

**A FRAMEWORK FOR UTILISATION OF HEALTH SERVICES FOR SKILLED BIRTH
ATTENDANT AND POSTNATAL CARE IN ETHIOPIA**

by

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DECLARATION

I declare that **A FRAMEWORK FOR UTILISATION OF HEALTH SERVICES FOR SKILLED BIRTH ATTENDANT AND POSTNATAL 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 any other degree at any other institution.

.....

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30 November 2015

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ABSTRACT

INTRODUCTION

The Ministry of Health (MOH) and its partners are determined to prevent and manage preventable causes of morbidity and mortality in mothers, neonates and children. In the last decade, special emphasis has been given to increasing the number of health facilities that provide maternal and child health services (MNCH), huge production of skilled birth attendants (SBAs), and equipping the health facilities to improve the utilisation of quality services. This study investigated the community perspectives of health service utilisation and proposes a framework for improving the utilisation of the available SBA and postnatal care (PNC).

PURPOSE

The purpose of this study was to develop a framework for the utilisation of skilled care for delivery and postnatal care by women of childbearing age (15-45).

METHODOLOGY

The study used a Sequential explanatory Mixed Methods Approach to investigate the utilisation of SBA and PNC in a district in Ethiopia. The Delphi Technique helped to solicit input from maternal health care experts on the development of a Framework for utilisation of SBA and PNC. This study utilised the Anderson Health Utilisation Model.

RESULTS

In the study, 79.8% and 248 (71.5%) of the women who delivered within 12 months prior to this study received ANC and skilled birth attendance respectively from SBA. Fifty five (15.8%) mothers and 131 (38%) babies received Postnatal care from SBA with

in 45 days after delivery. The study further found that women who can read and write and were educated are more likely to utilise SBA and receive quality health care services. The study showed that certain factors such as disrespecting service users, abusing service users' lack of trust on the SBA by service users, religion and superstition contribute negatively to the use of SBAs.

None of the predisposing, enabling and need factors predicted the use of SBA for PNC by the mothers. Nevertheless, through the focus group discussions (FGDs) and individual interviews (IDI), it was revealed that there was a widespread knowledge and perception gaps in the community related to the importance of postnatal period and PNC. Religious sanctification also have imperative role in hampering PNC service use by the mothers. The Health care workers (HCWs) also lacked the keenness and orientation to provide the service. Babies born from families with monthly income equal to 500 or above USD were more likely to use PNC within 45 days. There was a widespread misconception in the community that Babies do not need PNC before 45 days of birth except for vaccination purpose.

CONCLUSION

To examine their role in health service utilisation for SBA and PNC, researches can integrate social support and social network to the Andersen's health- service utilisation model. A framework for utilisation of SBA and PNC is proposed. The researcher recommends developing an utilisation tool kit that specifies the detail operationalisation of the framework.

KEY WORDS

Childbirth; framework; health services utilisation; postnatal care; skilled birth attendant; skilled care for childbirth.

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DEDICATION

**I DEDICATE THIS THESIS FOR WOMEN WHO LOST THEIR LIFE WHILE
GIVING BIRTH**

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List of Abbreviations

| | |
|--------|---|
| ANC | Antenatal Care |
| AOR | Adjusted Odds Ratio |
| ARV | Antiretroviral Therapy |
| BCC | Behavioural Change Communication |
| BEmONC | Basic Emergency Obstetric and Neonatal Care |
| BP/CR | Birth Preparedness and Complication Readiness |
| CI | Confidence Interval |
| CSA/E | Central Statistical Agency of Ethiopia |
| COR | Crude Odds Ratio |
| D&A | Disrespect and Abuse |
| DHS | Demographic and Health Survey |
| EmONC | Emergency Obstetrics Care |
| FGD | Focus Group Discussion |
| FMOH | Federal Ministry of Health |
| FP | Family Planning |
| GOE | Government of Ethiopia |
| HAART | Highly Active Antiretroviral Therapy |
| HC | Health Centre |
| HCW | Health Care Worker |
| HAD | Health Development Army |
| HEI | HIV Exposed Infant |
| HEW | Health Extension Worker |
| HMIS | Health Management Information System |
| HP | Health Post |
| HSDP | Health Sector Development Plan |
| HSTP | Health Sector Transformation Plan |
| HSU | Health Service Utilisation |
| IDI | In-depth Interview |
| IEC | Information, Education and Communication |
| KII | Key Informant Interview |
| MCH | Maternal and Child Health |
| MDG | Millennium Development Goal |
| MNCH | Maternal, Neonatal and Child Health |
| MNH | Maternal and Neonatal Health |
| MOH | Ministry of Health |
| OR | Odds Ratio |

| | |
|-------|--|
| PMTCT | Prevention of Mother to Child Transmission |
| PNC | Postnatal Care |
| RHB | Regional Health Bureau |
| SBA | Skilled Birth Attendant |
| TBA | Traditional Birth Attendant |
| TTBA | Trained Traditional Birth Attendant |
| WHO | World Health Organization |
| ZHD | Zonal Health Department |

CHAPTER 1

INTRODUCTION AND ORIENTATION OF THE STUDY

1.1 INTRODUCTION

Worldwide, about 15 % of obstetric complications occur during pregnancy, delivery and postnatal period (Warren, Daly, Toure & Mongi 2012:81). Safe-motherhood consists of antenatal care (ANC), safe delivery care (delivery assisted by skilled birth attendant (SBA), postnatal care (PNC), breast feeding for at least four months and infants and mothers' health care. These health care services help to save lives and are very important for the wellbeing of mothers and babies. Unfortunately, due to the absence of these types of care services, many mothers and babies die worldwide, contributing to family, social, and health-related economic crises (Singh, Padmus, Mishra, Pallikadavath, Johnson & Matthews 2012:2).

The United Nations reports that the progress on reducing maternal deaths has been slow. Progress towards reduction of neonatal deaths also has been slow. Maternal mortality remains high in most developing countries (WHO & UNICEF 2013:1). According to the last Ethiopian Demographic and Health Survey (CSA [Ethiopia] and ICF International 2012:271), the maternal and infant death rate in Ethiopia also has not gone down much. Maternal mortality and infant mortality remain at 676 per 100,000 live births and 59 per 1,000 live births respectively.

Antenatal care (ANC) is an important contributor for reducing maternal mortality. Hence, ANC coverage is one of the indicators for millennium development goal (MDG) 5.B (5.5). The current coverage of four ANC visits, skilled attendant at birth, and postnatal care in the 75 Countdown countries including sub-Saharan African countries was only 48%, 61%, 11% respectively (Bhutta, Das, Bahl, Lawn, Sanlam, Paul, Sankar, Blencowe, Rizvi, Chou & Walker 2014:361).

Skilled care for childbirth is an effective measure of maternal and neonatal mortality. This is because of the role that SBA has on reducing the deaths of mothers and neonates. For every increase in institutional delivery, there is a corresponding decrease in maternal mortality by up to 33% (WHO 2004:17).

Literatures often use the terms 'postnatal' and 'postpartum' interchangeably. Generally, postpartum refers to issues related to the mother, whereas postnatal refers to issues concerning the baby. However, the World Health Organization (2010:12) panel of experts recommended using the term 'postnatal' when referring to all issues concerning the mother and the baby. The postnatal period covers the time just after childbirth and extends up to six weeks (42 days) after birth. In cases of uncomplicated delivery (no detected health problem for the mother and the baby), the mother-baby dyad should remain under the observation of a SBA or receive an assessment by a SBA within 24 - 48 hours after birth (Warren et al 2012:80). The postnatal period is a critical time because evidences show us that about 50-60% of mothers and about 32 - 40% of neonates die within 24 hours after delivery (Warren et al 2012:81). The coverage of PNC within 24 hours for mothers and babies in the count-down countries was 42% and 26% respectively (WHO, World Bank, UNFPA & UNICEF 2014:16).

In Ethiopia, ANC, childbirth, and PNC by SBA within 42 days after childbirth were 41%, 15.5%, and 18% respectively in 2014 (CSA [Ethiopia] 2014:43-52). This low health service utilisation raises a question for any concerned body. In general, understanding why women utilise or do not utilise alternative or conventional health care services is central to increasing health care utility and efficacy and ultimately decreasing the morbidity and mortality that happen as a result.

However, there are very limited studies in the country that show the reasons why mothers do not go to health facilities for SBA and for medical follow-up after delivery. Existing published studies do not offer in-depth insight into the problem and lack comprehensiveness in their approach.

The purpose of this study is to propose skilled care for childbirth and PNC service utilisation framework for a community to increase service utilisation and ultimately reduce neonatal and maternal deaths. This study used mixed method design. The study informed by Anderson's HSB model, which tries to address the prevailing challenges comprehensively. MNCH experts, program people and policy makers' inputs enriched the framework.

There are different studies that have been carried out in Ethiopia that have revealed determinants of health care utilisation for ANC, institutional delivery, and PNC. These

include the Demographic and Health Survey (CSA [Ethiopia] and ICF International 2012:119-135; CSA [Ethiopia] 2014:50) and other studies. However, none of these studies comprehensively investigated community factors which might impeded the utilisation of SBA. This research provides a more in-depth review of factors that may determine the health care utilisation by women of childbearing age. Furthermore, the research utilised different research methods in order to provide a comprehensive picture of contextual factors determining health service utilisation. It also used Delphi method to explore the opinion of experts working at national level on maternal health services, proposed a maternal health- service utilisation framework for SBA and PNC. Study results generated from this research provides health care planners and program staff with an evidence-based framework to evaluate the importance of different factors determining health service utilisation in order to design relevant and targeted strategies. Furthermore, MOH and districts can use the proposed framework to guide existing and forthcoming initiatives to improve the health care utilisation for SBA and PNC.

In an effort to understand the determinants of health and health behaviour, and models that can be used to change these, the role of agency and structure were used to frame the arguments. According to Ritzer and Gindoff (1994) cited in Angel (2011:2). 'Agency' is the ability of an individual to act as agent on decisions that arise from within the unique self, whereas, structure, refers to 'those factors that limit humans' capacity to act as autonomous agents'. Examples of structure are social class, ethnicity, education, gender and religion. There is an on-going debate also within the research community on the relative importance of structure versus agency in determining health care seeking behaviours (Angel 2011:2; Choby & Clark 2013:6). This research does not engage in this debate. However, the complementarities of structural and agency factors was recognised and, to achieve a situational understanding of the factors influencing the utilisation of health services for SBA and PNC by women, the framework of social capital, particularly social support was included. This revealed the inter relationship between women and their social system and the complementarities of social factors and individual decision-making processes in seeking health care services. Andersen's (1995:2) traditional measure, used by most researchers to assess social structure, is limited to education, occupation, and ethnicity of the study participants. This research tried to include additional factors related to social structure variables extracted from social capital, to assess social determinants of health care service utilisation for skilled

care for delivery and PNC. In addition, women's autonomy was included in the model and were investigated in their relationship with utilisation of SBA and PNC.

1.2 BACKGROUND INFORMATION ABOUT THE RESEARCH PROBLEM

Ethiopia is the second largest African country after Nigeria in population size. According to the statistics of the Population Projections for Ethiopia in 2015, its population is about 90.7 million (CSA [Ethiopia] 2014:48). The population grows at the rate of 2.4% annually. The male to female ratio is almost equal. The majority (83.9%) live in the rural areas, implying that the country is among the least urbanised nations. Nationally, women in the reproductive age constitute 23% of the population and 19% of the women within the reproductive age live in rural areas (EPCC 2008:2-16; CSA (Ethiopia) 2013:48).

The average national household size in Ethiopia is 4.7. This figure has not changed since 2007. Somalia region of Ethiopia has the highest (6.3) household size and the lowest is in Direedawa City Council area (4). In Amhara region, the average household size is 4.3 (3.2 for urban areas and 4.6 for rural areas). A significant numbers of households are headed by females. Nationally, 24.2% of households are headed by females and about one third of households in urban areas and one fifth of households in rural areas are headed by females (CSA [Ethiopia] 2012:12).

Most births in Ethiopia occur within marriage. Marriage starts between ten and eleven years of age; and the peak age of marriage is between sixteen and twenty years. Nationally, married women who have been in marriage for ten or more years, and are less than twenty years old account for 80.8%. The proportions of married urban and rural women who have been in marriage for ten or more years, and were less than twenty year of age were 73% and 82% respectively (CSA [Ethiopia] 2012:25).

According to the Federal Ministry of Health of Ethiopia (2013), in 2014 the number of pregnant women in the country was 2,958,930 (FMOH 2013b:25). This is the number used to set program targets including ANC visits, institutional deliveries, prevention of mother-to-child transmission of HIV (PMTCT) services, and PNC services.

Agriculture accounts for 83.4% of the labour force, 43.2% of the GDP and 80% of the country's export (FMOH 2010a:2). The proportion of people over age 14 who can read and write is 42.7%. Only 35.1% of the women above age 14 can read and write. To make things worse, most rural girls marry at the age of 8-12 years (CSA [Ethiopia] and ICF International 2012:39-66). Although, the country has a long way to go to solve these challenges, there have been improvements in the last few years.

Ethiopia has made a number of fundamental reforms to improve the persistent health and socio-economic problems of its regions and meet the high demand for health care. Among these is the growth and transformation plan (GTP) of the country for the period 2010/11-2014/15. The national vision of the country guided this plan. It is a formal national planning document for all sectors including the Ministry of Health. Two of the four objectives in the GTP apply to the health sector. The first objective of the GTP is expansion and ensuring the quality of education and health services and achieving the MDGs. The other health related objective emphasises improvement of the health of the people of Ethiopia by promoting health, and providing preventive, curative and rehabilitative health services (FMOFED 2010:26-27).

The Government of Ethiopia (GoE) issued the Health Policy in 1991. The Policy was consistent with the GTP. The core elements of this policy include democratisation and decentralisation of the health system; development of preventive, promotive and curative services; and assuring universal access to health services (FMOH 2010b:4). The policy is directed to the major health problems of the country, which are largely preventable communicable diseases and nutritional disorders. Administratively, the structure of the Ministry of Health is comprised of the FMOH, nine Regional and two Administrative Counsel Health Bureaus, and Zonal/and Woreda (district) Health Offices. The FMOH and the Regional Health Bureaus (RHBs) focus more on policy issues, including developing and issuing national guidelines, strategic documents, technical support, and mapping and directing resources. Zone/Woreda Health Offices (WorHOs) have the fundamental responsibility of managing and coordinating the operation of a woreda health system under their jurisdiction. The devolution of power instituted to regional governments has resulted in the shifting of decision making for public service delivery from the centre to the authority of the regions and down to the woreda level.

In addition, the Federal Ministry of Health of Ethiopia (FMOH (Ethiopia)) has its Health Sector Development Programme (HSDP), which is the health sector policy implementation and strategy document for twenty years (1997/8 to 2015). It helps to develop sub-national plans and the annual health sector plan. The MOH implemented HSDP I between 1997/8 and 2001/02. The last HSDP IV covers the period 2010/11 to 2014/2015. This last HSDP has three focus areas: excellence in health service delivery and quality of care; excellence in leadership and governance; and excellence in health resources and infrastructure (FMOH 1998a).

The country has a favourable policy environment to improve the health of its citizens and particularly the Maternal and Child Health Services. Among these are the Abortion law (FMOH 2006); Reproductive Health Strategy (FMOH 2011b); the Road Map for Accelerating the Reduction of Maternal and Newborn Morbidity and Mortality (FMOH 2012); the Health Care Financing reform (FMOH 2011 a); the Elimination of Mother to Child Transmission of HIV (FMOH 2013c).

These Guidelines and policies underline the directions for the provision of maternal and child health services and strategies for demand creation, creating access, monitoring and evaluation framework to improve health utilisation, and quality improvement. These documents promote the availability of quality maternal and child health service and improve the service provision putting improved health utilisation as top of the health system agenda.

In 2007/08, the health expenditure of the country was USD 1.2 billion. However, as evidenced by per capita health spending, the health sector is under-financed compared with other sub-Saharan African countries. The highest contributions for the health sector were from external donors, household out-of-pocket payments, and government contributions, which were 50%, 34%, and 18% respectively (FMOH (Ethiopia) 2014a:18).

The health system is a three-tier health care delivery system. At level 1, the district (Woreda) level, there is a primary health care unit that constitutes a primary hospital, a health centre and five satellite health posts. A primary hospital provides service for 60,000 to 100,000 catchment area population. It is required to have 25 beds for inpatient services with required human resources of 4 midwife nurses, 12 clinical

nurses, and 5 general physicians. The MOH designed these hospitals to provide comprehensive emergency obstetrics and neonatal care services. They also serve as referral centres for the health centres around them. The minimum number and skilled personnel mix per a health centre includes two midwives, eight clinical nurses and one general physician. A health centre serves a catchment population of 15,000 to 25,000.

Two women health extension workers (HEWs) work in each health post. They serve a catchment area population of 3,000 to 5,000 each. HEWs are full time, government paid, mostly women front-line health care workers who completed their secondary school (tenth grade) and then trained for a year on 16 health service packages including attending clean and safe delivery and PNC. The health extension programme (HEP) is the foundation of the HSDP and implementation of the health programs occurs at the PHC level.

The HEP started in 2003 in agrarian communities to provide health promotive, preventive and basic curative services to all people free of charge. Then based on lessons learned, the MOH has been tailoring it to the pastoralist communities and to urban areas. The urban HEWs are nurses by profession and the MOH has trained them on 15 health extension packages. There are mixed findings regarding knowledge and skill levels of HEWs in providing ANC, safe and clean delivery, and their contribution to maternal and new-born health practices (Karim, Betemariam, Yalew, Alemu, Carnell & Mekonnen 2010:94-97; Medhanyie, Spigt, GeertJan & Blanco 2012:6; Workie & Ramana 2013:15-16).

With a strategic objective of empowering the community to produce its own health by taking health services closer to the population, the FMOH is trying to ensure the involvement, engagement and empowerment of the community through the implementation of the health development army (HDA). HDA is a key strategy of the Government of Ethiopia (GOE) to achieve high quality and high coverage of model households within a short period, and started in 2011 to scale up best practices by organising and mobilising families. HDA is a network created between five households and one model family to influence one another in practicing a healthy life style. HEWs provide trainings to the networks of families to implement the packages of the HEP in their respective villages. HDAs are engaged in health promotion and prevention activities at household and community levels, including the regular coordination of

structured community/women's dialogue sessions on health utilisation for institutional delivery for pregnant women. The HEWs provide guidance and education to these HDAs. HEWs and HDAs have extensive responsibilities for social mobilisation, increasing communities' awareness of their health rights and responsibilities, and creating an enabling environment (FMOH 2013a:7-8).

Next to the PHCU in the tier system, is a Level 2 General hospital that covers 1 million people. Obstetricians and gynaecologists provide comprehensive emergency obstetrics and neonatal care services in these hospitals. On third level is a specialised hospital that serves 5 million people.

The major emphasis of the tier system is to provide an essential health services package to communities. The package consists of five major components of services: family health, communicable disease prevention and control, hygiene and environmental health, health education and communication, and basic curative care and treatment of major diseases. The family health service encompasses reproductive health services, which include ANC SBA delivery and PNC, family planning, and immunisation services. Health facilities across all three tiers including health centres provide these services.

Currently, as part of its health care financing strategy, the FMOH has been working to implement social health insurance for the formal employed workers in the country and community-based insurance that is meant for the informal sector for example farmers. Overall, the health care financing reform is intended to build the capacity of the health system, retain human resources for health, and generate financial resources for health service provision (FMOH 2013a:98).

Furthermore, the number of service delivery points staffed by health workers has increased significantly. In 1996/7, there were only 2,202 health stations (now some converted to Health post and some others were upgrades to health centres), 241 HCs, and 49 hospitals. In 2014, the number of health centres increased to 3,541 and hospitals to 311. In addition, there were 16,251 health posts in the country. This is a huge investment from the government side (FMOH 2015:63).

The country is implementing many key and evidence-based maternal newborn and child health (MNCH) interventions to make a difference for women and children. These include focused ANC (FANC), emergency obstetrics and neonatal care (EmONC); Kangaroo Mother Care (KMC), short and long acting family planning method, Insecticide treated bed nets, and integrated community case management.

Family planning plays an important role in reducing maternal mortality and improving the health of the women. In Ethiopia, the total fertility rate (TFR), which is the number of children a woman could have by the end of her childbearing years if she were to pass through those years bearing children at the current observed specific ages, was 4.8. There is a declining trend from the 2005 DHS TFR of 5.4. TFR in rural Ethiopia is higher by 3 than in urban Ethiopia (5.5 and 2.6 respectively) and 17% of women want to have another child within the next two years (CSA [Ethiopia] and ICF International 2012:70-71).

About 29% of all women and 42% currently married women between 15 to 49 years of age use a modern contraceptive method. This reflects near doubling of the contraceptive prevalence rate (CPR) since 2005 when it was 15% (CSA [Ethiopia] 2014:34). However, the unmet need for family planning among currently married women is still high (25%) and is highest (33%) among women between the ages of 15-19. Rural women also have a higher unmet need (28%) than urban women do (15%) (CSA [Ethiopia] and ICF International 2012:101).

Maternal and neonatal mortality remain unacceptably high. In the last ten years, ANC has not improved much. In 2005, ANC coverage was 28%, and in 2011, it was only 34%. The same holds true for SBA and PNC in the first 48 hours after child birth, which were 11% and 7% respectively in 2005 and 2011 CSA [Ethiopia] & ICF International 2012:37-66).

Generally, the above evidence raises many questions. These include, despite the remarkable effort by the MOH to improve the existing challenges, why is the utilisation of skilled birth care and postnatal care very low? What are the perspectives of the community and the indwelling factors that determine the utilisation of skilled care for childbirth and PNC? ; And the strategies of improving the utilisation of these services were the study questions. This study aimed at answering these questions. The research

explored the factors hampering utilisation of skilled birth care and postnatal care and proposed a strategic framework for improving the utilisation of these services.

1.2.1 The source of the research problem

There has been a huge expansion of health facilities and trained work force necessary to provide the services in Ethiopia (FMOH 2015:74-77). Yet, utilisation of delivery assisted by SBA and PNC services has not shown much improvement in the last ten years (FMOH 2015:74-77). Multiple factors determine the service utilisation by the communities in general and by labouring and postnatal women in particular (CSA [Ethiopia] and ICF International 2012:119-131). There is no easy, 'one-size-fits-all' strategy to solve the multiple factors influencing this situation. To tackle these challenges, evidences generated from researchers that explores relevant factors comprehensively and in-depth should inform any strategy. Thus, the information generated from such in-depth analysis is expected to help to develop a pragmatic, strategic framework to tackle these challenges systematically. Particularly, as the world is now moving collaboratively towards a shared vision and global strategies to end preventable maternal and infant deaths, comprehensively understanding the context of health service utilisation for women in general and pregnant and postpartum women and newborns in particular, is needed.

The recent Manifesto, called 'ending preventable deaths of mothers and children' presented by experts on maternal health who gathered in early 2013 emphasised that the world shall accelerate the progress for the post 2015 era to eliminate all preventable maternal mortality (Langer, Horton & Chalamilla 2013:601-602). This calls for redefining the current model of service provision to be more comprehensive and informed by local evidence on barriers and feasible strategies. To this end, the roles of research that propose practical strategies are vital (Malquist, Yuam, Trygg, Sellin & Thomsen 2013:9).

The scope of this study is not to have a national representative study that is generalisable for all the regions in the country. Therefore, it did not try to assess factors in Ethiopian communities that affect utilisation of women for SBA and PNC, which are critical for reduction of maternal and neonatal mortality and morbidity. However, the findings from the study area and the proposed framework by the Delphi panels have relevance for the study area, communities that share similar social and ecological and

health characteristics. The results can also have implications for a broader population of Ethiopian women of reproductive age.

1.2.2 The statement of the research problem

Underutilisation of skilled birth attendants and postnatal care in Ethiopia is widespread among all regions. It has been reported to be very hard in the study area. This is despite all interventions made such as expansion of the health care services for maternal child health, health education made in communities and a governmental call for use of skilled birth attendants. Maternal and neonatal deaths are high and practical strategies are needed to enhance utilisation of skilled birth attendants and PNC services which would reduce both maternal and neonatal deaths. It is within this premise that this current study has proposed a community framework for the utilisation of skilled birth attendants and PNC services. This framework was proposed with the inclusion of the community and appropriate stakeholders.

1.3 AIM OF THE STUDY

This research aims to develop a framework for the utilisation of skilled care for delivery and PNC by women of childbearing age (15-45).

1.3.1 Research purpose

The main purpose of this study was develop a health service utilisation framework for improving the utilisation of health services for childbirth and postnatal care in districts of Ethiopia.

1.3.2 Research objective

As described above, based on the study objectives, this study has two phases and the objectives of the study would be listed according to the phases.

Phase 1

This phase of the research entails identifying the factors that influence the utilisation of skilled care for childbirth and PNC services in the study area and define the factors. The objectives of this phase of the study include:

- Assess the current status of utilisation of skilled care for childbirth and PNC services in a representative district/woreda in Ethiopia.
- Describe the key factors influencing the utilisation of such services

Phase 2

Findings from phase 1 were addressed by the following objectives for phase 2:

- Explore stakeholders' recommendations for the development of a strategic framework for utilisation of health services for SBA and PNC.
- Develop a strategic framework for the utilisation of health services for skilled care for childbirth and PNC based on study findings.

1.3.3 Research questions

This study aimed to answer the following questions for for both phases:

- What is the status of utilisation of skilled care for childbirth and PNC services?
- What are the key factors influencing the utilisation of skilled birth attendants and postnatal care services?
- What are the stakeholders' recommendations for the development of a strategic framework for the utilisation of health services for SBA and PNC services?

1.4 SIGNIFICANCE OF THE STUDY

This study provides a valuable insight into the factors that influence the utilisation of health services for childbirth and postnatal care by skilled professionals. The results of this study can also be used to strategise our demand creation and community

awareness approaches for health facility utilisation for maternal health care. Furthermore, the perception and client perspective of the quality of health facilities can be a valuable input to improve the quality of health services.

The health utilisation framework will serve as a model that could be applied and tested in different areas and outside of Ethiopia. Hence this study creates a pool for scientific knowledge and serves as the basis for further research.

1.5 DEFINITION OF TERMS

This section defines some of the key terms used in the study.

1.5.1 Framework

A framework formally articulates mapping of services within and across sectors and with agreed streamlined entry-exit procedures that support continuity of care by ensuring that consumers of the services are able to negotiate the system in a seamless and timely manner (Glossary of Terms and Definitions 2011:34). In this study they will refer to an articulated mapping of the utilisation of health services of skilled birth attendance and postnatal care in Ethiopia.

1.5.2 Help seeking

Help seeking is a complex construct, which refers to the act of seeking or requesting personal, psychological, 'affective assistance or services from formal or informal sources' (Rickwood & Thomas 2012:177).

1.5.3 Maternal death

Maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accident or incidental cause (WHO 2006:16).

1.5.4 Maternal mortality ratio

Maternal mortality ratio is the number of maternal deaths per 100,000 live births (complete expulsion or extraction of a product of conception from its mother irrespective of the duration of pregnancy, which, after such separation, shows evidence of life) (WHO 2006:16).

1.5.5 Postnatal period

Postnatal period refers to a period beginning immediately after the birth of a baby up to six weeks (42 days) after birth. It refers to both the mother and the baby (WHO 2010:12).

1.5.6 Postnatal care

Postnatal care refers to care sought/provided for the mother and the baby immediately after birth of a baby up to six weeks (42 days) after birth (WHO 2010:12).

1.5.7 Skilled birth care

Skilled childbirth care refers to a care provided by a skilled birth attendant (WHO 2006:21).

1.5.8 Skilled birth attendant

Sometimes referred to as skilled attendant. According to WHO, an accredited health professional (such as a midwife, doctor or nurse) who has been educated and trained to proficiency in the skills needed to manage normal pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns (WHO 2006:21).

1.5.9 Social network

Social network is the number of contacts and interactions that an individual has with his/her friends, relatives and others in his/her social bond (Maulik, Eaton, Bradshaw 2011:30).

1.5.10 Social support

Social support that is based on one's social network or interpersonal relationships, and includes a perception that those in the individual's network care for the wellbeing of the individual. This means that social support has an inherent notion and meaning of being beneficial and not harmful (Maulik et al 2010:30). For the purpose of this study, the questions for Social support were adapted from Saawon et al (1987). The questionnaire has twelve Social support questions. Each item has a six point Likert scale – very much unhappy (0 score) to very much happy (6 score), on the perceived satisfaction of the different supports the woman receives from people in her network. For all the six items, if the reply is not unhappy, it was scored as '0'; if neither unhappy nor happy, '0.5'; if happy '1'. The maximum aggregate score was 6. The aggregate scores are classified as follows: If the aggregate scores for an item was less than or equal to 2, it was classified as 'Low social support', if it was between 3 to 4, it was 'Medium' and a score of 5 and six were clustered under 'High Social support respectively (Sarason, Sarason, Shearin & Plerce 1987:503).

1.5.11 Stillbirth

According to Meyer (2009:126), stillbirth refers to a baby who is born dead. The accompanying characteristics are, if the birth weight is greater than or equal to 1000 gram, completed gestational weeks of 28 or above or body length (crown-heel) of greater than or equal to 35 cm (Lawn, Blencowe, Pattinson, Cousens, Kumar, Ibiebele, Gardosi, Day & Stanton 2011:1449).

1.6 THEORETICAL FOUNDATIONS OF THE STUDY

This section discusses the meta-theoretical assumptions, theoretical framework and Andersen Health Behavioural model which is the foundation of this study. The

researcher also discussed other models similar to Andersons, as a way of offering comparison and to argue why the Adersen's model was the best fit for his study.

1.6.1 Meta-theoretical assumptions

Musa (2013:9) views a meta-theory as assisiting scholarly inquiry in providing a way of thinking and explaining the philosophical approach to research which shapes the action of the researcher in the choice of a research desing and methods.

Andersen's Health Behavioural Model was the basis for the assumption of this study that assumes that predisposing, enabling and need factors, including social support are important factors determining women's utilisation of health facilities for delivery by SBA and PNC attendance. The choice of this model was based on its pragmatic value.

Pragmatism is the most commonly applied approach in Mixed Method Research. It is oriented towards realistic and real world problems to be researched or solved (Feilzer 2010:8). Pragmatism does not have orientation on assumptions related to the nature of knowledge (Teddlie & Tashakkori 2009:541). However, the criticism on pragmatism paradigm is its excess design, which is higher than any typology cover (Harrits 2011:161).

1.6.2 Theoretical framework

Behavioural science theories, including Andersen's Health Behavioural Model, are results of contribution of methods, approaches and strategies from multiple disciplines including public health, sociology, psychology, anthropology and other disciplines for years. These theories are very instrumental in identifying the most important factors determining a certain community and directing our attention to the critical and salient issues that can make a difference in the health of the community (Glanz & Bishop 2010:400). All models are different from each other and yet one model is not superior over the other. However, there are differences between them in their focus, application, and theoretical ground. Hence, the Andersen Health Behavioural model is different from other models. The following paragraphs present detailed description of the Andersen's model.

1.6.2.1 Andersen Health Behavioural Model (1968-present):

This model is among the most widely acknowledged behavioural model that has been applied in a broad range of health services topics and diseases (Babitsch, Gohi & Lengerke 2012:13). Ronald Andersen, a US medical sociologist and researcher of health services, developed the model in 1968 in his attempt to predict and explain "how" and "why" families use formal health services. The model he developed has been influential in explaining an individual's use of health care services, especially physician care (Andersen 1995:1).

The model is a valuable tool to explore determinants and identify relevant variables in the process of health service use. It asserts that health service is a function of individual traits, population characteristics, and the environment (Andersen 1995:1; Babitsch et al 2012:3). Recently, Scholars have expanded and modified the application of this model to address efficiency, equity, effectiveness concepts in health care and broader issues including policy, health systems factors, external environment, and patient satisfaction (Derose, Gresenz & Ringel 2011:1845).

When the model is used as an explanatory tool for particular conditions, which is the case in this research, this might provide a better comprehensive and informative analysis of a problem which in this case is the underutilisation of skilled birth attendants and PNC services (Andersen 1995:4). The application of Andersen's model mostly relies on individual level factors that affect health services utilisation (Derose et al 2011:1845). However, like other models, this model has some drawbacks. First, the model does not incorporate the characteristic of the decision processes that lead to actual use of services. The model also misses the characteristics of the socio-psychological process involved in the perception evaluation and response towards health. The other challenge of this model is the fact that although the model includes social structure as a component, it fails to consider social interaction or social networks (Babitsch et al 2012:3). However, Andersen believes that these can be incorporated and will "rightly fit" in to the model (Andersen 1995:3). This study explored the social support side of social structure was explored.

The model has undergone four phases of development over the years. According to the latest version, Andersen and Davidson (2001:7-8) classify conditions that facilitate or impede utilisation of health services as follows:

Predisposing factors: These factors are antecedents to behaviour that provides the rationale or motivation for behaviours. These can be either individual or contextual predisposing factors. Demographic factors/biological imperatives, social factors, skill, and mental factors in terms of health belief, attitude, values and knowledge on health and health services belong to individual predisposing factors. On the other hand contextual factors include demographic and social composition of communities; collective and organisational values, cultures, norms, and political perspectives.

Enabling factors: These are individual (for example income and health care insurance), organisational (including health service facilities and personnel, transportation means, travel time to and waiting time for care), and contextual (resources available in the community that enable the utilisation of health services).

Need factors: These antecedents to behaviour enable the behaviour to be realised. These factors also can be either individual or contextual need factors. At individual level, the view and experience of individuals towards their health - perceived need and evaluated need for health services, which is a professional assessment of individual's health status and need for medical care - makes up individual level need factors. The contextual need factors include the health related condition of the environment and the overall measures of community health.

Many models of health behaviour are also relevant to the model chosen for this study. These different models and theories are well suited for different population and different set ups. However, some are more easily applicable and more developed than others. To justify, why Andersen's Health Behavioural Model was, selected, the next paragraphs discuss other models commonly used by researchers in the health and behavioural sciences. Hence, below is the summary of models that have some relation to the Andersen's Model of Health Service Use.

1.6.2.2 Ecological Model of Health Behaviour

The premise of this model is based on the belief that behaviour is shaped by and shapes multilevel influences. Hence, people can change the environment to influence behaviour in a desired direction (Glanz & Bishop 2010:403). The overall core idea of this model is its focus on multiple levels of influences. These include intrapersonal, interpersonal, organisational, community, physical, environmental, and policy level influences. This multilevel focus broadens options for interventions and provides a comprehensive framework for understanding the multiple and interacting determinants of health behaviour. The evolution of the model's use in public health and behavioural sciences for research and practical application has demonstrated its adaptability and robustness. However, this model is not free from weaknesses. The first demerit of this model is its lack of specificity and focus about the most important and critical factors that influence certain behaviour. This makes the model difficult to apply as an operational model that leads to a testable hypothesis and useful guidance for intervention. The other drawback of the model is its lack of information about how the different factors or variables operate and interact across levels (Glanz & Bishop 2010:403).

1.6.2.3 The PRECEDE-PROCEED Model

The acronym PRECEDE stands for Predisposing, Reinforcing, and Enabling Constructs in Education/Environmental Diagnosis and Evaluation. The PRECEDE framework is based on the premise that diagnosis of the problems and needs of the community precedes an intervention plan. PROCEED stands for Policy, Regulation and Organisational Constructs in Education and Environmental Development. The model is an organising framework that provides a structure for applying theory and concepts systematically for planning and evaluating health behavioural change programs. It provides a systematic approach for priority setting among the myriad determinants of complex health problems. The model posits that the active participation of the intended audience in defining their felt priority needs, implementation of programs, and monitoring and evaluation of activities enhances success in achieving change. The model has eight phases: four planning, one implementation, and three evaluations (Glanz & Bishop 2010:408-433).

The strength of this model is that it allows integration of other models/theories of behavioural change or organisational change into the phases of the framework for their application for different functions. The major challenge of this model is its resource intensiveness - it demands high financial, time and technical skills (Glanz & Bishop 2010:408-433).

Based on the above review, we decided to use the Andersen's Behavioural Model because of its comprehensiveness in factor categories and the unique vocabulary it uses to articulate factors of health service utilisation. In summary, using Andersen's comprehensive Health Services Utilisation Model helped to explore the factors that determine health utilisation for SBA and PNC in a typical Ethiopian semi-urban setting. The findings were inputs for the second phase of this research, which is developing a health utilisation framework. National, programme people, policy makers, and other key stakeholders' experts enriched the proposed framework.

1.7 RESEARCH DESIGN AND METHOD

This is a cross-sectional explorative and descriptive study of the utilisation of skilled birth attendants and postnatal care services using mixed methods research (MMR) involving both quantitative and qualitative approaches. Sequential quantitative and qualitative methods were first utilised. These were followed by the Delphi method where inputs were solicited from stakeholders in the development of the framework. Chapter 3 discusses the details of the research methods.

1.8 SCOPE OF THE STUDY

Ethiopia is a multinational country with diverse cultural and demographic differences, each culture has its own unique influence in service delivery utilisation for women in labour, delivery and after childbirth. The current study is limited to the development of a framework for the utilisation of skilled birth attendants and PNC and views were collected from women and stakeholders in urban areas only. As a result the study may not reflect the realities among rural dwellers.

1.9 STRUCTURE OF THE DISSERTATION

This thesis has six chapters divided as follows:

Chapter 1

The first chapter provides the study orientation. Included in the orientation is the introduction and background to the research problem, the source of the research problem and the statement of the research problem. The significance of the study, theoretical framework as well as the study aim, objectives and scope of the research are also given in this chapter.

Chapter 2

Chapter 2 presents the literatures reviewed. The review covers studies done on SBA and PNC and the MCH context in Ethiopia.

Chapter 3

Chapter 3 discusses the research design and method. Ethical principles complied with are also discussed as well as permissions obtained for conducting the study, and issues of trustworthiness are discussed in this chapter.

Chapter 4

Chapter 4, presents the results of the study, their analysis and discussions. The chapter combined both qualitative and quantitative results. Finally, the chapter outlines the strategic objectes and activities of the framework for utilisation of skilled birth attendant and postnatal care women and neonates in Ethiopia.

Chapter 5

In this chapter the framework for the utilisation of skilled birth attendants and postnatal care is given.

Chapter 6

Finally, chapter 6 draws conclusions from the research findings, pinpoints the limitations of the study, makes recommendations, and makes suggestions about further research.

1.10 SUMMARY

This chapter presented the introduction and background to the research problem, the source of the research problem, significance of the problem, the foundation, objectives and scope of the research. The chapter tried to persuade the importance, the objectives of developing framework for utilisation of skilled birth attendant and postnatal care for women and neonates in Ethiopia. The chapter also tried to establish a link with appropriate theoretical Model that was utilised to explain the problem and present the pragmatic and theoretical contributions of the research.

The next chapter scrutinises literatures from different sources in relation to skilled birth attendant and postnatal care for women and neonates in Ethiopia and elsewhere. It outlines the reviewed evidences to present what was known, what was unknown, and the existing gaps and the public importance of the gaps in light of global, regional and Ethiopian context.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Chapter 1 gave the orientation of the study. This chapter presents the review of literature accessed from many sources. Sources used included, books, journals, articles, monographs and government reports and dissertation done in topics related to skilled birth attendants, maternal and neonatal mortality, utilisation of health services and other related topics. The review of literature is also targeted to the millennium development goals (MDGs) which has specific reference to the topic of study.

There are eight MDGs. The goal of MDG 4 is to reduce child mortality by two thirds between 1990 and 2015. MDG 4 and 5 focuses on the health of children and women respectively. The MDG 5 aims at improving maternal health and has two targets. The first, Target 5.A, is to reduce maternal mortality ratio by three-quarters. There are two indicators to monitor this target: maternal mortality ratio and proportion of deliveries attended by SBA. The global target is to decrease maternal mortality ratio by three fourths by 2015. The second MDG 5 target - Target 5.B, is directed to achieving universal access to reproductive health between by 2015 (UN 2013a).

Each year, about two million deaths occur because of childbirth. Globally, the death of women from causes related to pregnancy or childbirth has dropped from 543,000 deaths in 1990 to 287 deaths 2010 (WHO & UNICEF 2013). In sub-Saharan Africa, 265,000 mothers die every year as a result of pregnancy and childbirth (UN 2013b:24).

According to the United Nations MDG Report (2013b:24), in 2012, about 6.6 million children under five years of age, or about 19,000 a day, died worldwide. This reflects a drop of 45% from a 1990 global level of 90 deaths per 1,000 live births. In sub-Saharan Africa, 4.4 million children die every year. That represents 98 deaths per 100,000 live births. The death of children in sub-Saharan Africa is 16 times the average for developed regions (UN 2013b:1).

Globally, in 2012 an estimated 2.9 million babies died within 28 days of their birth, including those who died on their first-and only day of life as well as stillbirths. The decline in mortality has been very slow. In 1990, neonatal mortality rate was 33 per 1,000 live births but in 2012, it had declined to 21 deaths per 1,000 live births. Neonatal mortality contributes 44 % of under-five mortality in children worldwide (UNICEF, WHO, The World Bank and UN 2013:24-26). In sub-Saharan Africa the neonatal mortality declined from 45 deaths per 1,000 live births in 1990 to 32 deaths per 1,000 live births in 2012 (WHO, World Bank, UNICEF & UNFPA 2014:13).

Stillbirth is largely unrecognised and unaddressed challenge worldwide remains invisible and ignored in the policy, programs, and investment agendas of many countries. The problem is concealed within the grouping of neonatal deaths, with attention primarily directed towards survival of newborn babies. There are about 2.65 million third trimester stillbirths every year worldwide. Out of these 1.19 million are intrapartum stillbirths. For the majority of Low and Middle Income Countries, there is no national stillbirth data available or data is not of good quality. However, according to modelling estimates, 98% of the stillbirths occur in low and middle income countries. Rural sub-Saharan Africa and South Asia contribute to over 55% of global stillbirths. The trend of stillbirth from 1995 to 2009 was unsatisfactory, with a reduction by only 1.1% annually. There was almost no reduction in sub-Saharan Africa. If this trend continues at the same rate, by 2020 stillbirth might remain at 16.7 per 1000 births (Lawn et al 2011:1451-1452). It is within this premise that this current study proposes a framework for the utilisation of skilled birth attendants and postnatal care which would reduce the maternal and neonatal morbidity and mortality.

Ethiopia and nine other populous low and middle income countries (Nigeria, Democratic Republic of the Congo, Tanzania, India, Pakistan, Bangladesh, Afghanistan, China, and Indonesia) contribute to about 2/3 of all third-trimester stillbirths (1.7 million). Ethiopia ranked seventh among these countries for its high stillbirth rate (Lawn et al 2011:1452).

The MDG deadline, December 2015, is approaching. Countries vary in their achievements towards the MDG 4 and 5. In most countries maternal and child mortality is dropping by about 3.2% annually. However, this reduction is much below the expected annual reduction of 5.5% to reach the projected target (WHO, UNICEF & UNFPA 2012:25-26). Particularly in the sub-Saharan region, the rate of maternal and

child mortality is slower than hoped (WHO and UNICEF 2013:5). Hence countries should continue efforts to increase the coverage of high quality, proven and low cost interventions to make a difference in the health of mothers and children (Dermstadt, Choi, Arifeen, Bari, Rahman, Mannan, Seraji, Winch, Saha, Ahmed Ahmed, Begum, Lee, Black, Santosham, Crook & Baqui 2010:4-5). Meanwhile, countries have to document both progress and challenges they encounter, and develop and implement appropriate strategies tailored to their local contexts (WHO & UNICEF 2013:24).

The MDG target for Ethiopia is to decrease maternal mortality ratio from 950 to 238 per 100,000 live births. The maternal mortality is 673 (ranging between 548 and 799) per 100,000 live births (CSA [Ethiopia] and ICF International 2012:270-271). There is minimal reduction of neonatal mortality between the 2005 level of 39 deaths per 1000 live births and the 2012 level of 37 deaths per 1,000 live births (CSA [Ethiopia] and ICF International 2012:109-111). Hence, it is unlikely for the country to achieve its MDG targets for maternal and neonatal mortality (Accorsi, Bilal, Farese & Racalbuto 2010:4). However, the country has achieved its MDG4 goal of reducing child mortality by two thirds from 204 per 1,000 live births in 1990 to 68 per 1,000 live births by the end of 2013 (UNICEF, WHO, The World Bank and UN 2013:18)

The major causes contributing to maternal mortality in Ethiopia, like many similar developing countries, are infection, haemorrhage, obstructed labour, abortion, and hypertension in pregnancy. In addition, researches ascribed poor maternal health service utilisation as a major determinant factor (Abdella 2010:117-119; Say, Chou, Gemmill, Tuncalp, Moler, Daniels, Gulmezoglu, Temmerman & Alkema 2014:320). The world knows the key evidence based and cost effective interventions that have demonstrated the potential to significantly reduce maternal, neonatal, and child mortalities (Bhutta, Cabral, Chan & Keenan 2012:S14-S16; Clark 2012:47; Nyamtema, Urassa & Roosmalen 2011:9). However, these services have to be accessible to be utilised by the community.

The process and steps required for utilising health services by women for SBA at birth and PNC are a result of the interplay of individual and community factors and the dynamic processes in the environment. Specifically in developing countries, where the socio-economic, the health system including the infrastructure do not meet the societal need, health utilisation becomes more challenging (Glanz & Bishop 2010:401).

2.2 HEALTH SERVICE UTILISATION AND ITS PERSPECTIVES

The purpose of the present section is to assess health service utilisation in order to situate health service utilisation of skilled care for childbirth and PNC. While there is ample literature on health service utilisation, the majority of these studies focus on mental health conditions (Maulik et al 2011:47) and other chronic health conditions (Goetz, Szecsenyi, Campbell, Rosemann, Rueter, Raum, Brenner & Miksch 2012:6). According to Mackian, Bedri and Lovel (2004:137), research that focuses on health service utilisation have two categories based on their areas of emphasis. Those studies that emphasise the "*end point*" or the act of seeking/utilisation of formal health care and those that emphasise the "*process*" or the sequence of steps initiated in response to a health condition, called the "path ways model" for institutional delivery (Mackian et al 2004:1-2). The former ones imply health care seeking behaviour and the latter ones are categorised under health seeking behaviour. This study has more interest in the 'end point' act of utilising care and less interest in the process an individual undertakes.

Access to health service, is another concept related to health service utilisation. The concept meant different things at different times and contexts. In the United States of America, for example, researchers and program people use health insurance as a measure of access to health services and citizens who have having access to health care services are those who attain health insurance for themselves and for their families. However, this definition may not work for other countries like Canada where there is reported to be full coverage of health insurance for citizens (Sibley & Weiner 2011:1). According to Andersen's Behavioural Health Utilisation Model, which this study is founded on, access to health services is operationalised as something beyond the actual use of health services which includes situations that facilitate or impede their use. The model has evolved to emphasise effectiveness, value of services provided, the outcomes that resulted and how people negotiated care. Generally, access can be categorised into special access (accessibility and availability of service) and aspatial access (affordability, accommodation and acceptability of service) (Delamater, Messina, Grady, Messina & Shortridge 2012:2). Thus, the foregoing discussion has made a contribution to the problem stated in Chapter 1 by emphasising the importance of utilisation of health services provided.

2.3 THE IMPORTANCE OF HEALTH SERVICE UTILISATION FOR MATERNAL CHILD HEALTH

The literature reviewed in the present section is about the importance of health service utilisation for maternal child health and helps in answering the research question which says: what are the factors influencing utilisation of skilled care for childbirth and PNC services?

The global community has given a special attention to maternal health in the last 20 years by engaging governments, civil society organisations and other partners (WHO & UNICEF 2013:28). Not only can pregnancy and childbirth result in the death of the mother and/or baby, but many women may also experience lifelong suffering from mental, physical, and other disabilities and complications from pregnancy and childbirth.

The causes of maternal mortality are well known. Seventy five percent of maternal deaths are due to five key causes. These are haemorrhage (during pregnancy, childbirth and after childbirth), sepsis, eclampsia, obstructed labour, and complications of unsafe-abortion. Preterm, sepsis/pneumonia, and intrapartum related health conditions are the major killers of new-born babies (Bhutta & Black 2013:2228; Kinney, Kerber, Black, Cohen, Nkrumah, Coovadia, Nampala & Lawn 2010:5). According to some literatures, about 77% of maternal and 40% of neonatal deaths occur within 48 hours after birth (Kinney et al 2010:5; WHO 2010:19-21).

The consequences of pregnancy, childbirth and the time immediately thereafter are enormous and require the attention of public health policies and programs. Worldwide 15-20 million women sustain maternal morbidities or disabilities each year. These conditions directly or indirectly related to difficult obstetric events. These conditions include uterine prolapse, urinary incontinence, hypertension, severe anaemia, depression, fistula, and ectopic pregnancy. These effects hamper the women from disposing their daily responsibilities at home and in the community (Koblinsky, Chowdhury, Moran & Ronsmans 2012:125).

Factors determining health service utilisation for maternal health services are many as well as complex. Many women die during pregnancy and childbirth. Use of appropriate

prevention measures, adequate and none sophisticated timely medical care could avoid many of the causes of deaths of these mothers (Clark 2012:44-46).

The mere availability and accessibility of health facilities does not ensure the utilisation of their services. Although vertical programs are effective, integrated programs are more effective (Kinney et al 2010:5-6; Nyamtema et al 2011:8-9). Even, the fact that there is free access to health services for a community is not enough to bring about behavioural change and improve the health outcome of a community (Alter, Stukel, Chong & Henry 2011:280). Hence, there is an increasing focus on various behavioural and environmental characteristics determining utilisation (Roost, Jonsson, Liljestrand & Essen 2009:8-9).

Families and the community also play a crucial role in supporting the mother-baby dyad in promoting, maintaining and seeking appropriate care at the appropriate time and duration (Essendi, Mills & Fotso 2010:365). In particular, labour and childbirth are considered as major stressful life events for pregnant women and their families. Public health practitioners have recognised the critical role of continuous social support in the well-being of individuals and families when they are faced with critical life events like child birth (Hodnett, Gates, Hofmeyr, Sakala & Weston 2012:15-16; Negron, Martin, Almog, Balbierz & Howell 2013:620; Salmela-Aro, Read, Rouhe, Halmesmaki, Toivanen, Tokola & Saisto 2011:532). However, there are limited studies that revealed the role of social support and social network on maternal health service utilisation in such life events in general; and their results are not consistent as such (Maulik et al 2011:2).

However, there are well documented strategies and interventions to reduce maternal and neonatal deaths. An integrated package of services, SBA for every birth in a health facility with essential supplies and equipment to provide the service, and functional referral/transportation to the next health facility if need arises are critical to save the lives of labouring women and their children (Adegoke & Broek 2009:33-34). Furthermore, to save the lives of both the mother and the baby, the care by the SBA for the dyad (mother and neonate) should continue for at least days after childbirth (WHO 2010:12).

The key challenge is that most of the causes of maternal deaths are not reliably predictable and therefore appropriate treatment interventions often cannot be initiated early to avoid fatalities for mother and/or baby (Nyamtema et al 2011:9). Skilled care for childbirth and postnatal care is a fundamental basis for reducing maternal mortality. Hence, it has been the key-proxy- indicator used to monitor MDG 5 target of reducing maternal mortality by (UN 2013b).

2.4 SKILLED BIRTH ATTENDANT

Skilled birth attendants (SBAs) are health care workers (doctors, nurses and midwives) trained in midwifery who have the cognitive and practical skills to manage normal deliveries, and diagnose and provide first aid for emergency obstetric complications, including saving the life of the mother or the baby, or immediate referral of complicated cases (WHO 2004:1). This definition is universally accepted. According to this definition SBA do not include traditional birth attendants (TBAs).

Skilled birth attendants play a paramount role in reducing maternal and neonatal complications that lead to morbidity, lifelong disabilities, or mortality during the course of labour, childbirth and the postnatal period. SBA can reduce stillbirths by 23% to 45% (Yakoub, Ali, Ali, Imdad, Lawn, Broek & Bhutta 2011:5). That is why the global community set a target of making 90% births supervised by SBA by 2015 (WHO 2004:17).

Because of methodological challenges, such as a large sample size required to have a reasonable comparison of the study subjects and ethical challenges to conduct randomised controlled trials in humans, there is limited evidence for the impact of SBA at delivery and during emergency obstetric care. Nevertheless, there is evidence that demonstrates the critical importance and potential of skilled birth care in reducing intrapartum related neonatal deaths in Low and Middle Income Countries and the United Kingdom (Lee, Cousens, Darmstadt, Blencowe, Pattinson, Moran, Hofmeyr, Haws, Bhutta & Lawn 2011:17). Moreover, there is sound evidence demonstrating that access to SBAs has made a significant difference in maternal deaths for the past decade (Graham, Bell, Bullough, De Brouwere & Van Lerberghe 2001:125). Yakoob et al (2011:7) asserted that SBAs decrease perinatal and neonatal deaths. For example, there can be a decrease in stillbirth by 23% because of skilled birth care during

childbirth. Experiences from the past fifty years on maternal health services have shown us that countries that increased the number of SBAs and access to emergency obstetric care (EmOC) have made it possible to drastically reduce the maternal mortality (Kinney, Lawn, Howson & Belizan 2012:4). In particular, Malaysia and Sri Lanka, have managed to reduce maternal mortality significantly (Haththotuwa, Senanayake, Senarath & Attygalle 2012:S48).

With few exceptions, most countries with low maternal mortality rates are those that have better access to and utilisation of skilled birth attendants so that women in need are able to receive emergency care and EmOC (Haththotuwa et al 2012:45-48; Yakoob, Ali, Imdad, Lawn, Broek & Bhutta, 2011:5-6). On the other hand, most countries with high maternal mortality have very poor quality of maternal health services, unfavorable enabling policy environment to provide the services, or lack of skilled professionals, or poorly functioning referral and feedback mechanisms (Knite, Self & Kennedy 2013:5).

Regarding stillbirth, there are three categories of causes: infection, intrapartum related causes, and preterm-birth complications. Labour and delivery carries the highest risk for stillbirths, calling for appropriate obstetric care. Furthermore, maternal mortality, neonatal, and stillbirth rates have correlation with health systems indicators (eg, the number of nurses and midwives). Nations with lower maternal, neonatal and stillbirth mortality rates are those that have recorded low in their other health systems indicators (Lawn et al 2011:1453).

According to the International Confederation of Midwives (ICM) and International Federation of Gynecology and Obstetrics (FIGO), in developing countries, there should be one SB for every 5,000 population (Graham et al 2001:.....??). The density of midwives, nurses and doctors (all are considered SBAs) in Ethiopia is measured at 2.3 per 1,000 population and 0.4 midwives per 1,000 live births (UNFPA 2011:72; FMOH 2014a:19). This is far below the threshold of 2.3 doctor, nurse and midwife to 1,000-population ratio required to ensure skilled service provision (UNFPA 2011).

However, the availability of SBAs does not necessarily ensure reduction of maternal and neonatal deaths and stillbirths (Hodgins 2013:147). For example, in Burundi, Cameroon, Central Africa Republic, Sierra Leone and Zimbabwe, SBAs attended more than 50% of labors. However, the maternal mortality ratio in these countries is over 500.

In contrast, Tanzania and Zambia have less than half of the percentage of labors attended by SBAs but their maternal mortality ratio is less than 500 deaths per 100,000 live births (WHO & UNICEF 2013). This underpins the important recommendation that skilled care for childbirth should be backed up with a functional referral network, transportation and other health systems and community support factors. Overall, the concept of skilled care at childbirth needs to be linked with favorable policy, political commitment, and recognition of the key role that socio-cultural and other factors also play (Essendi et al 2010:356-369; Hodnett et al 2012:1-10).

SBA also makes a critical contribution to the prevention of mother-to-child transmission of HIV (PMTCT) and thereby saving the lives of both the mother and her baby. There is evidence that describes the relationship between HIV and maternal morbidity and mortality during pregnancy, delivery and the postnatal period. A systematic review and Meta-analysis of global documents shows that HIV infection risk increases during these periods. HIV infected women have over three times the risk of puerperal sepsis than HIV negative women. The risk increases more with deliveries by Caesarean Section. According to Clavert and Ronsmans (2013:29), there may be increased risk of antepartum haemorrhage, pregnancy induced hypertension, and uterine rupture in HIV positive pregnant women (Calvert & Ronsmans 2013:29-31).

With regard to maternal mortality, the review confirmed that HIV infected women have an eight times higher risk of dying during pregnancy or the postnatal period than HIV negative pregnant women (Grollman & Ronsmans 2014:90). SBAs are in a better position to early identify HIV positive women during ANC, labour and postnatal care and provide and/or refer to appropriate care, treatment, and support to minimise risks. The recent WHO guidelines on PMTCT recommend that all HIV positive pregnant women and postnatal women receive highly active antiretroviral treatment (HAART), irrespective of their immunological status. The Guidelines also recommend that maternal and child health service and postnatal delivery points provide HIV care, treatment, and follow-up for HIV positive pregnant women and HIV exposed infants' (HEIs). This strategy is effective in decreasing the mother-to-child transmission of HIV (MTCT) (FMOH 2014).

In Ethiopia, the estimated number of HIV positive pregnant women in 2013 was 32,000. In the same year, 1.2 million women learned their HIV status. Among those women who

knew their HIV status, 21,000 were HIV positive. The PMTCT coverage, which is the number of HIV positive pregnant women who already knew their HIV status and provided antiretroviral drugs (ARVs) for PMTCT was 18,000 (FMOH 2013d: XII). This constitutes 85% of the identified positive women and 56% of the national expected positive women. This is a big improvement from previous years. For example in 2010, the PMTCT coverage was only 25% (FMOH 2013d:30). Despite these improvements, the number of HEIs who did not get PMTCT services is still low. The MOH trained SBAs working in ANC, labour and delivery, PNC, and maternity service outlets on 'Option B+ strategy' to provide the service (FMOH 2013e).

Cognisant of these facts, health services coverage for maternal and child health has increased significantly and the number of SBA is increasing significantly in many countries. However, this increase is not optimum enough to reach the MDGs before the deadline of December 31, 2015 (WHO & UNICEF 2013:1-105). Hence, this research explored the contextual factors that affect the utilisation of these services from the community perspective.

2.5 POSTNATAL CARE

PNC is a general term describing the care provided immediately after delivery. This care includes early identification and management of obstetric and neonatal complications, HIV testing, counselling and treatment/prevention, and education for mother on danger signs after birth, breast-feeding, child care, self-care, and nutrition. PNC also includes the provision of family planning counselling and methods and vaccination services (Warren et al:2012:80-90).

Most maternal deaths happen during labour, delivery and within 24 hours of after delivery (WHO 2010:19-21). Particularly, the first (24 hrs) 2 days following childbirth is a critical time when complications that can end up serious outcomes including death to the new-born or the mother.

Nevertheless, in most middle and low-income countries, despite the high maternal morbidity, mortality, and disability associated with PNC, they offer less attention than ANC and skilled birth care. In these countries, only 41% of women (ranging between 7% and 92% among countries) and 26% of babies (ranging from 5-77%) receive PNC.

In sub-Saharan countries, the proportion of PNC recipients is about 70% (WHO & UNICEF 2013:16).

Postpartum Haemorrhage (PPH), defined as the loss of blood loss greater than or equal to 500 ml after the delivery of the baby, is the leading cause of maternal mortality worldwide. In most cases, PPH occurs mainly due to failure of the uterus to contract after delivery. Other causes include the presence of retained placenta or rupture or laceration of the uterus, cervix, perineum or vagina (Prata, Sreenivas, Vahidnia & Potts 2009:140). PNC by a SBA can minimise many of these consequences.

The major causes of neonatal deaths are infection, intrapartum-related causes including birth asphyxia, and preterm and low birth weight (<2,500 gram) (Kinney et al 2010:4). These conditions are preventable if skilled providers attend the births.

PNC is also the best opportunity to educate a new mother on breast-feeding skill and care of herself and her baby. Family planning provided to women and management of PPH through active management of third stage of labour (AMTSL) can reduce maternal mortality by 55% to 82% (Prata et al 2009:140).

2.6 MATERNAL AND CHILD HEALTH SERVICES IN ETHIOPIA

There has been a huge expansion of health facilities in the country in the last ten years, resulting in a significant improvement in access to MCH services in the last decade. Currently, more than three thousand health facilities provide MCH services. Moreover, because of the Human resource policy of the FMOH, the production of SBAs from government and private universities and colleges, and regional collages has improved (FMOH 2014a): However, Ethiopia was one of the countries where maternal death is very high. In 1990, maternal mortality ratio for the country was 950 per 100,000 live births. In 2008, Ethiopia was reported to be one of the six countries (India, Nigeria, Pakistan, Afghanistan and DR Congo) that contributed to 50% of the number of global maternal deaths. However, there are many improvements in the last few years. For example, the annual average reduction of maternal mortality from 1990 to 2010 was 4.9%. According to the new report by WHO and UNICEF, this annual rate of reduction has increased to 6.9%. Ethiopia now accounts for 3.1% (9,000) maternal deaths globally (WHO & UNICEF 2013:52).

In 2008, the FMOH carried out a national baseline assessment of the emergency obstetrics and newborn care (EmONC) services in the country. One of the purposes of this assessment was to provide evidence to guide policy and planning to strengthen the health system through EmONC as an entry point. The assessment covered 751 health facilities that provide childbirth services. According to the findings, only 10% of the visited health facilities had fully functioning lifesaving interventions for Comprehensive EmONC or Basic EmONC services. Moreover the assessment identified a poor and inadequate number of midwives to provide SBA in the visited health facilities (FMOH UNICEF, UNFPA, WHO & AMDD 2008).

Ethiopia relies heavily on Demographic Health Surveys to monitor maternal mortality and health. There is not a complete civil registration source. To achieve the MDG, the country has to decrease maternal mortality ratio to 238 per 100,000 live births (WHO & UNICEF 2013:8-22). With the current pace, it is unlikely that the country achieves this target in the remaining time (Accorsi et al 2010:7). Most Ethiopian mothers (90%) still prefer to give birth at home without assistance from a SBA (CSA [Ethiopia] and ICF International 2012:127). There are multiple and complex determinant factors behind this situation.

2.6.1 What are the determinants of SBA and PNC utilisation in Ethiopia?

The majority of Ethiopian research studies on maternal health services that were conducted prior to this study lack rigor in their methodology. Most are cross sectional and suffer from lack of causal association between the variables (Hurley, Denegar & Hertel 2011:93). In the absence of systematic review, randomised trials or case control studies, these researches were the only best available evidences for comparison purpose. The following paragraphs discuss this evidence in detail. Furthermore, the determinants of SBA and PNC utilisation in Ethiopia are summarised and presented below using the Andersen's Model of Health Service Utilisation.

Predisposing factors

Some researchers claim that age and parity of the woman were determinants of health services utilisation for SBA. Young women and primi-para women are likely to deliver in health facilities (Amano, Gebeyehu & Birhanu 2012:5). This may be because these

women consider themselves at high risk for complications related to childbirth and for fear of opinions of others who attend the course of childbirth at home (Bedford, Gandhi, Admassu & Girma 2012:234; Teferra, Alemu & Woldeyohannes 2012:8).

The educational status of the women and their spouses is also a documented determinant of health service utilisation. Better-educated women are more likely to obtain health care from a SBA pregnancy, childbirth and after childbirth (Malarcher 2010:6). This can be because educated women and families recognise the risks related to childbirth and value the role of medical care and health care workers.

According to a case control study by Abebe, Berhane and Girma (2012:5) to identify factors related to low utilisation of skilled birth attendance in Ethiopia, the likelihood of home delivery is high among women who attend ANC late in their pregnancy, have no formal education, are rural residents and those who have inadequate knowledge on pregnancy related problems. However, this study is hampered by the drawbacks of facility-based studies including selection bias, for it does not include those mothers who did not come to health facilities for services (Amano et al 2012:6).

In developed countries, women's' autonomy in general and their decision making power for issues related to their own health is asserted. However, in most developing countries women in general and women with low socioeconomic status have little power in the community and rely on their husbands or other family members for decisions regarding their health services utilisation. In Ethiopia, the major decision makers on place and time of delivery for women are the husband and older women in the family (mother or mother-in-law and sister or sisters-in-laws). These people decide the place of delivery and when and whether to seek care for the labouring women (Fotso, Ezeh & Essendi 2009:7; Woldemicael & Tenkorang 2010:995; Warren 2010:103).

The perception and awareness of individuals and the community about childbirth is critical in determining health services utilisation for childbirth and after delivery. There is a general perception among women in Ethiopia that institutional delivery is not necessary or customary (CSA [Ethiopia] and ICF International 2012:128). The majority of people in the communities do not believe that childbirth is an illness, and therefore not requiring the care and attention of health care providers (Gebrehiwot, Goicolea, Edin & Sebastian 2012:4). The community considers uneventful/successive past home

delivery experiences of the women or other important women as proof of success with subsequent deliveries (Shiferaw, Spigt, Godefrooij, Melkamu & Tekie 2013:6).

With regard to awareness of complications of pregnancy and childbirth, many women, including rural women in Ethiopia, are aware that pregnancy and childbirth can have complications and that there is merit in going to health facilities. There is a recognition of the expertise of care providers to manage complications arising during childbirth and after child birth. However, these services from health facilities are sought only if traditional options and cultural practices including herbal remedies, prayer, and massage are first tried and are not successful (Waren 2010:102).

There is also a perception among women that childbirth is a risky phenomenon and that complications will occur if the condition happens to be God's/St Mary's will. There is a belief in the community that heavy works during pregnancy, being young and experiencing malnutrition to expose pregnant women to complications during childbirth. Nevertheless, the community is usually not open to discussions about these complications in front of expectant women for fear of bad luck for the women (Warren 2010:111).

The paragraphs below present a summary of selected relevant studies done in Ethiopia that related to this study.

One recent study in Ethiopia, conducted by Shiferaw et al (2013:1-10), aimed to explore why women prefer home delivery in rural areas in Ethiopia where obstetrics care is accessible and distance and cost barriers are of less concern for the community. The study used a mixed method approach that included surveys, focus group discussions (FGDs) and key informant interviews (KII). The study identified the prevailing knowledge and perceptions about institutional delivery in the community. Among these was a misconception that the HCWs routinely perform surgery on all labouring women. Such false rumours will make women shy away from facility based skilled birth care during childbirth. This study also confirmed the community belief that health facilities do not **provide** services outside of routine working hours including weekends and during night times. The results of this study are consistent with previous studies done in Ethiopia and elsewhere. According to these studies, educated and autonomous women used health facilities for their last childbirth more often than the other women did. However, unlike

other studies, in this study transportation and financial barriers did not play a significant role in determining utilisation of health facilities for childbirth. This difference could be attributed to the study location, since the selected district has a well-functioning health facility and has implemented the national policy that exempts women from fees for maternal health services including childbirth. This study highlighted the role of elderly women who are relatives or neighbours of the labouring women as main decision makers. This study revealed that TBAs have cultural acceptance by the community and are trusted source of service for labour and childbirth. The study location is presented as rural, however, in fact it qualifies under the Urban classification by the Ethiopian Central Statistic Agency definition of urban, semi-urban, and rural (EPCC 2008:76).

The other relevant study was conducted by Worku, Yalew and Afeworkl (2013a:1-7) to assess the experiences in seeking professional assistance among women who gave birth 12 months prior to the study and had obstetric complications. The study location was a geographically remote district where the community lives far from a health facility. The cross-sectional community based study included interviews with 1,668 women. The result showed that only 57% of the interviewed women had a favourable perception of health professionals as being better and safer birth attendants than TBAs. In addition, the majority of the women in this study thought that women should not leave their homes during the first seven days after childbirth. About half of interviewed women did not visit a health facility for the complications they encountered during childbirth. The major reasons for not seeking assistance from health providers for the complications among these women were inability to judge the seriousness of the complication, distance/transportation problem to the health facility, and financial factors.

The current study will bear in mind the findings of the previously cited studies in mind to see whether there are any similarities. Such comparisons will be useful in the development of strategies for the utilisation of skilled birth attendants and PNC care which is the ultimate aim of this study.

Enabling factors

According to the FMOH Financial reform MNCH services ANC, childbirth, PNC are provided free of charge. However, the implementation of this policy varies in different parts of the country. In some regions, it has been fully implemented and in other regions

services are free but women are asked to pay for the drugs and other commodities used during health visits (FMOH 2013:93).

Research studies in Ethiopia and elsewhere have revealed that rural women in general are less likely to use maternal health services including skilled birth care and PNC (CSA [Ethiopia] and ICF International 2012:126-127). For rural women, in addition to urban rural differences (which are you referring to here, education differences, unavailability of nearby services also hampers service utilisation. For example, Worku et al (2013b:4) indicated that even in situations of maternal complications during pregnancy, labour, or post-delivery, distance from health facility and cost related to transportation and health services hamper women from using health facilities. On the other hand, the availability of the services near the community does not guarantee use of those health services (Bedford et al 2012:234).

This is partly the source of the research problem addressed here. As described in the background of this document, although there has been a huge expansion of health facilities over the last decades in Ethiopia, health services utilisation for childbirth and PNC is still desperately below what is expected.

Among the factors that determine the low utilisation of SBA and other services was household wealth. Women from a high household wealth quintile are more likely to use health facilities than their counterparts from the lowest wealth quintile (CSA [Ethiopia] and ICF International 2012:130; Yar'Zever & Said 2013:8). The socio-economic inequality in coverage of SBA for the poorest (20%) and the richest (20%) is wide in Ethiopia (WHO & UNICEF 2013:32).

Studies consistently described health system factors as major determinants of utilisation of skilled birth care and PNC in Ethiopia and elsewhere (CSA [Ethiopia] and ICF International 2012:133). These were health providers, the health facility, and the organisation of the health system itself related factors. The community complains that health providers are not available during night-time or weekend shifts, lacking the necessary skill to attend labour, and lacking motivation and medical ethics. There are situations where health providers fail to diagnose a true labour and refer the labouring women back home, asking them to come back when the labour matures (Bedford et al 2012:235). Most health facilities also are under-equipped/ with basic supplies and drugs

that are necessary to provide basic services to their clients (Warren 2010:103; Gebrehiwot et al 2012:7). Hence, supposedly, these facilities refer labouring mothers to other health facilities and in doing so expose families to unnecessary cost and discomfort.

Health care workers also sometimes fail to recognise the culture and tradition of labouring women and their families (Warren 2010:102). Ethiopia is a country with diverse cultures and traditions. Each culture has its own perspective and rules that the community implements them during and after childbirth. In the research of Shiferaw, et al (2013:15) for example, it is pointed out that in some Ethiopian societies, the placenta must be given due respect by being buried in their compound near the house of the woman who has given birth. These practices are very important for communities. The community believe that these practices help to avoid evil spirits and protect the woman and her new-born's health during their nesting period (Warren 2010:102). Unfortunately, health facilities do not seem to be ready to accommodate these practices. Moreover, the unfriendly nature of delivery units prompts many women to shy away from seeking delivery services from SBA. For example, women complained of the cold, unclean, and very bright deliver rooms; health providers also do not allow labouring women to be in other positions than the lithotomic position during labour time; and health facilities do not allow family members to enter the delivery room and provide support for labouring women (Bedford et al 2012:234).

Preference for home delivery is generally highest among most women in rural Ethiopia (ECSA & ICF 2012:128; Warren 2010:101). Home delivery makes women feel comfort and warmth during labour time. The women also appreciate the close attention and support they get from family members, relatives and neighbours (Bedford et al 2012:234; Teferra et al 2012:5). Previous researches reported that the spontaneous nature of labour to be the main reason for home delivery by women in remote Ethiopia (Bayou & Gacho 2013:84).

Need factors

The way in which pregnant women and their family members in Ethiopia view complications of labour and childbirth is very important. According to the WHO, the outcomes of labour and delivery are unpredictable and at risk (WHO 2006:7). According

to Worku et al (2013a:7), inability to judge the seriousness of obstetric complications was one of the major reasons for not seeking assistance from health providers in Ethiopia. This entails that lack of understanding of the dangers associated with pregnancy and childbirth; some communities do not value the need for visiting health facilities for childbirth and postnatal care.

2.7 SOCIAL NETWORK AND SOCIAL SUPPORT

Social network and social support are concepts that illustrate the structure, process and functions of relationship in a society. Social network refers to the number of contacts and frequency of interaction that a person has with friends, family and other important people in his/her life (Maulik et al 2011:35). It represents the web or networks of relationships of the society that an individual lives with. Social support is among the functions of social network and relationships (Glanz, Rimer & Viswanath 2008:186). It is a function of the interaction in the social network. Conceptually, social support related to social network. People attain social support through a social network established by people by some life circumstance. The concept is different from social influence, which refers to any real or implied pressure exerted by others on an individual's feeling, emotion, thought, or action (Gayen & Raeside 2007:902).

Social support includes emotional, appraisal, informational, and instrumental support. Appraisal support includes constructive feedbacks and affirmations that are useful for the individual to evaluate him/her. Emotional support encompasses empathy, love, and trust. In situations where measuring social support comprehensively is not feasible, predicting social support through measuring emotional support serves is the most preferred strategy (Glanz et al 2008:197). Information support entails information suggestion and advice provided to address problems that individuals face.

2.7.1 The role of social network and social support in service utilisation

Social support and social network influence the health of individuals, families and the community (Heaney & Israel 2008:207). The critical role of social support in the well-being of individuals and families when they are faced with major stressful life events and critical life transitions like first childbirth has been recognised by public health practitioners (Hodnett et al 2012:15).

The roles of social support and social network are multiple. Social support plays an important role in stimulating individuals and groups to adopt and maintain acceptable health behaviour (Gamarra, Paz & Griep 2009:274; Wouters, Damone, Rensburg, Masquinier, Mevlemans 2012:15). In addition, existing norms (beneficial or harmful) reinforce social network and diffuse new ones in a society (Viswanath 2008:207). Because of human predisposition to follow one's peers, strong relations can be a setback including unfavourable health outcomes (Ferlander 2007:123).

Social support is an intentionally helpful act. Unlike social influence, social support is a care consciously provided in caring, trusting and respectful ways so that the individual will make his own informed choice (Heaney & Israel 2008:192). The intention of social support is to benefit an individual or family in the social network. However, the effects of social support can be positive or negative (Maulik et al 2011:30). The type of support provided by the social network members for health service utilisation depends on their knowledge, attitudes and perceptions regarding service usage for a specific health situation. Because of misconception, lack of knowledge or bad past experience, people in a social network including family members may discourage the use of formal health facilities and provide wrong advice to pregnant women in favour of home delivery. The positive effects of social networks and social support on health service utilisation can include buffering the effect of stress, providing direct support, directing to the right referral service site, or direct service provision to those seeking help (Maulik et al 2011:30). One other mechanism by which social support influences health behaviour is by its effect on improving compliance behaviour (Wouters, Damme, Rensburg, Masquillier & Meulemans 2012:14).

2.7.2 The perspectives of social support in different societies

Literature describes social actions in two intellectual schools of thought. According to many sociologists, social context govern, shape, constrain, and redirect actors and actions. In the view of most economists, each actor has his/her own independently arrived goal, acts independently and is wholly self-interested (Angel 2011:2; Choby & Clark 2013:7).

In rural communities of developing countries, which are mostly traditional in outlook, the social network is dense and kinship-based. These communities cannot easily accept new and scientific information. The societal values and culture dictate Individual decisions. Hence, they prioritise home or community-based services over allopathic care (Edmonds, Hruschka, Bernard & Sibley 2012:458). Social network has both formal (e.g. contact with voluntary associations and civil services) and informal (e.g. family, friends and colleagues) connections (Ferlander 2007:117). In Ethiopia, there are formal social network groups in which women participate. Local Women's associations and the health development army (HAD) and Women's Idir, Tsewa, neighbourhood coffee groups are among the informal social networks for women. In this research, the social support provided to the women was assessed irrespective of the type of the social network the women belonged to.

2.7.3 What is the need to study social network and social support?

Much of the research done on the relationship between social network/social support and health services utilisation focuses on mental health problems and chronic diseases such as diabetes and Cardiovascular disease (Brown & Scheid 2010:200) and cervical and breast cancer (Gamarra et al 2009:274). Studies done on health services utilisation for mental health conditions indicate that social networks/social support affects health services utilisation for mental health conditions either positively or negatively (Maulik et al 2011:47). However, social support may operate differently for different health conditions (Heaney & Israel 2008:196). Particularly, in patriarchal and traditional societies, social support may have its own unique role in maternal health services utilisation for SBA and PNC. This issue invites study.

In recent years, social scientists have given increasing attention to the relationships, networks and support among people who share the same values (Leal, Pereira, Lamarca & Vettore 2011:s238). However, there are limited studies done that explain the role of social network and social support on health services utilisation in stressful life events in developing countries, and even the available study results are mixed (Maulik et al 2011:48). Hence, the results of this study could attempt to ascertain the role of social support in health service utilisation for SBA and PNC. This study focuses on the relationships and support at two events - childbirth and in PNC.

A study done in Rio de Janeiro State, Brazil on the relationship between social capital, social support and the adequate use of prenatal care services showed that there is an inverse association between emotional and affective support and prenatal service utilisation (Leal et al 2011:s241). Measures of social support are conceptualised as received or perceived support dimensions where the former refers to one's potential to access social support and the latter implies the reported receipt, exchange, or utilisation of resources at a specific time. Received support happens in response to stressful situations and is a contextual factor (Uchino 2009:237). Individual's perception is true to the individual. Therefore, this study tried to measure information about the study subjects' social support based on their responses to social support questions prepared for this purpose. Perceived support has a consistent influence on mortality and health. However, the links between received support and physical health are inconsistent. For example, a study done in Matlab, Bangladesh to determine social networks' influence on decisions regarding place of birth found that perceived advice provided by members of network had significant influence on the decision of women for utilisation of services for uncomplicated pregnancy and childbirth (Edmonds et al 2012:457).

2.8 SUMMARY

In the above chapter, literature was analysed on utilisation of SBA and PNC globally and in the context of Ethiopia. The chapter described the available evidences, existing gaps, the magnitude and public health importance of the gaps to shade light on the research questions, and the importance of this research. It also discussed major determinants of utilisation of SBA and PNC from available evidences in the country based on the Andersen's Health Utilisation Model.

The following chapter presents the research design and method. The chapter that illustrates how the study tried to answer the research questions and the scientific tools and the processes followed.

CHAPTER 3

RESEARCH DESIGN AND METHOD

3.1 INTRODUCTION

The purpose of this chapter is to provide a comprehensive description of the research design and the methods used to achieve the purpose and objectives of the study as well as to answer the research questions.

3.2 JUSTIFICATION FOR RESEARCH METHODOLOGY UNDERPINNING THIS STUDY

The study used mixed methods approach. The mixed methods research study approach combined elements of qualitative and quantitative research approaches for the purpose of breadth and depth of understanding and corroboration (Creswell, Klassen, Clark & Smith 2011:12). "Method" in the mixed methods research refers to issues more than method of research (experimental, ethnographic, observation, etc.) to include philosophical issues (e.g. ontology, epistemology) and method of data collection including questionnaires and interviews (Migiro & Magangi 2011:3758).

Mixed methods research helped in answering a broader range of research questions as it combines the strengths of both qualitative and quantitative approaches. Hence, it provides strong evidence for conclusion and adds better insight and understanding of the issue under study (Migiro & Magangi 2011:3759). As described above, the purpose of this study is to assess the current status of utilisation of skilled birth care and PNC services and propose a health utilisation framework for these services based on the study and inputs from experts' opinions.

However, using Mixed Methods Research is not without challenges as it is more expensive and time consuming and requires careful working out of the methodological details (Johnson & Onwuegbuzie 2004:19). The following paragraphs discuss the research design and methods used in this research.

3.3 RESEARCH DESIGN

A mixed method approach which combined both quantitative and qualitative approaches was used. The use of mixed method allows for data triangulation and for vigorous and dependable conclusions.

In mixed method research, the use of both quantitative and qualitative data is said to be complimentary (Charles & Abbas 2009; Leech & Onwuegbuzie 2009:267). The two methods have similarities and the combination has complimentary strengths and non-overlapping weaknesses (Ozawa & Pongpirul 2013). Most authors (Denzin 2010:421-422; Johnson & Christensen 2008:34) posit that mixed method research helps the researcher to understand both the subjective and objective worlds of human beings.

3.3.1 Quantitative approach

Quantitative research approach is rooted in post positivism with the philosophy that reality can be discovered using the deductive approach in which ideas or concepts are deduced into variables (Polit & Beck 2013:314). In this study, the researcher first conducted the quantitative community-based cross-sectional survey of women who gave birth in the last twelve months prior to the data collection period irrespective of who attended the delivery process. Subsequently, the preliminary analysis results of the Cross-sectional study were used to inform the following Qualitative section of the study, which explained and complimented the quantitative evidences. The quantitative methodology had additional benefits in that its application helped to develop trust and collegiality with study community members and identify discussants/interviewee for the in-depth interviews (Daniel & Turner 2010:754).

3.3.2 Qualitative approach

Qualitative research design in contrast to quantitative research design is rooted in the naturalistic paradigm in which multiple realities are subjectively described (Burns & Grove 2009:257; Polit & Beck 2013:246). In this study qualitative descriptive design was used in order to provide a rich description of the phenomenon from the participants' viewpoint. According to Sandelowski (2000:334), this design aims at providing a "comprehensive summary of events in the everyday terms of those events." In order to

accomplish this, the researcher captures information in a natural setting (Lincoln & Guba 1985:189). In this study the researcher used qualitative approach to describe the key factors that influence the utilisation of such services, and explore stakeholders' recommendations for the development of a strategic framework for utilisation of health services for SBA and PNC in Ethiopia.

The qualitative methods applied focus group discussions (FGD), in-depth interview (IDI) with Key informants (KIs) and Delphi method. The study used FGDs and KII to obtain an in-depth understanding of the perspective of women and the community on why women do not utilise SBAs during childbirth and PNC (Ring, Ritchie, Mandava & Jepson 2011:3).

The study applied FGDs with relevant community members including women who delivered at home and at health facility in the last year preceding this study, traditional birth attendants, Health Development Armies (HDAs).

The second qualitative method was In-depth Interview (IDI) with Key Informants in the community. Key Informants were identified and interviewed include respected and prominent individuals in the community, HEWs, SBAs (health officers/nurses/midwife), medical directors/chief executive officers of the two health centres in the district. The KII tools explored the perspectives and their recommendations that helped for the development of the Framework for the utilisation of SBA and PNC service.

3.4 RESEARCH METHOD

3.4.1 Population and sampling

The researcher purposefully selected the study area based on the availability and accessibility of maternal services in the community. This is because, as the GOE is striving to make maternal and child health services universally accessible across the corners of the country, the study tried to identify other factors than access that affect the utilisation of SBA and PNC.

3.4.1.1 Study population

Population are human beings or other cases in which the investigator is interested in (Polit & Beck 2013:306). The following inclusion and exclusion criteria for the study were considered:

Inclusion criteria

To be included in this study the respondents had to meet the following criteria:

- Women of reproductive age
- Living in the study district
- Had given birth at least one year before data collection
- Using the FMOH Woreda Based Core Planning document

Exclusion criteria

To be excluded from this study the respondents should have:

- Given birth before their 28th of gestational week
- Given birth before twelve months prior to the data collection to avoid recall bias
- Living outside the study district

The study population were all women of reproductive age, who lived in the study district and had given birth in the last one year before this study. Use the FMOH Woreda Based Core Planning doc. According to the FY2013/14 Federal Ministry of Health Woreda Based Core Planning Document (2013b:119). In the selected districts, there were about 227,370 inhabitants. Of these, the total number of women who gave birth in the preceding year was 760. The research-excluded women who had given birth before their 28th of gestational week. The exclusion also included women who gave birth before twelve months prior to the data collection to avoid recall bias.

3.4.1.2 Sampling

Sampling was done for both quantitative and qualitative phases of the study.

Quantitative sampling

For the quantitative part of the study, random sampling technique was used to select the study subjects. HEWs have a register with a list and number of households that identifies pregnant, lactating women and other clients in their respective catchment area they are working at. Hence, the sampling frame was this list prepared by the HEW. The researcher used this sampling frame to select eligible women that meet the inclusion criteria for this study using.

Study participants were selected using Simple random sampling technique. Simple random sampling is a type of probability sampling where each member has purely an equal chance participation in the study (Lohr & Julet 2010:33).

Qualitative sampling

To select study participants for the qualitative study the criteria was relevance of the role of the community members to the aim of the study. This strategy was helpful solicit data on the service utilisation for SBA and PNC from the resourceful community members. To assure representativeness of sampling, Maximum Variation Sampling of representatives from the community, community groups, important personnel from the community, SBAs, experts, and recipients of services are involved in the qualitative study (Kitto, Chesters & Gribich 2008:244). This helped to get holistic overview of the phenomena of factors affecting health services for skilled birth attendant and postnatal care and to capture their perspectives on the recommended service framework that is feasible in the study set up. Hence, the study used purposive sampling technique to select the FGD and IDI participants.

3.4.1.3 Sample size

A sample size is a subset of the population elements that the researcher works with (Polit & Beck 2013:306). For the quantitative element of the study, the research used

the formula for single population proportion study with random sampling (Mitchel and Jolley 2010:284-285) to set the sample size. The assumptions under this formula were:

In the two selected districts, there were about 227,370 people (FMOH 2013b:119). From these, in 2014, the population size of the districts that live within 10 kms of radius from the health centres was 81,980 (FMOH 2013b:119). To estimate the number of women who delivered a year before the survey I multiplied the population of the district by Total Fertility Rate (TFR) of the zone, which was 3.8%. Then we reached at expected annual pregnancy for the districts to be 3,078.

The study used two scenarios into account to determine the sample size. For the first scenario, the assumptions were 20% SBA proportion at 95% Confidence Interval with Margin of Error (Confidence limit) of 4%. The assumptions for the second scenario were 10% PNC proportion at 95% Confidence Interval (CI) with Margin of Error (Confidence limit) of 4%. The study used the following formula to determine the sample size.

$$n = \frac{Z(\alpha/2)^2 * P(1-P)}{d^2}$$

- n=sample size
- $Z(\alpha/2)$ =is the value of normal distribution representing confidence level of 95%. Its value is 1.96
- P=Proportion of the case (Skilled care for childbirth or postnatal care)
- d=Margin of Error

Table 3.1 Scenarios used to determine the sample size: North Shoa, October 2014

| Scenario | Sample size |
|---|-------------|
| One (proportion of skilled care for childbirth=20%; 95 CI | 342 |
| Two (proportion of PNC=10%); 95 CI | 202 |

Finally, the researcher decided to select the number from the first scenario (see Table 3.1 above). Accordingly, the researcher fixed the sample size for this study to interview 342 women who delivered 12 months prior to this interview. There were two study sites for this study. The above sample size allocation to the population size of the two study sites were as follows:

Table 3.2 Proportional allocation of sample to population size: North Shoa, December 2014

| Name of the site | Total population | Population living within 10 kms of radius from the health centre | Expected number of women who gave birth within 12 months prior to the study | Sample size |
|-------------------------|-------------------------|---|--|--------------------|
| Chacha | 32,830 | 24,190 | 813 | 274 |
| Keit | 49,153 | 5,980 | 201 | 68 |
| Total | 81,983 | 42,582 | 1,014 | 342 |

Using the register by the HEW that lists women who delivered in the past year as a sampling frame, we randomly selected 342 women who had delivered in the past one year prior to the study from the two study sites. However, we succeeded to interview 347 women that met the criteria.

As described above, the study used purposive sampling technique for the qualitative study. Purposeful sampling technique is a deliberative process of choosing the members that can contribute to the research objective. However, to assure representativeness of sampling, a Maximum Variation Sampling and typical case sampling techniques were used to select representatives from the community (Polit & Beck 2013:320). The former helped to select diverse cases that have relevant role in health service utilisation for women. Hence HDAs, TBAs, Ambulance driver, and district health management officers, heads of health facilities, SBAs and HEWS were included. Using the Typical case sampling, the cases which can illustrate their life experience about skilled care for childbirth and PNC participated in the study. These delivered either in a health facility or at their homes in the last 12 months prior to this study. This helped to obtain a holistic overview of the factors affecting health services for SBA and PNC and to capture a range of perspectives on the recommended service framework design. The number of FGDs and KIIs was determined by the extent of the richness of data collected to answer the study objectives until there were no more new data or discoveries and there was enough consistency in the data (data saturation) (Mason 2010:13). Each FGD constituted between 6 and 11 discussants (Royse 2011:275). In total, we conducted 21 KIIs and 10 FGDs.

3.4.2 Development and testing of the data collection instrument

For the quantitative data collection instrument, the researcher consulted standard survey questions from standardised surveys including DHS and previous similar researches. The researcher first translated the questions into the local language in the study location, which is Amharic. To check the validity of the questionnaire were translated back into English to avoid its inconsistencies in the meaning and intentions. Then we developed a training guide to train data collectors and the supervisors. The training guide emphasises on how to assure the quality data, ethical issues, possible challenges and how to handle the challenges, effective communication strategies and some questions that need thorough attention by the data collectors. Then the instruments were pretested in 30 women in Addis Ababa.

To solicit responses related to the study objectives, we used structured KII and FGD instruments. The researcher tailored the questions based on the interviewee disposition and past experience.

3.4.2.1 Characteristics of the data collection instrument

The survey question had a cover page that the data collectors read out for every woman that qualified for the interview and after thorough explanation those that agreed to participate in the study were then asked to sign an informed consent form (Annexure 3). The survey questionnaire consisted of five parts. The first section was composed of questions on the socio demographic characteristics of the women. This included the age, marital status, ethnicity, religion, educational status of the woman and their husband's. The second part was on the utilisation of ANC, Skilled care for childbirth and postnatal care. Following the service utilisation category, were questions categorised under predisposing, enabling and need factors (Annexure 4). The questionnaire was also translated into Amharic the local language (Annexure 5).

The qualitative data collection instruments had main guiding questions and probing questions to explore the interview and the discussions. The questions were open ended and none leading question. As the interview progressed, we modified some of the questions to fit its purpose. We annexed the English and Amharic instruments in this thesis (Annexure 6).

3.4.2.2 Piloting of the data collection instrument

We pre-tested the qualitative data collection instrument in Addis Ababa on 30 women who had delivered twelve months prior to the pre-test time. Addis Ababa is outside the two districts used for the study. The purpose of the pre-test was to acquaint the data collectors and supervisors with the instrument, the questions, and the actual fieldwork process. In addition, the pre-test also helped to improve the quality of the questions.

Based on the pre-test findings, I made some changes to the questions. We made corrections to typologic errors we identified. In addition, I added or deleted some questions from the questionnaire. The qualitative instrument was not pre-tested.

3.4.2.3 Quantitative data collection process

Six data collectors participated in the quantitative data collection. Five of the data collectors were all Bachelor of degree level educated and graduates in the field of health and sociology. One enumerator was third year University student. The five enumerators have experience in conducting their own researches. Two of them were fluent in English and two effectively communicate both Amharic and Afan-Oromo. These data collectors collected the quantitative data by going home to home in the selected households from the study area.

In addition to the six enumerators, two supervisors participated in in this research. The role of the supervisors was to oversee the data collection process and trouble-shooting problems encountered by the research assistants. Before the day of the data collection, the Supervisors organised the logistics needed for the data collection. They oriented data collectors about their assignment zones and the focal persons that guide them in the field. The Supervisors also participated in the data collection. On the day of the data collection, the Supervisors went around and guided the research assistants to comply with the data collection Guidelines to ensure the quality of the data collected. They also provided technical support to the data collection through the phone. At the end of each day, the supervisors checked the filled-instruments for completeness and correctness. They also held discussions with the enumerators and took field-notes of the accomplishments of the day including the problems encountered.

3.4.2.4 Qualitative data collection process

Individual interviews and focus group discussions were the two qualitative methods used in the study. The same were conducted by the researcher.

Individual interviews

Face-to-face interview was made with the KII. The KII included health extension workers, midwives, nurses, Woreda Health Office reproductive health person, religious leaders both Muslims and Christian religions and local community leaders. The opening statement for all those that were interviewed was *“Please tell me what you perceive as barriers to health service utilisation for pregnant, women in labour and postnatal women in the community.”* This broad statement was followed by other questions on predisposing factors, role of culture and religion and knowledge on health services among others (Annexure 6). The interviews were audio-taped with the permission of the participants and each interview lasted sixty minutes to 90 minutes. The researcher also took field notes. The interviews took place in the participants’ homes or offices at the time selected and suitable to the participants.

Focus group discussions

The FGD discussants sat in semi-circular sitting arrangement to allow effective communication in the FGDS. Focus group discussions took place in the compounds selected by the participants themselves. Most of the discussions took place in the shades. As with individual interviews, FGDs were also audiotaped with their permission and the research assistant took notes as well. The questions for the FGDs were the same as those of the individual interviews (Annexure 6).

3.4.2.5 Delphi data collection process

The Delphi method or technique is a structured sequence of communication exercise on a subject matter among selected knowledgeable and experienced people from diverse geographic and discipline background using series or “rounds” of questionnaires. Delphi method helps to explore issues from many panellists living in different geographic locations and from diverse disciplines participate in a normative way (Geist 2010:148).

Hence, the technique reduces the unwanted consequence of interactions in groups like control of the consensus process by dominant group members. The other merit of this technique is its anonymity (Jones & Hunter 1995:376). These advantages of the Delphi method allows to overcome challenges common to other qualitative methods mainly focus group discussion. This includes following one single thought, destructed from the main issue of discussion, and loss of sight of the goal of the discussion. Researchers do not have universally agreed up on requirements for using the Delphi Method (Okoli & Pawlowski 2004:17). In this research, the Delphi panellists included MNCH programme experts, lecturers, and other relevant experts. The purpose of this method was to solicit inputs from these experts. Data was collected telephonically from these experts. The first telephonic interview just introduced the researcher and the purpose of the call and then explained the study and made the appointment. The second telephone interview asked for the participants input into the envisaged framework. The whole process of data collection using the Delphi method and the framework itself is explained in chapter 5.

3.4.3 Data analysis

Quantitative and qualitative data nalysis will be discussed separately in this section.

3.4.3.1 Quantitative data analysis

A statistician entered the data collected from interviews of 347 women into EPI-Info Version 7 software (CDC 2012). Then the Statistician cleaned and coded the data. The Investigator randomly selected data from about 40 (10%) filled-questionnaires, entered into EPI-Info Software, and checked for validity by comparing with the data entered by a Statistician. Then, after the Statistician exported, the data to Statistical Package for Social Sciences (SPSS) Version 20 (IBM Corp 2011), both descriptive and analytic statistic were used to analyse and answer the objectives of this study, which aimed to investigate the status and factors determining the utilisation of SBA and PNC services.

With the SPSS Software, the researcher used Logistics Regression Model to identify the key variables that have significant association with skilled birth care and PNC attendance among the study population. The researcher used Binary Logistic Regression to identify the predisposing, enabling, and need factors that predict the

dependent variables. The first dependent variables that were analysed in this model were utilisation of SBA for childbirth. The other dependent variable was utilisation of PNC by the woman. The third dependent variable was utilisation of PNC by the babies. I separately entered the relevant independent variables for each of the three dependent variables and analysed their relationship with the respective dependent variables. The Binnary Logistic Regression representation was as follows:

$$Z=b_0 + b_1X_1 + b_2X_2 + ...b_kX_k \text{ (Garson 2014:163)}$$

- Z in the above formula represents the log odds of the dependent variable. As described above, in this study we have three dependent variables for each of which the analysis were done separately.
- b_0 stands for the intercept of the model
- $b_1, b_2, ...b_k$ stand for the independent/predicting variables
- $X_1, X_2, ...X_k$ stand for the coefficients of the independent variables

3.4.3.2 Qualitative data analysis

Data for interviews were transcribed verbatim by an experienced transcriber who was one of the research assistants. Data was then analysed using qualitative thematic content analysis and framework analysis. The Thematic content analysis was used in exploring or describing reasons for use and none use of SBA and PNC. The Framework analysis helped in classifying and summarising data within a thematic framework (Green & Thorogood 2009:202-208). The following were the steps followed:

First, familiarisation was done with the data in their entirety by listening to audi-recording, reading of field-notes, and the transcripts repeatedly. Then thematic analysis was done to develop a coding scheme. Categories followed Andersen's health services utilisation model (predisposing factors, enabling factors and need factors) as themes to classify the codes. These coding categories were all inclusive and mutually exclusive. Therefore, themes were used as unit of analysis for the qualitative data.

Identification number and indexing numbers were allocated to each unit, which indicated the fragment's precise location in the transcript. This number was simply the line number in the transcript plus a letter (a, b, c, or d) to indicate which fragment on that

line is being located. The letter was put if there was more than one relevant fragment on the same line.

A special coding sheet for charting was then developed in which the column and row headings represented categories of relevant information. Then, an identification number of each fragment of relevant information was put into the appropriate cells. The identification number allowed for comparison of the content of one interview with another and to physically explore the relationship and association between the concepts. This step is called Mapping and interpretation (Green & Thorogood 2009:213). It also allowed the researcher to summarise the results of a number of interviews on the same topic by showing the frequency with which each type of information is given. Finally, it provided a locating index that helped the researcher to find specific examples of any category of information in its original context in the transcript. The researcher looked at the relationships between new themes that emerged for example disrespect and abuse and the context of particular codes. Then the researcher summarised and classified the data within a thematic framework. We selected and presented verbatim quotes from interviewees and discussants relevant to the themes with their analysis.

In this research, the researcher used the consolidated criteria for reporting qualitative research (CORAM) to improve the quality of reporting the aspects of this research. For improving, the quality of reporting qualitative researches CORAM - is a 32-item checklist, was recommended to be used (Tong, Sainsbury & Craig 2007:352-356).

3.4.3.3 Delphi method data analysis

For data collected using the Delphi method, the researcher analysed the feedback collected from the Delphi panel through email. The feedback from the Delphi panel included editing for typographic errors, inputs, questions and comments on the content highlighted in track changes. The researcher analysed the feedbacks, incorporated the inputs and sent back to the Delphi Panel. For feedbacks that were not clear or seemed indifferent from the existing knowledge and practice, the researcher clarified through a telephone call to the person and compared with existing literature, and decided to include or reject in the framework. The three rounds of feedback helped to validate the framework by the Delphi panel.

3.5 RIGOUR AND TRUSTWORTHINESS

Rigour involves scholarly measures taken to ensure reliability and validity of instruments used for data collection.

3.5.1 Reliability of the study

Reliability in quantitative research refers to the degree of reproducibility and stability of a particular instrument or technique to yield the same result each time it is applied to the same subject (Babbie 2010:150-152). In this study, the Investigator provided theoretical and practical training to the data collectors. In addition, the Supervisor verified the reliability of selected questions from study participants during the fieldwork. The data entry clerk entered the data into EPI Info software. Another ten randomly selected questionnaires were selected and entered into EPI Info software and checked for consistency. Inconsistencies were only found in two of them implying that the data entered were consistent.

3.5.2 Validity of the study

In quantitative study, there are three types of validity: face validity, content validity and construct validity. Face validity is the subjective evaluation of the relevance, unambiguity and clarity of the questionnaire. Content validity, on the other hand refers to the extent to which the instrument is comprehensive enough to incorporate the domains of interest that are intended to be measured (Bowling 2009:166-168).

In this study, we adopted most questions in the questionnaire from other standard researches including DHS and Sarason et al (1987:498-507). Moreover, I incorporated important comments and suggestions from statisticians and epidemiologists to improve the validity of the instrument. Operational definition provided to skilled care for childbirth and PNC in this research was in reference to the definition given by the World Health Organization. This improved the construct validity of this research.

3.5.3 Trustworthiness

Lincoln and Guba (1985:300) describe trustworthiness as the value, applicability, neutrality and consistency of an inquiry. It is essential for the study to have trustworthiness established so as to consider methodologically appropriate and worthy to attention. Trustworthiness is achieved through strategies that demonstrate credibility, transferability, dependability and confirmability (Lincoln & Guba 1995:300).

3.5.3.1 Credibility

Credibility in this study was ensured by investing more time during data collection through visitation of the KII and focus group discussants to establish rapport with them. The researcher's experience as a health care practitioner and conversant with SBA and PNC services in Ethiopia assisted in conceptualising this study. Again, the researcher used individual interviews to probe participants. Also, field notes and audio-tapes were used to enable the researcher to understand in-depth, the complex nature of utilisation of SBA and PNC services. The researcher used member check during data analysis by giving transcripts to an independent researcher and supervisors to check the authenticity of data (Creswell & Clark 2011:91).

3.5.3.2 Confirmability

Confirmability was ensured through audit trail. The researcher used record keeping such as field notes, interview transcripts from individuals (Lincoln & Guba 1985:300). The same authors describe confirmability as some degree to which the research findings are depicted from the study and not from the researcher's biases. The researcher used relevant literature in order to ensure that the reader can conceptualise the researcher's background for take up this study. Confirmability was addressed by using an independent reviewer of the audio-tapes and recording of themes by an experienced and independent qualitative researchers such as supervisors. The focus of the member checking helped the researcher to focus on discovering omissions of comments and to verify placement of phrases into categories.

3.5.3.3 *Transferability*

Sandelowski (2000:300) describes transferability as the extent to which other people can see similarities in the findings of the study. In this study, transferability was ensured through the research design because mixed method had been used in other similar studies. The researcher provided adequate information on the study process for replication such as the study purpose, objectives, and sampling strategies data collection procedures and data analysis. The research also used member check through by the supervisor and experts in the field and through code-recode procedure during analysis of the interview transcripts.

3.5.3.4 *Dependability*

Dependability is described by Sandelowski (2000:300) as a criterion used to judge the accuracy, completeness and accessibility of the research process. The supervisors and copy editor for this research were used as auditors of the reviewed documents produced during the study. The supervisor also reviewed transcripts for analysis and an independent qualitative researcher was also used to review the transcripts.

3.6 ETHICAL CONSIDERATIONS

This section discusses the permissions sought and granted by bodies relevant to the study. It also discusses the ethical principles adhered to.

3.6.1 Permission to conduct research

In order to safeguard patients' rights and do no harm, and do good (beneficence) to patients, and observe other principles important to protect human participants were observed (Burns & Grove 2009:346). The approval for the study was sought from two ethics committees before commencement of data collection. The initial ethical clearance was sought from the Higher Degrees Committee of the Department of Health Sciences, Unisa (Annexure 1). Upon approval by the UNISA Ethics Committee, the ethical approval was sought through to Amhara RHB (Annexure 2).

3.6.2 Confidentiality

Confidentiality was maintained carefully during and after data collection. Confidentiality is concerned with the respect for people's privacy and this involves not revealing the participants' identity to anyone other than the researchers and all involved in the study such as supervisors (Polit & Beck 2013:342). This also embraces information collected from participants. To prevent identification of information to participants, the signed consent forms were kept in a different file, not with completed questionnaires. The researcher requested the participants not to write their names on the questionnaires, instead codes were used on these questionnaires.

During interviews, confidentiality and protection of invasion of privacy were maintained throughout the study. Recruitment and interview sessions were conducted in private rooms, with only the researcher and the potential participant or the participants. The participants were informed that the information would be disseminated during seminars, conferences or articles in such a way that no one would identify who was interviewed.

3.6.3 Informed consent

The researcher was obliged to provide prospective participants with sufficient information to make informed decision to participate in the study (Brink & Woods 2007:231). According to Polit and Beck (2013:231), informed consent involves agreement made by the participant to participate in the study after being informed about the purpose, benefits, risks and the process of data collection and confidentiality. Polit and Beck (2013:321) assert that informed consent is part of autonomy as the participants are supposed to make informed choice without being coerced to participate in the study. For this study, participants were informed that participation was voluntary and it was obtained without any form of coercion or undue influence or promise for any special kind of remuneration. Also the participants were informed that they can withdraw at any time without giving reason and that there will be no penalty or sanction for withdrawal. Participants were provided with a consent form to write their names and sign. They were informed that no one would have access to the data and that the researcher would keep data in a computer access by password protection.

3.6.4 Autonomy

Respect for study participants has two parts. Researchers should treat research participants as autonomous persons who can make their own decision. The other component deals with protection of persons with less autonomy or capacity. This kind of people can make decision to participate through their designated surrogates. Respect for person's autonomy requires ensuring that the research participants participate in the research voluntarily and after fully informed about the research (Bordens & Abbott 2013:200). In this study, I first informed the participants in the quantitative and qualitative study about the research and its objective, their right not to participate, not to answer a question that they think is sensitive, or to withdraw from the study any time during the data collection. Then after the investigator assured oral informed consent, the data collection continued.

3.6.5 Ensuring justice and beneficence/non-maleficence

Beneficence is one principle of ethics in research that emphasises the importance of reducing harm and maximising on benefits for participants or the society as a whole (Polit and Beck 2013:80-90). The following are dimensions of beneficence:

- The right to freedom from harm and discomfort – this entails not subjecting of study participants from unnecessary risk of physical, financial, emotional or social harm or discomfort (Polit & Beck 2013:80-90). In this study, there was no intervention and human subjects were not involved in any interventions. There was no any anticipated or actual harm or discomfort that occurred in this research.
- The right to protection from exposure – this dimension of ethical principle refers to not exposing study participants to conditions for which they have not been ready. The data collectors explained the objectives and scope of the study to all of the study participants as part of ensuring informed consent before the interview started. In addition, they introduced themselves to the study participants and the fact that their role was only data collection.

3.7 CONCLUSION

This chapter described the methodological underpinning of this study, which is mixed methods research. Both quantitative and qualitative research designs are discussed with emphasis on how they were used to answer the research questions.

The sampling strategy and selection criteria for participants, the instruments used for data collection and the pilot are described. The intervention for this study is discussed in detail together with data collection procedure and data analysis techniques.

At the end of the chapter, rigour and trustworthiness of this research process and the methodological issues encountered are described.

CHAPTER 4

ANALYSIS AND DISCUSSION OF RESEARCH FINDINGS

4.1 INTRODUCTION

This chapter presents and discusses the findings of the study in line with the research questions the study purported to answer. These questions were:

- What is the status of utilisation of skilled care for childbirth and PNC services?
- What are the key factors influencing the utilisation of skilled birth attendants and postnatal care services?
- What are the stakeholders' recommendations for the development of a strategic framework for the utilisation of health services for SBA and PNC services?

The chapter presents both quantitative and qualitative findings. The quantitative data was analysed using descriptive and analytic statistics. The descriptive statistics included frequencies, averages/mean, and median, standard deviation of the variables from 347 interviewed women as appropriate to the variable and to the study objectives. The qualitative result presents data from 10 FGDs and 21 key informant interviews. Focus group discussions involved women who delivered at home, at health facilities, the HDAs, HDA one-to-five and one-to-thirty leaders. Key informant interviews were made with midwives, health officers, nurses, TBAs, urban health extension workers, rural HEWs, elderly women in the community, health centre ambulance driver, the district health office head, and health centre heads/delegates.

The researcher shared the first draft Framework for Utilisation of Health Services for SBA and PNC for fifteen renowned experts in the country. Twelve experts shared their Comments and inputs. Then the researcher incorporated the comments and inputs from the experts and a second document sent out for the second round inputs. In this round, ten experts contributed their feedback. For the final round, seven experts replied and had very few comments and inputs into the Framework.

The analysis and discussion in this chapter first describes the study area and the socio-demographic characteristics of the study subjects and then addresses the following study objectives:

- Investigate utilisation of delivery by SBA and PNC services
- Describe the key factors influencing the utilisation of such services
- Finally, I present the Framework for utilisation of SBA and PNC

4.2 DESCRIPTION OF THE STUDY AREA

One fourth (n=87) of the interviewed women, live in two semi-urban towns called Chacha and Keyit. These towns have a population of 5,773 and 4,751 respectively. In these semi-urban towns, there are well functioning and well-staffed health centres that provide labour and delivery and other emergency services for 24 hours a day and seven days a week. According to the Regional Health Bureau, Zonal Health Bureau, and the interviewed SBAs from these health centres, both health centres perform the six Signal functions of BEmONC (WHO, UNFPA, UNICEF & World Bank 2010), which are:

1. Perform assisted vaginal delivery
2. Administer parenteral anticonvulsants for pre-eclampsia / eclampsia
3. Perform manual removal of placenta
4. Perform removal of retained products
5. Administer parenteral Oxytocic drugs
6. Administer parenteral antibiotics

MOH assigned at least two midwife nurses to each of these health centres. To improve their competencies and skills, the MOH and its partners have trained these HCWs on basic emergency obstetric and neonatal care (BEmONC). Hence, the MOH well regarded these health facilities in terms of completely providing quality basic emergency obstetric and neonatal care (BEmONC) services. If labouring women have complications, the health centres refer them to the nearby Zonal Hospital called Debreberhan Hospital. The hospital is located about 50 Kilometres away from both study health centres on the main highway towards the country's North-West. Chacha health centre has two ambulances and Keyit health centre has one ambulance for transporting only women in labour from the community to the health centres or transport

women who delivered in a health facility back to their homes. The ambulances also transport referred women from the health centres to the hospital. The ambulance in Keyit health centre returns women after delivery back to their respective homes. However, the ambulance in Chacha health centre does not return women back to their homes because of logistics issue in the health facilities and the district health office.

4.3 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE STUDY PARTICIPANTS

This section discusses the socio-demographic characteristics of participants and presents the summary of the socio demographics in Table 4.1.

4.3.1 Age distribution

The age of the interviewed women ranged from 16 to 48 (average 27 and S.D of 5.95). The proportion of women in the sample declines steadily after twenty-nine years of age. In this study, 43.2% of the women were less than 25 years of age implying that more young women reside in the study communities. This is similar to the CSA/E results of 2011 and 2014. As described in the other reports, the high fertility in the previous years attributed to this decline (CSA [Ethiopia] and ICF International 2012:35 -36).

4.3.2 Educational status of the interviewed women and their spouses

Education is an important factor to improve the health awareness and perceptions of people. In this study, 46% of the women had never been to formal schools. Hence, 39.5% of the women could not read or write. In addition, 28.8% of their husbands were illiterate. According to the 2012 Inter-Censal Population Survey, the proportion of female and male illiterates in Amhara region where this study was conducted were 60% and 45% respectively (CSA [Ethiopia] 2014:22). This difference can be because the people in the study area were in closer proximity to urban areas and had more access to education. In addition, the regional data is assumed to be diluted with data that came from people from different socio cultural, demographic and other backgrounds.

4.3.3 Ethnicity

The Amhara Ethnic group constitutes 75.8% of the study population (add the total number). Women of Oromo Ethnicity numbered 82 (23.6%).

4.3.4 Religion

The majority (98.6%) of the interviewed women were Orthodox Christians.

4.3.5 Occupation of the husband

In this study, for the majority (69.5%) of women, the occupation of their husbands was Farming. Merchants and Daily Labourers constituted 9.8% and 8.1% respectively.

4.3.6 Marital status

The vast majority (92.2%) of the interviewed women were married. The rest (7.8%) were single, divorced or widowed.

4.3.7 Head of the household

Household members informally recognise the head of the household (CSA [Ethiopia] 2014:12). The field data collectors reported that women felt puzzled by this question. For the majority of the women, the head of the family was their husbands (73.2%). Twelve percent of the women said that they themselves were the heads of the family. The remaining 14.4% stated that both their husbands and they were the heads of their households. According to the recent national census, in Amhara region, in about a quarter of the households, members accepted men as the leaders of the household. According to the report, male headship of families for the region was 75.3%: in urban and rural areas in the region, it was 60.6% and 78.6% respectively (CSA [Ethiopia] 2014:13). Thus, there is no big difference in the headship of family for this study, which covers semi-Urban sites.

4.3.8 Family size

Since 2007, the national average family size in Ethiopia has been 4.7. The family size in Amhara region in 2012 was 4.3. The rural areas had family size of 4.6 and urban areas is 3.2 (CSA [Ethiopia] 2014:12). The average family size for study women was 4.6 (S.D=1.95). Fifty three percent of the women had less than five family members. Women residing in rural areas had larger family size than women from semi-urban areas had ($\chi^2=37.6$; P. Value< 0.05).

4.3.9 Number of children born:

The number of births refers to the number of children ever born to the interviewed women. The number of live births refers to number of children born to the women who were alive during the interview time. Both number of children born to the women and alive children ranged from one to eleven. The average number of births and alive births was 2.64 (S.D=1.79) and 2.62 (S.D=1.76) respectively. The DHS 2011 does not have regional disaggregation of births and alive children. However, it was reported that the mean number of children ever born to women of reproductive age (1–49) was 2.88 and the mean number of living children was 2.42 (CSA [Ethiopia] and ICF International 2012:74). Thus, our finding was similar to these studies.

4.3.10 Family monthly income:

The study area was a food-crop production area. The community also participate in animal husbandry, producing milk and milk products Therefore, it was very difficult to translate it into monetary terms. The average family monthly income was 1,354 Birr (\$ 67.7 USD). Over half (57.1%) of the families earned less than 1,000 Birr (\$ 50 USD) per month.

Table 4.1 Socio-demographic characteristics of women who gave birth in the last twelve months, North Shoa, Oct, 2014

| Socio-demography | | Frequency | Percentage | S.D. and Mean |
|---------------------------------|---|-----------|------------|-----------------------------|
| Age | 15–19 | 19 | 5.5 | Mean=27 S.D=5.9 |
| | 2 –24 | 94 | 27.1 | |
| | 25–29 | 115 | 33.1 | |
| | 30–34 | 60 | 17.3 | |
| | 35–39 | 48 | 13.8 | |
| | 40+ | 11 | 3.2 | |
| Ethnicity | Amhara | 263 | 75.8 | |
| | Oromo | 83 | 23.9 | |
| | Tigre | 1 | 0.3 | |
| Marital status | Married | 320 | 92.2 | |
| | Divorced | 18 | 5.2 | |
| | Widowed | 1 | 0.3 | |
| | Single | 8 | 2.3 | |
| Educational status of the women | Illiterate | 137 | 39.5 | |
| | Read and write | 27 | 7.5 | |
| | Primary cycle (1–4) | 50 | 14.7 | |
| | Second Cycle (5–8) | 82 | 23.6 | |
| | Secondary High School | 43 | 12.4 | |
| | Tertiary | 8 | 2.3 | |
| Occupation of the husband | Farmer | 241 | 69.5 | |
| | Merchant | 34 | 9.8 | |
| | Daily labourer | 28 | 8.1 | |
| | Employed | 18 | 5.2 | |
| | Govern Employ | 15 | 4.3 | |
| | Others (Dead, No job, Private Employed) | 11 | 3.2 | |
| House hold income | 0–1,000 Birr* | 198 | 57.1 | Mean=1,354.3 S.D=1,432.9 |
| | ≥1,001 Birr | 149 | 42.9 | |
| | Total | 347 | 100.0 | |

*One Birr is equivalent to \$ 0.05 USD

4.4 HEALTH SERVICES UTILISATION

The vast majority (93.6%) of interviewed women thought that, utilisation of health facilities was beneficial. This signifies the favourable value women give to the use of health facilities. Three hundred and eight women (88.8%) had sought their first ANC at some point during their last pregnancy. Among these women, 277 (90%) received their

ANC from medical doctors, health officers, nurses, or midwives at either hospital or health centre or both. All of these professionals are skilled birth attendants in the Ethiopian and global context. These findings are slightly smaller than the 2014 Mini DHS/E but lower than the 2013/14 MOH Annual administrative report, which accounted the first ANC conducted by SBA for the region at around 46.2% and 90% respectively (CSA [Ethiopia] 2014:45; MOH/E 2014: 11). In addition, 16 (9%) of the women received ANC from health extension workers (HEWs) at Health Posts. The high ANC attendance in this study compared to the proportion reported in the DHS 2014 report can be because of the recent efforts made by FMOH, district administration and other relevant stakeholders to educate, motivate, and refer the women to health facilities. This finding indicates the gradual improvement of the community in semi-urban areas towards health utilisation for health services in general and for ANC services in particular.

4.4.1 Health services utilisation for skilled care at delivery

Two hundred and forty-eight (71.5%) study participants delivered in a health facility with the assistance of SBAs. This result was seven fold higher than the DHS report (CSA [Ethiopia] and ICF International 2011:126). A study conducted in 2012 in the same region reported 13.8% of deliveries assisted by SBAs (Worku et al 2013b:6). The high level of skilled care at delivery can be explained by the unprecedented commitment that the GoE and Regions have made to improve the MNCH services in the country – specifically, the initiatives that used community volunteers called Health Development Army for demand creation, educating women and making referrals from the community to health facilities for institutional deliveries. Moreover, there were monetary and other incentive packages provided to motivate the Midwife nurses at their work. These initiatives probably had played important role in the increase in institutional delivery (MOH/E 2014: ARM). If the MOH continues to maintain the above achievements and efforts over time across the country, the country can see many improvements in MNCH outcomes.

For 91.1% of the women who delivered in the last 12 months before this interview, their plan during pregnancy was to deliver in a health facility. This result is much higher than studies done in some other parts of the country (Tura, Afework & Yalew 2014:4756). Few (8.9%) women planned to deliver at home or had not had a plan. The major reasons for this were: lack of knowledge on the importance of delivering with the

support of SBA in a health facility; was healthy and labours in previous pregnancies were short and smooth; didn't think delivery in a health facility was necessary; or issues related to the perceived poor quality of services in the health facilities. This result necessitates the need for routine implementation of birth preparedness plans by the SBAs during ANC visits.

4.2 POSTNATAL CARE SERVICES UTILISATION FOR THE MOTHERS

Only 55 (15.8%) of the interviewed women received PNC from an SBA within 45 days after childbirth. Among these, only one woman received a PNC check-up within four hours after delivery. Forty-one (75%) of the women received a PNC check-up between 40 and 45 days after childbirth at the health facility. In addition, nine women claimed that they received PNC from HEW within the 45-day post childbirth period.

PNC utilisation of women after childbirth is historically not common in Ethiopia. A study done in the same region of the country reported PNC coverage of 6.3% (Worku et al 2013b:7). The EDHS also reported PNC coverage of only 8.9% (CSA [Ethiopia] 2014:52). Previous studies done in other parts of the country reported PNC coverage of 20.2 and 37.2%, which are higher than the current study (Regassa 2011:393-394; Workineh, Hailu, Gultie, Degefu, Mihrete, Shimeles, Mahino, Guesh & Alemu 2014:256). These differences were due to the difference in how the researchers operationally defined PNC these studies and the recent improvements made in institutional delivery in the country. The education that the women and their families received on the importance of PNC before they left the health facilities can explain the small improvements in PNC services utilisation by the mothers in this study. The role of HEWs to create demand for health service utilisation for PNC also might have contributed.

The interviewed women might have taken these PNC services after childbirth and before discharge from the health facilities as part of delivery care, without reporting it as PNC. It was not possible to be completely sure of how many of the SBAs provided PNC for women who delivered in the health facilities within the specified time. Nevertheless, if we assume that all women who had delivered in health facilities with assistance from SBA had also received PNC within six hours after childbirth and before the HCWs discharge them, the PNC service coverage in this study would be 261 (75.2%). This

result informed us that HCWs should provide a standardised PNC service guided by a standard operating procedure (SOP) to include all the components of PNC should be routinely provided in the health facilities before they are discharged post-delivery.

4.4.3 PNC services utilisation for neonates:

Out of the 347 deliveries in the last 12 months preceding this study, there were one stillbirth and four neonatal deaths that occurred after few hours of delivery. The other 342 were alive infants during the data collection. From the alive infants, 131 (38%) of them received PNC from SBA at the health facility within 45 days after birth. Compared to their mothers, the number of new-borns who received PNC from SBA is more than twice as high. This means that, the women went to health facilities with their babies but missed the opportunity to receive any PNC for themselves; or that somebody else took the babies, for example care givers, to the health facilities. Among the new-borns that received PNC, 85 (25%) received the service on or after their 40th birthday. Sixty (17.5%) neonates also received PNC from HEWs either at home or at HP.

4.5 KEY FACTORS INFLUENCING THE UTILISATION OF SKILLED CARE AT CHILDBIRTH

The common factors that motivated women to deliver in health facilities were the knowledge that institution delivery is useful or home delivery is dangerous (143 or 57.7%); for the safety of my baby and myself (68 or 27.4%); and was told by the health providers that there was a health problem with myself or my unborn baby (38 or 15.3%). This means that efforts to improve the knowledge of the women on the importance of SBA and related issues could help inspire women to seek for SBA during childbirth.

To predict the probability of SBA for 343 women who delivered in the last 12 months prior to this data collection a Binary Logistic Regression Model was conducted (September 2013 to September 2014). A test of the full model using Omnibus Test of Model Coefficients was statistically significant, indicating that the predictors as a set of reliably distinguished the difference between deliveries attended by SBA and non-SBAs ($X^2=50.7$, $df=24$, and $P. Value=0.001$).

4.5.1 Predisposing factors

Predisposing factors refers to the tendencies the use of services. They are antecedent factors to behaviour or actions that provide the rationale for behaviour. Variables that fall under predisposing factors include age, sex, ethnicity, religion knowledge, attitude and values of an individual or a group (Aday & Andersen 1974:213; Andersen 1995:2). These variables were analysed to see whether they predict skilled care for childbirth for the study subjects.

Socio-demographic characteristics

Age of the women, marital status, ethnicity, religion, family income, educational status of the women and their husbands, occupation of the husband, family size, number of all births and live births to the women were analysed separately using Chi-square test. The output showed that only family income is associated with births attended by SBA ($\chi^2=$; $P=0.002$).

However, when analysed with Binary Logistics regression to control for confounders, educational status of the women showed significant association with births attended by SBA (Table 4.4). Women who can read and write or are more educated were two times more likely to have skilled care for childbirth than illiterate women (AOR=2.35, 95% C.I.=1.34, 4.12). This finding was consistent with results of an analysis of EDHS data which showed that better educated women were more likely to have their labour attended by SBA (Fekadu & Regassa 2015:980; Yebyo, Gebreselassie & Kahsay 2014:23). The reason can be that educated women may have more access to health information and other resources than illiterate women may. This finding implies the importance of educating all women during ANC visits to make a difference on the health of women's outcomes. It also implies the importance of educating women and girls in education.

In this study, seeking ANC from a SBA during last pregnancy does not have significant association with SBA for childbirth. Other research studies indicate mixed results on the role of ANC on delivery service use. Some studies reported that ANC attendance has a positive influence on skilled attendance at delivery (Adjiwanou & LeGrand 2013:32-33). According to previous studies done in Ethiopia and elsewhere, ANC attendance had

positive association with SBA at childbirth (Yabyo, Gebreselassie & Kahsay 2014:25). On the other hand, others claimed that ANC attendance does not predict skilled attendance at delivery (Adjiwanou & LeGrand 2013: 31-32). However, the role of ANC in identifying complications during pregnancy and treating them, compliance to treatment regimen, and as an opportunity to counsel and educate the woman on various relevant health topics including the importance of skilled attendance at delivery are well discussed (WHO 2011:10).

Perception about health facility use

The vast majority (n=335 or 96.3%) of interviewed women believe that, generally, use of health facilities is useful. There is no statistical significant association between women's thoughts about usefulness of health facilities and their age, place of residence, educational attainment of the women, and their family income ($p>0.05$).

Determining date of delivery

The women also mentioned lack of knowledge on the last menstrual period to contribute for lack of preparation for labour. The cumbersome household activities including preparing food for the family, looking after the other children and delayed decision making for seeking health care also seem to contribute for home delivery. This was supported by the quote below:

“Most women in our area are illiterate and do not remember when they last saw their blood [Menstruation]. As a result, they don't know their time for delivery. As labour starts and the woman feels mild labour pain...they try to prove whether it is a true labour. They get busy with household activities. By the time they realise that it is a true labour, it will be too late to go to health facility” (HCA, KII 29).

Birth preparedness and complication readiness

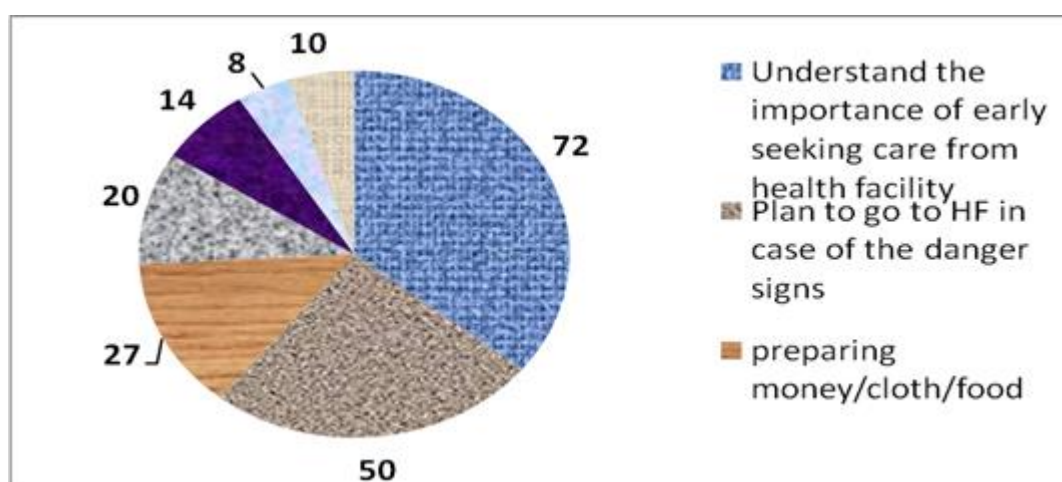
Birth preparedness and complication readiness (BP/CR) is a process developed with the thought that the causes of delays to receive care are known and are predictable and thus to tackle this problem, families, communities, health workers and the health

facilities must be ready in advance to provide emergency care. JHPIEGO defines BP/CR as ‘the process of planning for normal birth and anticipating the actions needed in case of an emergency’ (JHPIEGO 2001:5). Pregnant women or their families are expected to understand danger signs of pregnancy and childbirth, identify SBA, identify a birth location, organise for transportation, identify a blood donor, and save money in case of emergency (JHPIEGO 2004:7).

A randomised control trial in a district in North Tanzania revealed that if birth preparedness was implemented during ANC visits, birth plans could increase utilisation of skilled care for childbirth and PNC (Magoma, Requejo, Campbell, Cousens, Merialdi & Filippi 2013:438). Another study in Uganda showed that women who were well prepared for childbirth and had identified a skilled health professional, saved money, and identified transportation, were more likely to choose SBA at childbirth (Kabakyenga, Östergren, Turykira & Pettersson 2012:4). In this study, more than half (221 or 63.7%) of the women reported that they had heard about birth preparedness. In addition, 306 (88.2%) of the women asserted that birth preparedness is necessary. There is no statistically significant association between women’s ever hearing about birth preparedness and their age, place of residence, ethnicity, and educational attainment ($p>0.05$).

As shown in Figure 4.1 below, when asked to mention their preparedness plans for complications that occur during labour and childbirth, nearly half (167 or 48.1%) said I do not know. The remaining women reported understanding the need for seeking care early from health facility (72 or 20.7%); planning to go to health facility in case of danger signs (50 or 14.4%); preparing money/clothing/food (27 or 7.8%), and identifying support people (20 or 5.8%).

This study was consistent with previous studies in Ethiopia in that very few (23% and 29.9%) women had birth preparedness plans in place during their pregnancy (Debelew, Afework & Yalew 2014:4; Markos & Bogale 2014:4). This emphasises the importance educating women on these issues during their pregnancy period.



**Figure 4.1 Birth preparedness/complication readiness plans.
North Shoa, 2014**

Knowledge on warning signs of pregnancy

Warning signs or danger signs of pregnancy is a phrase that is used to describe to clients the signs and symptoms of life-threatening and other serious conditions that require immediate medical attention (JHPIEGO 2004:2-30; WHO 2006:C15). In this study, 234 (84.5%) of the women who had received ANC from a SBA reported that they were told about the danger signs of pregnancy. Vaginal bleeding, severe head-ache, and abdominal pain were the most common signs and symptoms women in the study were able to remember – 88 (28.6%), 60 (19.5%), and 30 (9.7%) respectively. The remaining women mentioned various signs or claimed that they did not remember the signs and the symptoms.

Among the warning signs mentioned by the women that relate to labour and delivery were excessive bleeding through the vagina (33.7%), prolonged labour (12.4%), and retained placenta (10.4%). Table 4.2 below covers list of the responses by the clients. These results emphasise the importance of strengthening the health education of pregnant women to enable them take early actions when such warning signs occur.

Table 4.2 Respondents' mentioned common warning signs during labour and delivery, North Shoa, October, 2014

| Warning signs during labour and delivery | Frequency | Percent |
|---|------------------|----------------|
| Excessive vaginal bleeding | 117 | 33.7 |
| Prolonged labour | 41 | 12.4 |
| Retained placenta | 36 | 10.4 |
| Unconsciousness/ convulsion | 27 | 7.8 |
| Umbilical cord appear/ Mal presentation of baby | 27 | 7.8 |
| Abdominal pain | 20 | 5.8 |
| Fetus problem | 18 | 5.2 |
| Others (Back pain, Headache, Death etc) | 44 | 12.7 |
| Do not know | 154 | 44.4 |

Knowledge on danger signs and common complications of labour on the mothers

One hundred and forty women (40.3%) stated that they do not know the common complications of labour and childbirth. Among the common health problems that occur during labour, as listed by women who claimed to know them were: vaginal bleeding, prolonged labour, and death of the woman were mentioned by 140 (36.3%), 84 (24.2%), and 23 (6.6%) of the mothers respectively (See table 4.3 below). This finding was consistent with a study in a different zone of the same region, which reported that the common complications during labour and childbirth mentioned were prolonged labour and excessive bleeding by 50% and 37.9% of interviewed women (Worku et al 2013a:4).

The HCWs provided health messages on complications to the mother and the neonate to women while they were pregnant. The HCWs and the HDAs provided the health messages during their ANC follow up by SBA or HEWs or during pregnant women's conferences held in the Kebeles or during home visits by the HDAs. As shown above, in this study most women reported that they were not aware of the common complications that occur during labour and delivery. This may be due to recall bias between the interview time and the actual time when they received education on the complications. However, this finding signifies the importance of availing a strategy to provide a comprehensible education to women during pregnancy. Table 4.3 indicates common health problems experienced during labour and delivery.

Table 4.3 Common health problems that occur during Labour and Delivery, North Shoa, 2014

| Health problem | Frequency | Percent (%) |
|--|------------------|--------------------|
| Vaginal bleeding | 126 | 36.3 |
| Prolonged labour | 84 | 24.2 |
| Death | 23 | 6.6 |
| Abdominal pain | 22 | 6.3 |
| High blood pressure | 21 | 6.1 |
| Physical problem | 16 | 4.6 |
| Infection | 11 | 3.2 |
| Anaemia | 3 | 0.9 |
| Retained placenta | 8 | 2.3 |
| Others (Fistula, vomiting, kidney problem etc) | 16 | 4.6 |
| I don't know | 140 | 40.3 |
| Total | 345 | |

Factors motivating women for home delivery

Studies done so far in Ethiopia reported some difficulties associated with skilled delivery. Some of those include the fact that it is not culturally accepted; not necessary, distance, transportation and cost as the major factors that contribute to home delivery (Shiferaw et al 2013:4). However, the efforts undertaken by the GoE and its partners working on MNCH may have changed the knowledge and attitude of the communities towards the importance of institutional delivery and the dangers associated with home delivery. This current study revealed that the major reasons mentioned by the women to deliver at home were labour started suddenly and lasted a very short time (54 or 59.3%) and transportation problem (for 21 or 23%). This result was similar to the findings of other studies done recently in the country (Bayu, Adefris, Amano & Abuhay 2015:4-5).

The qualitative results also substantiated this finding. The community equates labour with other natural phenomena that occur accidentally. Discussants described labour as follows:

...labour and flooding are the same. They neither consult nor have a known specific time when they appear..... labour can start while a woman is at home, in the farm, or when she is out of her home to fetch water ... (KII 2, HDA-1 to 5 Leader; Chacha).

Other reasons for preference for home delivery by some women included: culturally sensitive care, support from family members, friends, or neighbours for the woman in labour, convenience of the labouring environment for the labouring women, and absence of restrictions to meeting needs of the women were among the strong pulling factors for women to elect home delivery.

...at home, the mother's body is covered with cloth, the room is warm, she can take a warm food or sip a fluid, and has the choice to kneel down and grasp the pillar or anything when she pushes. Her neighbours and family members come around, reassure her, and encourage her to push. This is what Ethiopian women report the wish to have during labour time (KII; TTBA, 75; Chacha Area).

Previous studies in different parts of the country reported the same results. Bedford et al (2013) described that during home delivery, the women move freely, the family members will be around to support the labouring women, and would be available to her all the time, and these factors motivate women to deliver at home (Bedfore 2013:233-234). Another study in Ethiopia described that the warm and private conditions at home motivate women to deliver at their homes (Warren 2010:101). Shiferaw et al (2013) also stated that the community practiced different traditional practices during childbirth and support from family members inspire women to deliver at home (Shiferaw 2013:4-5).

Knowledge, belief and attitude

Most discussants affirmed the positive changes in women's knowledge and attitude from the health education provided by health care workers, HEWs and HDAs in the last few years. However, the FGD and KII discussants pointed out that lack of knowledge or misconception and belief still determine women's decisions on place of delivery. The lack of knowledge by the women can be on the importance of institutional delivery, dangers of home delivery, or about cost of health services.

According to the interviewed women, the main reasons for other women in the community to not deliver at health facilities were lack of knowledge on the importance of childbirth assisted by SBAs (33%); the poor quality of services in the health facilities (22.3%); and cultural or religious reasons (16.9%). Only 4.2% of the women cited lack of approval from male partners or other family members as a reason for other women not to deliver in a health facility.

There was still a belief in the community that health facilities were only for the sick; and labour that has some complications. The community believed that pregnancy and childbirth were normal and risk-free. Thus, a special care and support including transportation and delivering in health facilities is not required. These cares rather call for unnecessary public attention that the women badly hate. As discussed in one FGD:

...the women hate the Dink [locally made stretcher to transport women in labour and the sick]. When other community members see a woman on a stretcher accompanied by other people, they think that some serious health problem has happened to the woman (KII HEW, Keit area; 27).

A qualitative study in another part of Ethiopia reported the same result that carrying a labouring mother with a locally made stretcher has a negative undertone in a public display that something bad happened to the woman (Bedford et al 2012:235).

Culture and stigma attached to labour

The study also revealed that there is stigma related to how a woman in labour handles her labour pain and when to call for help. The norm was that a woman in labour should not cry out and no one should hear her when she pushes.

Culturally, a woman in labour should not disclose her labour to other women until the labour pain is too strong. In addition, they are supposed to remain silent during labour pain. Otherwise, if she shouts or cries the community will laugh at her (FGD 2; Chacha town; 43).

Past experiences as a guarantee and proof of the future

Referring to past successful childbirth events as a reason for home delivery was also very common among interviewed women.

They just refer to other women and their mothers whose previous labour and childbirth was concluded peacefully after delivering at their homes and to justify their decision to deliver at home (UTTBA, 52; Keyit).

The community thinks that successful childbirths in the past and absence of any health problems during pregnancy is enough evidence that the next childbirth will be without problems as one HEW described below:

...some women have this old thought that if the previous childbirths ended smoothly without any problem then the subsequent childbirths also will be concluded likewise (KII, HEW 2, Chacha Area).

In many FGDs and KII interviews, the discussants and the interviewee emphasised the sensitivity of women to exposing their private body parts to the health care workers and strong fear of being seen naked by others.

I served as the Head of this kebele and as TBA for over thirty years. I know the culture and the attitude of my people in this area. I tell you! They do not want to show their body to anyone except their husbands. They do not want anyone else to see them naked. It is too shameful for a woman to be seen naked by others (KII; TBA, Chacha area, 75).

Superstition and religion

Superstition and religious factors also play a negative determinant role in utilising SBA for childbirth in communities who are part of the worship and cultural system.

Some families worship the Witchcraft. The superstition has its role in determining health facility use for childbirth. The worshipers have big respect and trust in what is told by the leader. Thus for fear of the bad consequences laid on them or their families, they are subject to oblige to what is instructed by the Superstation Leader.

For families who are still part of the culture, they go to the Hamechisa [witchcraft] first and seek advice on the outcome of their pregnancy, and whether to go to health facility or not. The Hamechisa is very influential. People trust whatever the Hamechisa instructs them to do and they never dare to bypass the order. At times, the Hamechisa may tell them not to go to health facility for delivery. The family thinks that if a woman delivers at health facility despite the instruction given the Witchcraft by he or her baby or both will die or something bad will happen to them (FGD 4, Cheki area, 45).

For others, there was an assumption that the only 'person' in-charge of the labour course and the first hand helper in stressful childbirth period is St Marry. The community believes that St Marry is the one who determines the fate of the labour. If it is her good will to do so, the labour course will shorten and the labour will be short and the woman delivers at home without any complication to the woman or the newborn.

There is a widespread belief in our community that if a woman delivers at her home, this is because St Mary approached her and simply untied her [liked her and helped] (FGD 5; Keit; Age 40).

For a woman who thinks to deliver outside of her home including at the health facility, anything that is culturally believed by the community to expose her or her new-born to sickness are major concerns. Study participants reported a widespread belief in the community that after childbirth, the mother and the neonate should not be exposed to the Sun, wind-draft, or seen by other people. Hence, if she gives birth at health facility she will be exposed to the Sun and Wind-draft while she and her baby gets back home from the health facility.

With regard to their plan for future delivery, the majority (287 or 82.7%) mentioned going to the health facility. Fifty participants (15%) said they do not have any such plan for future delivery. As shown in Table 4.4 below, none of the variables under predisposing factors predicts use of SBA at childbirth.

Table 4.4 Predisposing factors as predictors of deliveries assisted by SBA, North Shoa Zone, October, 2014

| SN | Variable | | Deliveries attended by Skilled Birth Attendant | | | AOR (95% C.I) |
|----|---|------------|--|-------------|------------------|-------------------|
| | | | n=347 | n (%) | COR (95% C.I) | |
| II | Predisposing factors | | | | | |
| 1. | Educational status of the mother | Illiterate | 137 | 80 (58.4%) | 1 | 1 |
| | | Literate | 210 | 168 (80%) | 1.27 (1.27–3.84) | 2.28 (1.32–3.92)* |
| 2. | Think using health service useful | No | 12 | 7 (58.3%) | 1 | 1 |
| | | Yes | 335 | 241 (71.9%) | 1.65 (0.38–7.20) | 1.46 (0.32–6.56) |
| 3. | Hear about birth preparedness | No | 126 | 84 (66.7%) | 1 | 1 |
| | | Yes | 221 | 164 (74.2%) | 1.15 (0.64–2.07) | 1.26 (0.73–2.18) |
| 4. | Believe birth preparedness is necessary | No | 41 | 24 (58.5%) | 1 | 1 |
| | | Yes | 306 | 224 (73.2%) | 1.21(0.51–2.90) | 1.43 (0.80–2.24) |
| 5. | Sought ANC | No | 41 | 19 (46.3%) | 1 | 1 |
| | | Yes | 306 | 229 (74.8%) | 1.94(0.95–3.97) | 1.67 (0.84–3.35) |

4.5.2 Enabling factors

Enabling factors are the resources available to an individual or family. The resources allow a motivation of a person/group to be realised. Variables under enabling factor include health facilities, health providers, health financing, income, health policy etc. (Aday & Andersen 1974:213; Andersen 1995:2).

Distance to health facility:

Two hundred and seventy-six (79%) of the interviewed women thought that the walking distance from their respective homes to the nearby health centres takes two hours or less. Similarly, 260 (75%) of the women thought that the health facility was very near, near or not far from their homes.

Health services charge:

Only 22 (6.3%) of the women argued that health services charge had ever been a barrier for institutional delivery. Nevertheless, although there is no fee that the health facilities charge families for institutional delivery services, it appeared that other indirect costs related to transporting the woman in labour were strong constraining factor for childbirth assisted by SBA.

Once somebody is out of his/her home, he/she and the family have to pay money to get what they want. There are expenses for food and even a wrapper for the baby. These kinds of costs make the family shy away from getting service from health facilities and remain at home (FGD 1; Chacha area; 50 years HDA 1 to 5 Leader).

There are male partners of pregnant women who do not support their wives to go to a health facility for childbirth. This is because they are afraid of associated expenses. The people carrying or escorting expect him to buy and invite them Arege [locally made alcoholic drink] and sometimes lunch for people who accompany the women to health facilities (KII; HEW; Keit).

Quality of health services:

It is difficult to have an agreed upon and common definition for quality in health care, health systems, and other health aspects. The WHO and the Institute of Medicine (IOM) definition of quality places acceptability/patient centeredness as one of the biggest dimensions of quality in health care and health systems. Patient or client centeredness refers to quality that has taken into account the preferences and aspirations of clients and their culture as one dimension of quality in health care and health system (WHO 2006:10; Nair, Yoshida, Lambrechts, Boschi-Pinto, Bose, Mason & Mathai 2014:13). Hence, patients or clients' perspective on quality of health care services is a subjective way of measuring and judging the quality of health care services.

Accordingly, in the present study, we tried to understand the perspective of clients on the perceived quality of services they received during pregnancy and childbirth. Among two hundred seventy seven women who sought ANC during their pregnancy, the vast majority (301 or 97.7%) were happy with the service they received. Many women (324 or 93.4%) judged the quality of services in the health facilities as "good". Also two hundred thirty four (94.4%) of the women who delivered in a hospital or health centre were happy with the service they received in their last childbirth.

Although the MOH has made many efforts to make services in the labour wards women friendly and culturally acceptable, there are still important issues that remain concerns for women in labour. The FGD and KII participants revealed many issues related to labour and delivery services that exist in the health facilities.

Cultural insensitivity and unfriendliness of services

Discussants expressed their deep hatred of the exposure of their bodies to cold in the labour ward:

They [the HCWs] extend their legs apart, hang them up and tie on the bed. They leave us in this condition until the labour is concluded. We also hate the freezing temperature in the health centre. The concrete walls and the floor are too cold. When we are in labour, drapes and clothes are not provided to us to cover our body and to cope with the freezing weather (FGD 7; Chacha area; 35).

Trust in health care workers

The levels of trust women on the HCWs appeared to be an important enabling factor for childbirth assisted by SBA. For some women, trust for HCW starts during pregnancy time where they form rapport and openly discuss on family and health issues. Women who want to give birth at health facility had the fear that a HCW they never know may be assigned to assist them during childbirth. The community believe that, perceived absence of trust in the HCWs by pregnant women hindered health facility delivery. As described by HCWs:

During a woman's ANC follow-up, pregnant women develop trust and rapport with the Midwives working in the ANC. Nevertheless, they may encounter a different person they have never met before. This does not make them happy at all with this person because they cannot communicate freely what they want to know or need help (KII; Midwife; Keit HC;30).

The HCW assisting the delivery are new to the women and they worry that this person may mismanage the labour and do harm to them or their babies. They want to make sure that the umbilical cord is not pulled and stretched from the baby's abdomen, the baby's airways are cleaned, and the baby is handled carefully not to fall down on the floor. However, it is difficult for them to talk to or ask the HCW they do not know before about these concerns (KII; HEW; Chefanen; 27).

Disrespect and abuse during childbirth:

Disrespect and abuse (D&A) at childbirth are interactions or health facility conditions experienced as or intended behaviours that local consensus deem to be humiliating or undignified (Freedman, Ramsey, Abuya, Bellows, Ndwiga, Warren, Kujawski, Moyo, Kruk & Mbaruku 2014:915). The results below are based on the experiential or evidentiary building blocks of D&A which entails the subjective experiences and objective events or conditions that happened during childbirth (Bowser & Hill 2010:8). Most of the times the interviewees and group discussants do not want to disclose their or other women's experiences on D&A. However, after probing, once they start to tell their experience or what they heard happened to other women, they keep on describing more and more experiences.

Even though the FGD discussants and KII participants believed that there are improvements in the quality of services provided in the health facilities, they identified different manifestations of D&A still experienced by women during childbirth.

D&A – non-consensual care: These include the medical or nursing procedures that the HCWs perform to women in labour without their consent. There were different manifestations of non-consented care including touching the women's private body parts. Researches also reported that there is a perceived belief among women about HCWs doing major operative procedures without their permission.

Last time I took my daughter who was in labour to the HC. We were very sad about the HCWs inserting their fingers into her body [vaginal exam] hundreds of times [disappointingly many times (KII; HDA, 49; Chacha area).

There are women who think the HCW may operate on them without their consent or do harm to them. There is also an inclination by some HCW to operate women in labour with the intention of shortening the labour process (FGD1; Chacha town; 58).

D&A – Abandonment of care: The HCW failed to follow the progress of labour and provide all the care that the labouring woman needed during labour time. This kind of disrespect and abuse has come up in many discussions and interviews.

In my recent childbirth in the health centre..., the HCW came to me and did a quick check on me. Then he left the room never to come back again the whole night. He locked the Staff room and was sleeping, never came back, and checked me. Early in the morning, my labour was very intensive. My family couldn't find the HCW. However, he had already left the health centre... (KII; Chacha town; postnatal woman).

Few (11 or 3.2%) women complained that they themselves or someone they know was denied services for labour and delivery in a health facility in the last twelve months. The qualitative studies finding where FGD discussants explained as follows substantiate these complaints.

If a woman in labour goes to the health facility during night time, the HCWs prefer to refer them to hospital even before they examine her properly. They don't want to see our eyes during night time (FGD 3; Keit; 60).

HCWs also recognise the presence of D&A in the health facilities and attribute it to the institute or the health care system. As one Health Officer explained:

Once we check and learn that a woman in labour is in the first stage and the labour is not mature, we go and provide service for our clients in other units. However, this makes the woman in labour unhappy. We can't remain with the woman in labour the whole time when the labour is not mature enough, except monitoring the labour periodically (HCW, Health Centre 1, 29).

D&A – non-dignified care: The health facility staffs do not treat women with respect and they do not welcome them like a client. Given the culture of the rural community that guests deserve high respect, and should be welcomed properly, if they are not greeted and get the respect that a person deserves, they get annoyed. This results in dissatisfaction with the service and puts the health service quality under question by the community.

There are some problems mentioned by women in the community on health providers. Most women seriously complain of not welcomed by the HCWs during labour and delivery. They claim that the HCW showed them a cold shoulder while they were in the health facility for childbirth (FGD 4; Chacha area; 38).

D&A – non-confidential care: In many of the FGDs and KIIs participants stated that the HCWs examine women in non-private settings and they do not protect their privacy

...they [HCWS] come in group, they throw our clothes away from us and leave us naked during labour time. People around can see our body (KII; TTBA; Chacha area; 20 years of service as TBA).

There is no consensus on the prevalence of discriminatory treatment during childbirth. Those key informants who claimed to witness discriminatory treatment during childbirth stated that women from rural areas in particular were subject to this form of D&A. They attributed the discriminatory treatment to their poor personal hygiene, low orientation and

slow adaptation of the rural women to the health facilities protocols, and attitude of the health providers toward the rural community.

This study yielded no evidence on physical abuse. There were no reports of pinching, slapping, beating, stitching episiotomy without anaesthesia, or rape. However, the level of neglect in one instance led to a client's death.

...the woman in labour was assisted by the doctors in Debreberhan Hospital and she delivered her baby. However, after childbirth was completed, the HCWs left her alone in another room. Her parents noticed excessive blood on the bed she slept on and reported it to the doctors. The doctors tried to save her life but she died (KII; HDA; Chacha area).

There are both qualitative and quantitative studies that explore the distribution and extent of D&A in most low and middle income countries (LMIC) including east Africa. Consistent with the current study, the results from these studies showed us that D&A is rampant in these countries (Abuye, Warren, Miller, Njuki, Ndwiga, Maranga, Mbehero, Njeru & Bellows 2015:3; McMahon, George, Chebet, Mosha, Mpembeni & Winch 2014:3; Mirkuzie 2014:3). For example, in Tanzania verbal abuse is very common. The HCWs exposed women in labour to discriminatory treatment associated with their assumed social status including having no money (McMahon et al 2014:7). A study in 13 Kenyan facilities that interviewed 640 postpartum women during their discharge from postnatal wards found out that one in every five women had encountered some form of D&A (Abuya, Warren, Miller, Njuki, Ndwiga, Maranga, Mbehero, Njeru & Bellows 2015:7).

There was a recent study done in one specialised teaching hospital and three catchment health centres in Addis Ababa. The study included 173 women after their childbirth and immediately before the SBAs discharged them from the health facilities. The study showed that while 95% of them had encountered denial of the right to information or informed consent or preference/choice of service, 39.3% of them were left without care, and overall 78% of them had encountered at least one form of D&A (Asefa & Bekele 2015:2-6).

Negative experiences in health facilities including poor quality of service could have backfire effect on the huge efforts made by FMOH has been making at community level to educate the community and create demand for health services utilisation for MCH services including SBA at childbirth. Reports of negative experiences like D&A encountered by many women are more likely to spread in the community and discourage other women from going to a health facility for childbirth and other health services. This calls for a strategy to integrate accountability and quality improvement in the health system in a manner that allows the community to participate.

Competency of health care workers

When community members do not have the clinical knowledge and skill that HCWs have, it may be difficult for them to evaluate the competency of HCWs. However, based on their experience of what is happening to them or what has been heard from others after they sought care from the HCWs, they have their own way of judging HCW competency. Accordingly, the qualitative study participants claimed that in some HCWs working in the health facilities they know there had some skill gaps. Such phenomena are bad in that they frustrate and desperately resort to rely on the TBAs.

We know women in our area that went to this health centre for childbirth and were then the HCWs in the health centre told us that the cervix was not open. They delivered the child on their way back to their homes before they reached their homes. There is also another woman whom the HCWs referred her from this health centre and delivered at the hospital corridor before she arrived at the delivery unit (KII 12; HDA; Chacha; 49).

In line with this finding, perceived poor competency of HCW has been described repeatedly as a barrier to seeking SBA at birth by previous researches (Bayu et al 2015:7; Shiferaw et al 2013:6). Bohren depicted that quality of the health service in general and positive perception of the community on the HCW competency is associated with increased health services utilisation (Bohren, Hunter, Munthe-Kaas, Souza, Joao, Vogel & Gulmezoglu 2014:8). This signifies the importance of building the capacity of HCWs to improve their midwifery skill and ability to make clinical decisions. The relevant stakeholders should provide adequate theoretical and practical skills training followed by follow-up mentoring.

Other health service quality related factors

Client Identification Cards (CIC) are passports for receiving service and sometimes a reason for dissatisfaction about D&A for women in labour. The Clerical staffs working in the card rooms ask labouring women for their CICs. If the woman has the Card at hand, staff working in the card rooms do not easily locate the clients' file in the archive and therefore the client has to wait for a long time until they find it. If the family of a woman in labour forgets to bring or loses her card, they are liable to experience D&A.

The most dissatisfying factor for women in labour in health facilities is the long waiting time in the card room until the Clarks identify our file (KII; PNC woman who delivered in a health facility; Chacha town).

Women who forget to bring their CIC while visiting HCs suffer a lot. They also complain bitterly to the women or their families for not bringing their card. The persons working in the Card room sometime abuse women verbally for not bringing their CIC (FGD 2; Keyit; 28).

In many of the FGDs, the community discussed difficulty in accessing an ambulance because of communication problems such as the telephone network being down and a late response once it has been called for as one major factor hindering health services utilisation for childbirth assisted by SBA.

...some women delivered at home while they wait for the Ambulance to come from a health centre. Sometimes, the Ambulance may not be available or arrives late. While they wait for the Ambulance, the labour will intensive and they deliver at their home (KII 2 TBA; Chacha area; 59).

Some important positive changes that the community recognised were the transportation support, cleanliness of the health facilities, and providing porridge and coffee to women after delivery, which the community culturally practiced.

If there is a labouring woman in our village, we call for the ambulance and transport the woman to the HC free of charge. In the HC, the workers cleaned the delivery room after delivery, and the women are served coffee and porridge;

and returned back to her home happily with her baby vaccinated (FGD 6, Chacha area; 55).

In some places, the ambulance assigned for maternal health services returns women back to their homes after delivery. However, in one of the study sites, this was not a practice. This creates a barrier for poor women and families who cannot afford to rent a car or use public transport. This also has a direct relation to cultural beliefs about exposure to sunlight or wind after childbirth.

Women do not want to be exposed to sunlight or wind after childbirth. Ta does not get us back to our homes and because of this some women don't want to give birth at HC (FGD 8, Chacha Area; Women who delivered home).

Social support and social network

Taken as a whole, the social support satisfaction score for the 347 women was 4.52 out of six. This implies that 282 (81.3%) of the women were very happy, happy, or happy with the social support groups in their network.

The traditional and endogenous social security systems in the village called Idirs (two types – the big Family Idir and Women' Village Idirs) and Women's Social Saving Groups were social support groups available for women in the study communities. In addition, Mahaber/Tsiwa (social groups established for religious purposes) and coffee-drinking groups were social support groups in the women's network in the community. The community established most social groups mentioned above for different purposes and the function of the groups were not to provide social support in stressful life events like labour. Hence, their role in health services utilisation for childbirth with SBA and PNC was not recognised. However, coffee-drinking groups and Village Women's Saving Groups appeared to have relevance to women in labour.

The community established Village Women's Saving Groups for improving the household economy for members. Women reported that the main type of social support obtained from women in their village was instrumental support where they could borrow some money from the saving group without any interest. Moreover, because of the attachment, rapport, and trust developed among group members, these groups might

also provide emotional and informational support to a woman in labour (Prochasta, Redding & Evers 2008:102). As explained by one key informant:

The objective of Village Women's Saving Groups is to improve the saving culture of the women and improve their household economy. However, members can borrow money for urgent needs. The lending is interest free. If a woman in labour needs some money, the Saving Group can borrow her some amount of money (KII; HDA Leader; Serity; Age 49).

Members of coffee-drinking groups are neighbourhoods. The groups provide emotional support for a woman in labour by remaining close to her, and empathising and caring for her in the course of labour. They also provide both instrumental support in the form of money or food for the woman in labour, and informational support - giving advice, suggestion and information to the woman (Heaney & Israel 2008:190).

Coffee-drinking group members are the most and first hand support for pregnant women during a problematic labour and delivery by providing the necessary support she needs. For example, when my date of birth approaches, my neighbours were on high alert to help me. Some of them were passing the night in our house until the day of delivery (KII; Postnatal women who delivered with the assistance of SBA, Chacha).

The study found that the first easily accessible support person/s for labouring women at the commencement of labour were her neighbours followed by her husband.

The husband can be in the farming field and he does not know what is going on his home. However, a woman in labour can easily summon her neighbour for help. They can coordinate support in the village, call her husband from the field and carry or accompany her to health facility (KII; HDA Leader; Chacha area; Age 35).

Universal access to skilled care for childbirth is one of the best strategies to decrease maternal mortality and morbidity. However, the feasibility of universal access to the service is challenging for LMICs including Ethiopia because of Human Resources for Health constraints, health systems challenges, and related factors. Maximising the role of community health workers including people in the network of pregnant women in

health promotion, prevention and even therapeutic interventions is believed to be a transitional and complementary strategy to increase health services utilisation and decrease perinatal mortality (Bhutta, Ali, Cousens, Ali, Haider, Rizvi, Okong, Bhutta & Black 2008:984). It also has a big implication for community ownership and sustainability of the activities through their active participation. Therefore, Ethiopia needs to capitalise on the use of the existing social networks and social support available to pregnant women for improving their health service utilisation and gradually improve the health outcomes of mothers and babies.

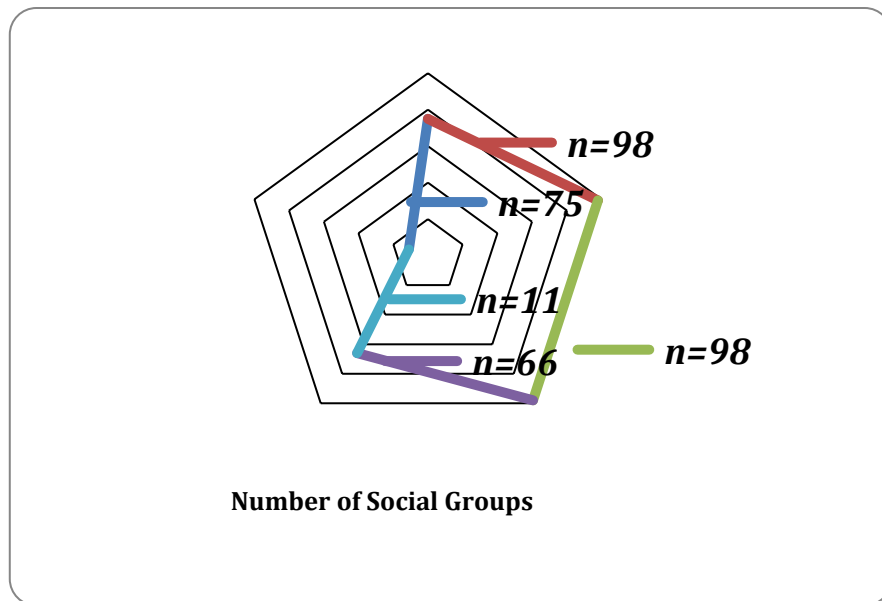


Figure 4.2 Number of social groups that the women were networked/participated. North Shoa, Dec 2014

Autonomy of women

Women's autonomy is a composite variable constituting the women's control over money, decision-making power, and freedom of movement (Ghuman, Lee & Smith 2006:8).

Previous studies in Ethiopia using the data from the DHS indicated that women's autonomy is a significant predictor of women's health service utilisation for ANC, modern contraceptives and birth in health facilities (Shiferaw et al 2013:6; Wado, Afework & Hindin 2013:19; Woldemicael & Tenkorang 2010:996). In the present study, many (154 or 44.4%) interviewed women did not have control over money in their

families. They neither got money regularly nor got money without consulting somebody. Nevertheless, over a third (77%) of the women had good decision-making power in family affairs. They could make decisions on small and big family issues and on their own health service utilisation. With regard to freedom of movement, 218 (62.9%) women did not have freedom of movement. They could not go out of their house, to the health facility for their child or for their own health problems; or to visit their friends or relatives. They also could not go out of their homes without somebody else escorted them. Overall, 234 (67.5%) of the women had partial or low or no autonomy. This finding was consistent with other studies in Ethiopia (Nigatu, Gebremariam, Abera, Setegn & Deribe 2014:79).

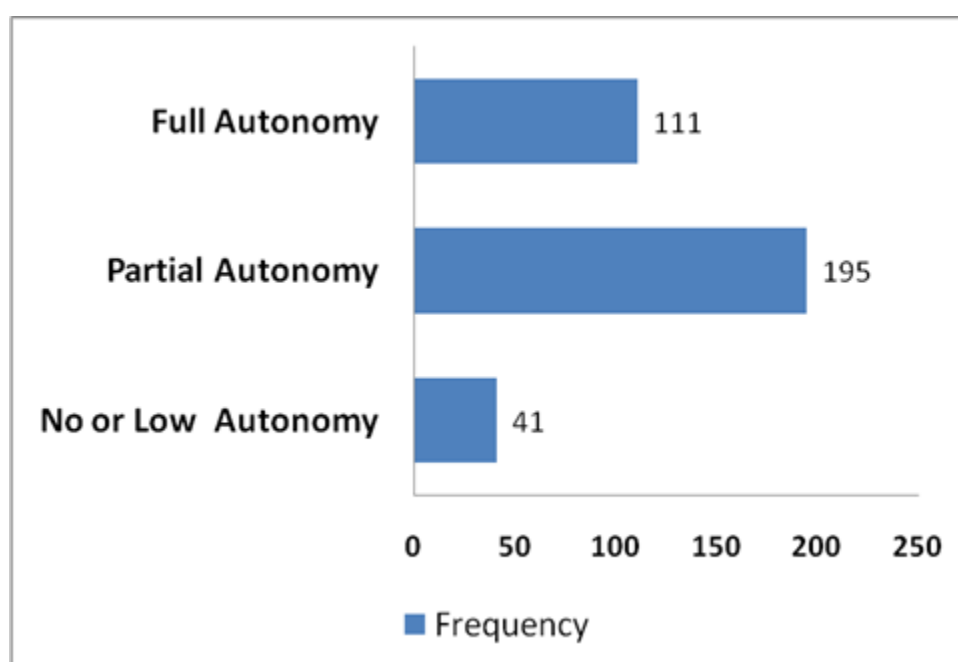


Figure 4.3 Level of autonomy of women who gave birth in the last 12 months, North Shoa, Oct 2014

The qualitative study findings support the quantitative findings of the study. In both the FGDs and KII, many discussants described that, since few years ago, male dominance on decision making on household matters has decreased pointedly. They also witnessed that women's decision-making power had improved in families. However, a few discussants refuted this perspective. They claim that mothers-in-law are still the most influential person in the family and the one to make the decision on big family matters including where a woman should deliver:

...how can a woman go to health facility without permission from her husband? (KII 6, 29; HDA).

The husbands' mothers are the most influential family members to decide on place of delivery for pregnant women in this locality. They mostly prefer the women to deliver at home (KII; TTBA; 75; Chacha).

There are different informal ways of asserting control over freedom of movement and decision making by the men and the mothers-in-law in a family.

He [the husband] neither directly tells the woman not to go to health facility nor discusses the woman's pregnancy or the plan for deliver. However, in informal family discussions like in coffee ceremony...they rather project their ideas commenting, for example on something bad that happened to other women in the neighbourhood after giving birth in a health facility or commenting negatively on the health facility itself, the service or the health care workers. The comment is ironical and that there is an implicit reflection of his interest that discourages a pregnant woman not to seek care from SBA for childbirth (FGD 8, Keit, 32).

Model: Multiple Regression: Table 4.5 below illustrates that the model in this analysis is significant implying that the results are explained by the model.

Table 4.5 Model fitting information on enabling factors and deliveries attended by SBA, North Shoa Zone, October 2014

| Type | Model fitting criteria | Likelihood ratio tests | | |
|----------------|------------------------|------------------------|----|-------|
| | -2 Log likelihood | Chi-Square | df | Sig. |
| Intercept only | 558.353 | | | |
| Final | 506.050 | 52.303 | 26 | 0.002 |

As shown in Table 4.6, variables under the enabling factors including distance to health facility, women's autonomy, number of social support groups each number of woman's was networks, and social support were subjected to Binary Logistic Regression and analysed to investigate if they can predict the dependent variable. Overall, health services cost for labour and delivery and experienced long waiting time to get service in health facilities were predictors of deliveries assisted by SBAs. Women who reported that the waiting time in the health facility is short and good were more likely to have SBA during childbirth (AOR=1.78, 95% C.I=1.01–3.45). Similarly, women who perceived cost

of health services as an issue, were likely to be hesitant about getting their deliveries attended by SBAs (AOR=0.29, 95% C.I=0.10–0.79). However, none of the quantitative enabling factors had association with childbirth assisted by SBA.

In this study, women's autonomy did not show any association with SBA at childbirth. Previous studies that used recent DHS (EDHS 2011) data to estimate the association between place of childbirth and women's autonomy didn't show any such association (Yebyo et al 2014:8-9). This signifies the importance of generating evidences with appropriate methodology to understand if this is a true absence of relationship.

Social support and number of social groups did not have statistical significant association with childbirth with SBA. It was not possible to find a study in Ethiopia or similar LMIC to compare with this finding. This calls for further quantitative research to explore the relationship between social support and utilisation of SBA for childbirth and PNC.

Table 4.6 Enabling factors predicting deliveries assisted by SBA, North Shoa Zone, October, 2014

| N | Variable | | Deliveries attended by Skilled Birth Attendant | | | |
|-----|---------------------------------------|-------------------|--|-------------|--------------------|--------------------|
| | | | n=347 | n (%) | COR (95% C.I) | AOR (95% C.I) |
| III | Enabling factors | | | | | |
| 1. | Distance to health facility | Far | 139 | 97 (69.8%) | 1 | 1 |
| | | Near | 208 | 150 (72.1%) | 0.81 (0.47–1.42) | 1.48 (0.78–3.02) |
| 2. | Time spent in a health facility | Long and not good | 76 | 45 (59.2%) | 1 | 1 |
| | | Short and good | 270 | 203 (75.2%) | 1.89 (1.01–3.54) * | 1.78(1.01–3.48) * |
| 3. | Cost related to L&D services | No | 325 | 236 (72.6%) | 1 | 1 |
| | | Yes | 22 | 12 (54.5%) | 0.32 (0.12–0.88) | 0.29 (0.10–0.79) * |
| 4. | Autonomy of the women | Low | 45 | 30 (66.7%) | 1 | 1 |
| | | Moderate | 189 | 136 (72%) | 1.27 (0.56–2.85) | 1.12(0.51–2.48) |
| | | Good | 113 | 82 (72.6%) | 1.07 (0.44–2.56) | 1.06(0.45–2.51) |
| 5. | Number of membership to social groups | 0 -2 | 173 | 131 (75.7%) | 1 | 1 |
| | | ≥3 | 174 | 117 (67.2%) | 0.79 (0.45–1.40) | 0.72 (0.41–1.27) |
| 6. | Social support | Low | 42 | 31 (73.8%) | 1 | 1 |
| | | Moderate | 116 | 75 (64.6%) | 1.27 (0.56–2.85) | 0.48(0.19–1.19) |
| | | High | 189 | 142 (75.1%) | 1.07 (0.44–2.56) | 1.01(0.41–2.49) |

4.5.3 Need factors

The majority (93%) of study participants believed that SBAs should attend all births including normal labour. Only 4% of the women preferred TBAs, friends, relatives, or HEWs to assist them during delivery and childbirth. Having a plan to deliver in health facility during pregnancy is a strong predictor of skilled care for childbirth than not having planned to deliver in a health facility (AOR: 4.92; CI 2.0–12.10). See Table 4.7 below.

Table 4.7 Need factors as predictors of deliveries assisted by SBA, North Shoa Zone, October, 2014

| SN | Variable | | Deliveries attended by Skilled Birth Attendant | | | |
|----|---|-----------------|--|-------------|------------------|--------------------|
| | | | n=347 | n (%) | COR (95% C.I) | AOR (95% C.I) |
| IV | Need factors | | | | | |
| | Believe that normal labour and delivery should be attended by SBA | No | 33 | 19 (57.6%) | 1 | 1 |
| | | Yes | 314 | 229 (72.9%) | 0.66(0.66–3.98) | 1.43 (0.80–2.24) |
| | Believe that normal labour and delivery should be attended at health facility | No | 23 | 12 (52.2%) | 1 | 1 |
| | | Yes | 323 | 235 (72.7%) | 1.2(0.48–8.33) | 1.24 (0.65–1.35) |
| | Planned place of delivery | Home | 30 | 20 (66.7%) | 1 | 1 |
| | | Health facility | 317 | 79 (25%) | 2.14(2.14–13.38) | 4.92 (2.00–12.10)* |

*P-value<0.05

4.6 KEY FACTORS INFLUENCING PNC SERVICES UTILISATION BY THE MOTHERS

4.6.1 Predisposing factors

Table 4.8 below illustrates the reasons given by women who did not attend PNC after their childbirth. The main reasons for not attending PNC for themselves were lack of information on whether PNC was needed after childbirth (41%), I was healthy (was not sick) (18.8%), waiting for religious ceremonies to happen first (17.1%), lack of time or somebody to support (10.7%).

Table 4.8 Reasons mentioned by women who did not attend PNC within 45 days after childbirth (n=234), North Shoa Zone, October 2014

| Reasons | Frequency | Percentage (%) |
|--|-----------|----------------|
| I don't have information if I was supposed to do | 96 | 41.0 |
| Because I was healthy/ was not sick | 44 | 18.8 |
| Was awaiting for religious ceremony yet | 40 | 17.1 |
| I don't have time or somebody to support me | 25 | 10.7 |
| Distance or transportation | 17 | 7.3 |
| Others | 12 | 5.1 |

The Omnibus Tests of Model Coefficients to analyse the independent variables and the outcome variable which was PNC use by the mothers from SBA resulted in $X^2=40$, $df=18$, and $P\text{-value}=0.002$. This means that the model significantly explained the relationship.

Table 4.9 Omnibus test of model coefficients for the independent variables and the PNC service utilisation by the neonates. North Shoa Zone, October 2014

| | | Chi-square | df | Sig. |
|--------|-------|------------|----|------|
| Step 1 | Step | 58.896 | 24 | .000 |
| | Block | 58.896 | 24 | .000 |
| | Model | 58.896 | 24 | .000 |

4.6.2 Predisposing factors:

In general, 55 (15.8%) of the women who delivered in the last 12 months received PNC within 45 days of delivery. None of the independent socio-demographic variables (age of mother, educational level of husband and mother, family income, etc.) predicted PNC service use for the mothers within 45 days after childbirth. Receiving ANC services from an SBA during pregnancy also did not predict PNC service use. Furthermore, giving birth under SBA management did not predict PNC after childbirth ($P\text{-value} > 0.05$). According to a recent synthesis of quantitative data from 36 studies in LMIC where 11 were from Low Income countries, being educated, having better family income, and affiliation to a certain religion or ethnicity are related a difference in the use of PNC services (Langlois, Miszkurka, Zunzunegui, Ghaffar, Ziegler & Karp 2015:269). The low proportion of PNC use in this study could explain the difference.

Awareness on PNC

The study revealed a lack of awareness in the community about the importance of PNC for the mother and the baby. It also appeared that community members might have not received sufficient education and counselling by the HCWs on PNC and its importance to change their behaviour.

Once the baby is delivered peacefully [normal delivery], what is the need to go to a health facility afterwards? We have no idea if a woman who gave birth has to visit health facility after childbirth! Nobody told us! This is new idea for us! (FGD 6; Chacha Area; Women who delivered home; 38).

Similar results were reported by Tesfahun, Worku, Mazngiya and Kifle (2014:2344) that there is lack of knowledge among the women in the community who believe that PNC is only for the children and meant to provide vaccination.

Perception about postnatal period

All the FGDs and KIs indicated a widespread belief that postnatal period should be a time of absolute rest and recovery wherein the women regain their strength and wellbeing and a belief that normally the PNC period should last about 40 days. During this time, the family does not allow women to go to anywhere out of their maternity home.

For up to 40 days after childbirth, a woman who delivered cannot stand-up and walk. Her body is not strong enough yet and she cannot walk. She has to sleep behind the curtain, eat good food, and provide care for her baby. The family members will not allow her at all to go out of her bed (FGD2. Chefanen; 35).

Unlike pregnancy, which the community perceives it as a normal condition with 'no risk', they believed postnatal period to be an infirmity. However, the community does not see this condition as needing medical attention from a skilled provider.

The woman's body [of women in postpartum period] is open after delivery [not aligned to its normal position] until 40 days after childbirth. Therefore, her body is not strong enough yet and she cannot walk anywhere out of her home. Instead, she has to be *Metares* [I italicised; means to rest by sleeping on her bed most of her time and served good food] until she recovers (FGD 6; Chefanen; TBA).

Cultural, superstition and religious sanctification

One component of the cultural belief that a woman should not leave her home and go out somewhere before 40 days after childbirth is the norm that the mother and neonate have to wait until their families execute some cultural or religious sanctifications. These religious sanctifications are the only guarantee after which going out of home or any participation in public events is possible.

They [the community] thinks that the mother and baby should not be exposed to Nifas [Air-draft], Jenber [Sun] or people's eyes before being sanctified in a religious ceremony that is conducted 40 days after birth for baby boys or 80 days for baby girls. In the ceremony, the Priest sprinkled holly- water and the

woman kisses the Mero [the Cross-]. Otherwise, they claim that the mother and/or baby may die (KII; HCW; Chacha).

Some community members believe in and follow Hamechisa [Witches]. People ask Hamechisa about anything that concerns them. Some families prefer to first take the newborn to Hamechisa before baptising the baby in Christian Church or go to health facility for vaccination. The Hamechisa has to hug the baby and pray for the neonate and the mother [KII; TBA; Cheki area; 52).

These religious or cultural beliefs are deep rooted and are highly frightening for the community. They are afraid of sending out the postpartum woman for any reason including visiting a health facility for fear of the bad health consequences that could happen.

There is an Evil Spirit, which is busy in hunting women and new-borns after delivery. If it finds them [the mom or the baby] exposed, it does not excuse them at all! it can make them fall sick or can kill them. Therefore, prevention measures like somebody should always be available near the mother and baby in the maternity room; putting sickle or knife or other metallic items under the mattress/bed can protect from the attack by the Evil Spirit. I have noticed a lot of such experiences (KII; TTBA; Age 60; Chacha).

Focus group discussants and key informants associated different disease elements happening after childbirth with exposure to evil spirits.

Different health problems happening to the women after delivery because of *Megagna*, *Likift* [I italicised; names of evil spirits] etc. These conditions result in headache, sharp pain, persistent cramp, psychosis or even death. Therefore, a woman should not cross-river [leave her home and go somewhere] before 40 days after childbirth (KII; HDA; Chacha area).

4.6.3 Enabling factors

Social support, number of social groups the women participate in, women's autonomy, perceived cost of PNC services, distance to health facility, which were the enabling factors, did not predict PNC service utilisation by the interviewed women. Furthermore, women who affirmed that they were comfortable with the time duration they spend in a health facility to get services were not different in getting PNC after childbirth from the women who were not comfortable ($P>0.05$).

The interviewed HCWs consider PNC as an important intervention for the mothers. However, they described it as a big challenging the health behaviour of the women on PNC is not easy to change.

...we do not usually instruct women to come back to the HC for PNC before their sixth week after childbirth. This is because we recognise that whether we tell them or not they do not come... (KII; HCW; HC B; 28)

HCWs also claimed to have insufficient orientation on the existing PNC Guidelines. They attribute the reason to the health system.

...even we, the UHEWs know about PNC on the reporting format and not in practice. This is because the policy changes so frequently every time and we are confused.... (KII; UHEW; Town1).

The above findings imply that there should be feasible strategy to address the health services utilisation of the community on PNC. It also entails the importance of emphasis to build the capacity of HCWs on PNC.

4.6.4 Need factors

The interviewed women who believed that PNC health service utilisation was useful did not show statistically significant relation with actual PNC service use ($P\text{-value}>0.05$). Two hundred seventy-seven (79.8%) mothers believed that the mother and neonates should seek PNC within 45 days after delivery. However, the Logistic regression model did not show any relationship between the women's beliefs and PNC service utilisation.

In many FGDs and KIIs, the study participants acknowledged that there was a widespread belief in the community that PNC for the mother is not necessary.

The delivery has ended in peace and health, why should we go to a health facility?! (KII 15; TBA Keyit area)

The women argue that after the baby was born and both my baby and the mom are in good health. Why should we go to health facility? (FGD 7; HDA Leader; Keyit; 37)

Generally, this study found out that, PNC utilisation for the mother was a major problem in the study locations. The barriers are deeply rooted in the community's social, cultural, and belief systems and associated with health system factors. To tackle these problems well thought out, culturally acceptable public health interventions are required.

4.7 KEY FACTORS INFLUENCING PNC SERVICES UTILISATION FOR NEONATES

4.7.1 Predisposing factors

Awareness of common health complications on neonates

One hundred and ninety-two interviewed women reported that they were not aware of any complications that might occur with neonates after birth. However, birth asphyxia, death, and trauma were listed by 72 (20.7%), 38 (11%), and 26 (7.5%) women respectively. Overall, maternal awareness on health complications in neonates did not predict PNC service utilisation by neonates.

By the binary logistic regression (presented in Table 4:10 below) all of the predisposing factors - age of the mother, educational status of the father or mother, religion, ethnic group, and ANC or childbirth assisted by SBA, or the mothers' use of

PNC. The number of births, number of live births, and family size showed no significant association with PNC service utilisation by the neonates.

4.7.2 Enabling factors

As presented previously, although the number is small, neonates are more than twice in number than the mothers in utilising PNC within 45 days after birth. Mothers with family income less than 1,000 Ethiopian Birr (EB) or \$500 USD are more than two times likely to use PNC within 45 days after birth than babies born from families with monthly income above or equal to 1001 EB (\$ 500 USD) (OR=2.74; CI=1.59, 4.7). This relationship was not clear to explain. However, this could be because of the fact that families who had better income had the ability to afford to buy protective items including umbrella and clothes used to cover up the baby and get access to transportation to seek PNC for the baby. Nevertheless, the study did not identify this relation in PNC for the mothers.

Other variables under enabling factors:

Perceived fees for PNC services for neonates, perceived distance from home to the nearest health facility, social support and number of social groups the women participate in did not have significant association with PNC service utilisation for neonates ($P>0.05$).

4.7.3 Need factors

Most (85%) of the interviewed women asserted that neonates need PNC after delivery. Nevertheless, both general agreements on the need for utilisation of health services among the women and their belief on the usefulness of PNC for the neonate did not predict PNC services utilisation by the neonates. In both KIIs and FGDs, participants asserted that PNC for the neonate before 45 days was not necessary except that the child should take vaccination at six weeks after birth.

Table 4.10 Factors predicting PNC service utilisation by neonates (n=345), North Shoa Zone, October, 2014

| Variable | | Neonates attended PNC from SBA within 45 days after delivery | | |
|---------------------------------|---------------|--|---------------------|-------------------|
| | | n (%) | COR (95% C.I) | AOR (95% C.I) |
| Educational status of the women | Illiterate | 137 (39.7%) | 1 | 1 |
| | Literate | 208 (60.2%) | 1.36 (0.78, 2.34) | 1.02(0.43-2.43) |
| Family size | 1–4 | 182(52.7%) | 1 | 1 |
| | >5 | 163 (47.3%) | 0.94 (0.49, 1.78) | 0.84(0.32-2.24) |
| Family income | 0–1,000 | 198 (57.3%) | 1 | 1 |
| | >=1,001 | 147 (42.7%) | 0.56 (0.32, 0.9) | 2.74(1.59 -4.7)* |
| Mother received PNC services | No | 291 (84.3%) | 1 | 1 |
| | Yes | 54(15.7%) | 8.16 (3.99, 16.66)* | 2.27(0.69-7.45) |
| Received ANC | Non SBA or no | 53 (15.3%) | 1 | 1 |
| | SBA | 292 (84.7%) | 0.68 (0.34, 1.36) | 0.89(0.49-1.64) |
| Delivery assisted by SBA | No | 98(28.4%) | 1 | 1 |
| | Yes | 247(71.6%) | 1.12 (0.63, 2) | 0.53(0.17-1.62) |
| Social support | Low | 42 (12.1%) | 1 | 1 |
| | Medium | 116 (33.6%) | 1.4 (0.62, 3.17) | 1.44(0.68 – 3.02) |
| | High | 187 (54.2%) | 1.06 (0.47, 2.38) | 1.02(0.5-2.06) |
| Autonomy | Poor | 44 (12.7%) | 1 | 1 |
| | Medium | 188 (54.4%) | 1.01 (0.46, 2.26) | 1.19(0.58-2.44) |
| | High | 113 (32.7%) | 1.52 (0.65, 3.53) | 1.64(0.78-3.45) |

* P-value<0.05

4.7 SUMMARY

This chapter has presented the data analysis for 347 women who delivered 12 months prior to the data collection, through the results of ten FGDs and 21 KIs. The analysis of factors determining health services utilisation for SBA for childbirth and PNC for mothers and newborns was structured by Andersen's Health Belief Model. With regard to the socio-demographic characteristics of the quantitative study participants, the average age of the interviewed women was 27 (S.D=5.95). In addition, 43.5% of the women had never been to school. Forty percent of the women and 33.5% of their spouses couldn't read or write. For the majority (69.5%) of women, the husband's husband was Farming. Ninety two percent of interviewed

women were married. The average family size of the women in this study was 4.6 (S.D=1.95).

Two hundred and seventy-seven (79.8%) received their ANC from SBA. In addition, forty-eight (71.5%) of the study participants had SBA at delivery. Only 55 (15.8%) of the interviewed women received PNC from SBA within 45 days after childbirth. Of the alive infants, 131 (38%) received PNC from SBA at a health facility within 45 days after birth.

The educational status of the women showed significant association with births attended by SBA. Failure to estimate the delivery time, lack of knowledge, belief and attitude, cultural acceptance, history of past delivery location, and superstition and religious factors were identified as key predisposing factors influencing utilisation of SBA at delivery.

The majority of women (301 or 97.7%) were happy with the service they received at HC during their childbirth time. Among endogenous social support groups in the women's network, coffee-drinking groups and Village Women's Saving Groups appeared to have relevance to women in labour.

This research identified factors that hampered utilisation of SBA for childbirth in the study area and they were many. These includes identified as lack of health worker friendliness and cultural unacceptability of the health facilities, lack of trust that women have with the health care workers, D&A during childbirth, lack of competency of HCWs, lack of decision making power on big family matters including where the woman should deliver, and lack of freedom of movement. In addition, health services cost for labour and delivery and experienced long waiting time to receive services in health facilities were predictors of deliveries assisted by SBAs. The majority (90.5%) of interviewed women believed that SBAs should attend all births including normal labour.

Not all of the predisposing factors showed statistically significant association with SBA for PNC. However, the qualitative data revealed that the community's

awareness on PNC, cultural or religious sanctification and perceptions about the postnatal period played important roles in determining SBA for PNC.

Community attitudes that were not amenable towards PNC were considered a challenge by HCWs. HCWs also reported less orientation on the existing Guidelines on PNC. In many FGDs and KIIs, the study participants reported a widespread belief in the community that PNC for the mother is not necessary.

Family income had a positive association with utilisation of PNC utilisation provided by SBA for the neonates. The FGD and KII participants largely believed that it is not necessary to seek PNC from SBA for neonates (you need a number and % age here).

Based on the above findings from both qualitative and quantitative study; and review of experiences from other similar studies; and experiences other countries that made a difference in the improvement of maternal and neonatal health in their countries, we proposed a Framework for utilisation of health services for SBA and PNC for Ethiopia. In the following chapter presented, a Framework for utilisation of health services for SBA and PNC. The Framework encompasses the principles, strategic objectives and detailed activities endorsed by Experts in Ethiopia and reflected the findings of this study.

CHAPTER 5

A FRAMEWORK FOR UTILISATION OF HEALTH SERVICES FOR SKILLED BIRTH ATTENCE AND POSTNATAL CARE

5.1 INTRODUCTION TO THE FRAMEWORK

The following paragraphs discuss the major components of the Framework. The guiding principles, objectives of the framework and scope of the framework will be discussed. The method used in the development of the framework, strategic objectives and the monitoring and evaluation of the framework are also discussed.

5.2 GUIDING PRINCIPLES

- Client centred care
- Cultural sensitivity
- Community involvement/ participation /engagement
- Inter-sectorial collaboration
- Improving metrics, monitoring, evaluation and innovation

5.3 OBJECTIVES OF THE FRAMEWORK

5.3.1 General objective:

The general objective of this Framework is to contribute to the national response to preventable causes of maternal and neonatal deaths and gradually decrease maternal and neonatal deaths in Ethiopia.

5.3.2 Specific objectives

- Seek expertise input for developing a framework for utilisation of SBA and PNC for women and neonates.
- Develop a framework for improving SBA and PNC.

5.4 SCOPE OF FRAMEWORK

The scope of this framework is for district level use. However, it includes some policy issues with implications for both national and regional maternal and neonatal health implementation policies and strategies. Therefore, FMOH, Regional Health Bureaus and Zonal/Woreda Health Offices and health facilities can benefit from this framework. In addition, local and international implementing partners supporting MOH can also use this Framework for improving MNCH services. However, this framework is a proposal based on best available evidence and expertise opinion in the country and the Framework still needs testing in the field.

5.5 METHODOLOGY

The Delphi method was used to develop this Framework. Delphi method or technique is a structured sequence of communication exercise on a subject matter among selected knowledgeable and experienced people from diverse geographic and discipline backgrounds using series or “rounds” of questionnaires. Delphi method helps to explore issues from many panellists living in different geographic locations and from diverse disciplines and enable them to participate in a normative way (Geist 2010:148). Hence, the technique reduces the unwanted consequence of interactions in groups like control of the consensus process by dominant group members. The other merit of this technique is its anonymity (Jones & Hunter 1995:376). These advantages of the Delphi method allow it to overcome challenges common to other qualitative methods, mainly FGD. This includes following one single thought, without distraction from the main issue or loss of sight of the discussion goal. There is no universally agreed on requirement for using the Delphi Method (Okoli & Pawlowski 2004:17).

Selection of experts

First, the researcher drafted a Framework for utilisation of SBA and PNC based on these research findings and review of other relevant research. Then a list and contact details for contributors to the national reproductive health, FP, and maternal health strategies was developed. Experts working for FMOH proposed additional

experts to contribute to this Framework. Fifteen Experts including two lecturers from two large universities in Ethiopia participated in this exercise. These experts have collective experience in developing national MNCH Guidelines, strategies, training packages on MNCH including FP, emergency obstetric care, and prevention of mother-to-child transmission of HIV (PMTCT). The experts also have clinical and research experience related to MNCH and other health issues. The researcher explained the objective of the study and each was separately invited by email to this exercise.

First the selected experts were approached either face-to-face or by email and phone and the study objective was discussed. The researcher also explained the anonymity of responses and right to decline from participation at any time during the study, and the experts provided verbal consent to participate in the panel. Then the researcher forwarded the draft Framework for utilisation of SBA and PNC and a separate checklist developed by to the experts. The checklist seeks to identify the strengths, weaknesses and missing items in the Framework. In addition to providing comments, inputs, and questions on the Framework with track-changes, the experts provide their additional thoughts in the attached checklist. Figure 5.1 illustrates the flow of the steps and processes undertaken in the Delphi method.

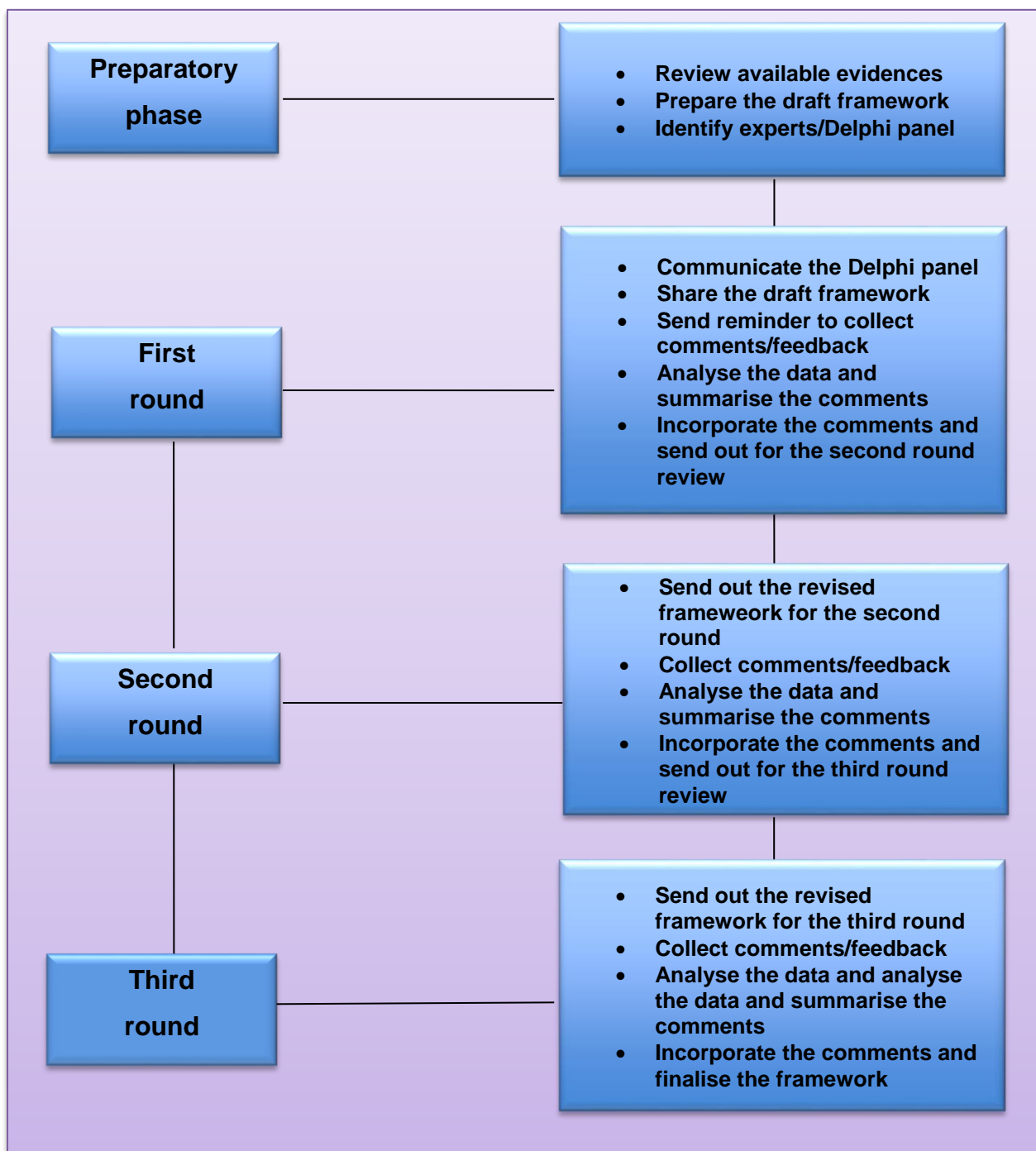


Figure 5.1 Thematic representation of the Delphi process

5.6 STRATEGIC OBJECTIVES AND ACTIVITIES

Below, the following paragraphs present the recommended strategic objectives and list of activities for the framework. In addition to the stud findings of this research, findings from other similar studies found through literature review informed these strategic objectives and activities. As discussed above, experts in the field enriched this framework through their Feedback in at least three rounds.

National/regional level

- 1 *Strategic objective: Promote policies to support women centred care to provide women in labour with care choices*

Activities

- Identify culturally sensitive issues related to childbirth and PNC in the communities in the health facility catchment area.
- Seek scientific evidence for the applicability of interventions for identified cultural issues.
- Revise SOPs to standardise the implementation of these culturally appropriate interventions.
- Train SBAs on the revised SOPs and ensure the availability and application of these women centred care SOPs in all health facilities.

District level

- 2 *Strategic objective: Link the district health program with other sectors to support improvement in addressing community barriers to SBA*

Activities

- Identify and assign a district Leadership and team that oversees the linkage and harmonisation of activities to address community barriers for SBA at district level.
- Identify relevant sectors that can support the health system; examples include Agriculture, District Roads and Transportation Authority, Education, Electric and Power Authority, and Water Authority.
- Sign Memoranda of Understanding (MOUs) with the identified sectors on possible areas of collaboration and ensure close collaboration.
- Monitor the implementation of the MOUs.

- Conduct joint planning, implementation, and monitoring including site visits with these partners.
- 3 *Strategic objective: Apply model/theory based behavioural change and communication (BCC) and Information Education and Communication (IEC) approaches to change positively the knowledge and attitudes of the women, male partners, and other family members towards health services utilisation for SBA for childbirth and PNC.*

Activities

- Select one or two theories or models of BCC.
 - Implement the selected theory/ies or model/s of BCC.
 - Develop standardised, low literacy, field tested messages and IEC tools (leaflets, brochures, posters, and job-aids) appropriate to the culture of the district/s.
 - Educate all health workers and district managers on BCC and IEC and the application of the model/theory with the communities they serve.
 - Monitor the implementation of the theory/model.
- 4 *Strategic objective: Increase the knowledge and awareness of women on ANC, SBA and PNC for their own health and that of their babies.*

Activities

- Capacitate SBA working in the ANC to be able to develop trust and good rapport with pregnant women during ANC.
- Enable HDAs to provide simple and standardised message for women in the community on ANC visits for safe pregnancy, importance of skilled delivery at childbirth and PNC for mother and baby.
- Use ANC visits to educate pregnant women on:
 - Birth preparedness
 - Danger signs of pregnancy and childbirth
 - Importance of delivery attended by SBA
 - Risks of home delivery to the mother and the neonate

- Timing and importance of PNC for the mother and the new born
 - Regularly conduct women's conferences at community level to educate and discuss with pregnant women on pregnancy, childbirth and PNC issues
 - Use local media (radio, television, and print media) to educate the community on ANC, SBA, and PNC.
 - Establish community radio-listening groups to regularly meet, discuss and reflect on the aired radio messages
 - Identify volunteer women in the community (champion women) to mentor pregnant women from pregnancy to postnatal time.
- 5 *Strategic objective: Improve the role of communities (family members, neighbours, friends, and other influential people) in social networks to improve the ANC, SBA and PNC for the babies and the women.*

Activities

- Identify and educate people in the social network of the pregnant woman including the husbands/male partners on ANC, SBA and PNC for the babies and the women.
 - Discuss the positive role of people in the social network of the pregnant woman including the husbands/male partners during pregnancy, childbirth and PNC.
 - Assign responsibility for the positive role of these people in the social network for the pregnant woman during pregnancy, childbirth and PNC.
- 6 *Strategic objective: Address cultural and religious barriers in the community that hinder women from utilising health facilities for SBA and PNC.*

Activities

- Research and identify cultural/traditional barriers specific to the district.
- Involve cultural, religious, and other important community leaders (e.g. priests, imams and traditional leaders, TBAs?) in identifying and addressing the cultural barriers for SBA and PNC;

- Provide continuous education to the community on utilising health facilities for SBA and PNC.
- Use role models /community champions to educate and motivate pregnant women to give birth and attend PNC in health facilities.

7 *Strategic objective: increase the skill of HDA volunteers, HEWs, and health providers on effective communication and proper health education.*

Activities

- Train HDA volunteers, HEWs, and health providers on culturally appropriate effective communication and inter-personal techniques.
- Develop and provide job-aids that can support HDAs, HEWs, and health providers (including visual aids that do not rely on written instructions).
- Distribute and consistently use appropriate IEC materials (leaflets, Brochures, Flip charts, etc).
- Monitor uniform and standardised message delivery by HDAs, HEWs, and health care workers and revise where needed.

8 *Strategic objective: Reform the provision of PNC for women and neonates by SBAs*

Activities

- Provide both community and facility-based education for women on the importance and timing of PNC for mothers and newborns through appropriate channels with emphasis on hindering factors and working out solutions together.
- Institute and implement PNC service coverage monitoring mechanisms in the HPs and Health centre.
- Organise/ continue PHCU support by SBAs for HEWs.
- Facilitate home visits to enable PNC provided by SBAs to mothers who cannot return to HC within the 45 day period.

- Provide HEWs with the necessary equipment and drugs to properly assess, diagnose, and treat postnatal women and neonates.

9 *Strategic objective: strengthen sustainable service delivery models to ensure continuity of existing promising /proven initiatives at health facility level.*

Activities

- Institute/improve Health Care Financing in health facilities to generate income from other medical services and use the revenue to improve MNCH service quality.
- Introduce community health/MNCH insurance system in the districts. This insurance serves to ensure financial security case of emergencies when ambulances are not available, for additional expenses, etc.
- Scan potential private sector, NGO, CBO partners and social support groups and collaborate with these partners.
- Define feasible and acceptable mechanisms that can motivate health workers who work with MNCH for better dedication to their work quality.
- Institute and appropriately apply Performance- Based-Motivation (PBM) scheme at PHCU level.
- Monitor the application of the PBM scheme and improve the scheme as resources allow.
- Establish social accountability mechanisms at all levels of the health system, including at the district/woreda administration level.

10 *Strategic objective: Institute a culture of participatory and model based quality improvement at different levels in the health system and at community level.*

Activities

- Establish quality improvement teams at health facilities and Health post level constituting representative/s from the community, health facility and district health office.

- Regularly conduct assessment, planning, designing, monitoring, and implementation of quality issues.
- Enhance community involvement in oversight of service quality through their active involvement in a constructive dialogue with the health care team.
- Use opinion/suggestion box to collect feedback from clients about the services.
- Document and evaluate quality improvements and challenges.
- Assign social accountability mechanism at all levels of the PHCU where by the the system will use the performance of the PHCUs and motivate HCWs and the administration.

11 *Strategic objective: Strengthen the functionality of referral, back-referral and linkages within the primary health care unit and the community.*

Activities

- Prepare and issue a workable SOP for referral and back-referral system; Conduct regular joint audit to monitor the referral and feedback mechanisms. This includes:
 - The use of referral slips and back-referral (counter-referral) note.
 - Arrange proper care including first-aid service to the mother or newborn on the way to the referral site.
- For labouring women from remote kebeles/villages, avail stretchers to transport the women to a place where the ambulance can reach.
- Capacitate HDA volunteers so they can identify pregnant women in their catchment area, ensure that the pregnant women in their catchment area attended at least four ANC visits during pregnancy, notify the HEWs on women approaching their date of birth, and early referral of women in labour.
- Use ambulances to return women and newborns back to their homes/villages after childbirth at health facility.
- Earmark budget for ambulance operating and maintenance costs and ensure their consistent availability to provide services.

- Improve the infrastructure in each kebele by improving roads and install landline telephones.
- Avail alternate communication equipment (example, two-way radios) at community and health facility levels to ensure notification for ambulance, obstetric emergency, etc.
- Assign a focal person at health facilities to monitor strictly the communication between the community and the ambulance driver and timely availability of ambulance for the community.
- Conduct referral mentorship in the PHCU.
- Conduct referral and linkage audits in the PHCU.

12 *Strategic objective: Improve strategic information and health metrics*

Activities

- Conduct additional research to inform improved service utilisation for SBA and PNC in Ethiopia.
- Document and widely share promising practices and success stories.
- Train health care workers to value documentation and meet documentation requirements for their positions.
- Train health care workers to improve their competency on statistical methods so that they can value the importance of recording and reporting and use local data to understand and improve their performance.
- Strengthen documentation and reporting system at health facility and district levels.
- Use local data for decision making at all levels of the health system.

5.7 MONITORING AND EVALUATION

Relevant Health Management Information System (HMIS) indicators to monitor the implementation of this Framework are needed. The research proposes the following customised indicators to monitor and evaluate the implementation and performance of the Framework. The MOH and PHCUs can capture results to these indicators

through the existing administrative reports and/or integrated into special administrative monitoring reports including Supportive Supervision (SS) reports.

Indicators

- Number of deliveries assisted by SBAs
- Number of PNC services provided to the mother by SBAs in HC and at home

Aggregated by time of PNC

- Number of PNC services provided to the neonate by SBAs in HC and at home:

Aggregated by time of PNC

- Number of promising practices for MNCH shared and adopted
- Number of PHCUs that established PBM scheme
- Number of functional social accountability mechanisms established
- Number of functional leadership teams that are composed of different sectors established at PHCU to oversee the MNCH issues in the district
- Number of PHCUs that have instituted and implemented PNC service coverage monitoring mechanism in the HPs and HCs
- Number of multisectoral partnerships established in each district?

5.8 CONCLUSION

The framework developed has been discussed in this chapter. The next chapter presents factual and conceptual conclusions made on the analysis research findings. Then, it lists the limitations of this research and finally it summarises the recommendations based on the study recommendations.

CHAPTER 6

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter outlines the conclusion drawn from this study based on the findings presented in the previous chapters, which included the proposed framework for utilisation of health services for SBA and PNC. The chapter pinpoints the limitations of the study and the recommendations that emanate from the study. The main objective of this study was to develop evidence based Framework for utilisation of health services for SBA and PNC in Ethiopia. The study tried to investigate the following queries based on the objectives: despite the remarkable efforts made by the MOH to improve the existing challenges, why is the utilisation of skilled birth care and postnatal care very low. What are the perspectives of the community and the indwelling factors that determine the utilisation of skilled care for childbirth and PNC? and how it could be improved.

6.2 RESEARCH DESIGN AND METHODS

The study used Mixed-method research design to achieve the study objectives. A household survey, FGDs, and IDIs with KIs to collect and analyse data from the study participants. Three hundred and forty seven women who delivered within 12 months prior to the administered survey participated in this study. In addition, ten FGDs and 21 KIs were conducted. The mixed-methods helped to comprehensively answer the study questions. Fifteen Delphi-panels also participated in the Delphi method. The study used purposeful sampling to select the study sites. The quality of maternal health services the health facilities provided was the basis for selection of the study sites. The study participants live within a ten-kilometre radius of the two selected public health centres.

The quantitative data was analysed using descriptive and analytic statistics. The qualitative data analysis followed a process of data reduction, data display, and

conclusion drawing. The transcripts were transcribed verbatim by the researcher from the Tape-recorded interviews and from the field-notes and then organised the data thematically. The Andersen's Health Utilisation Model (1995) guided the thematic analysis. The qualitative and quantitative data were analysed concurrently.

6.3 SUMMARY AND INTERPRETATION OF THE RESEARCH FINDINGS

One fourth (n=87) of the interviewed women live in two semi-urban towns called Chacha and Keyit. These two public health centres provide labour, delivery, and other emergency services 24 hours a day and seven days a week to fulfil all six BEmONC Signal functions. Each of the centres is staffed with at least two Midwife nurses trained in BEmONC. The nearest Zonal Hospital is located about 50 kilometres away from the health centres on the main highway to cities in the the country's northwest regions.

6.3.1 Summary of the socio-demographic characteristics of the study participants

The ages of interviewed women ranged from 16 to 48 (average 27 and S.D of 5.95). With regard to educational status, 46% of the women had never been to formal schools. Hence, 39.5% of the women could not read or write. In addition, 28.8% of their husbands were illiterate. The main ethnic groups of the study participants were Amhara and Oromo, constituting 263 (75.8%) and 82 (23.6%) respectively. Orthodox Christians comprised the majority (98.6%) of interviewed women. For 241 (69.5%) of the women, the occupation of their husbands was farming. Merchants and daily labourers constituted 9.8% and 8.1% respectively of husband occupations.

The vast majority (92.2%) of interviewed women were married. The rest (7.8%) were single, divorced or widowed. For 73.2% of the interviewed women mentioned that their husbands were the heads of the households. Twelve percent of the women said that they themselves were the heads of the family. The remaining 14.4% stated that both their husbands and they were the heads of their households. The average family size in this study was 4.6 (S.D=1.95). Fifty three percent of the women had less than five family members. Women residing in rural areas had larger family size

than women did from semi-urban areas ($X^2=37.6$; $P\text{-value}<0.05$). The average number of births and live births was 2.64 (S.D=1.79) and 2.62 (S.D=1.76) respectively. The average family monthly income of interviewed women was 1,354 Birr (\$ 67.7 USD). Over half (57.1%) of the families earned less than 1,000 Birr (\$ 50 USD) per month.

6.3.2 Utilisation of SBAs for childbirth

Two hundred and seventy-seven (79.8%) women received ANC from SBA at either hospital or health centre or both. Two hundred and forty eight (71.5%) study participants delivered in a health facility with the assistance of SBAs. For 91.1% of the women who had delivered in the last 12 months, their plan during pregnancy period had been to deliver their last baby in a health facility.

6.3.3 Utilisation of PNC from SBAs for health of mothers

Only 55 (15.8%) of the interviewed women received PNC from a SBA within 45 days after childbirth. Among these, only one woman received a PNC check up within four hours after delivery. Forty-one (75%) of the women received a PNC check up between forty and forty five days of childbirth. In addition, nine women claimed that they received PNC from HEW before 45 days after childbirth.

6.3.4 Utilisation of PNC from SBAs for health of neonates

Out of the 347 deliveries in the last 12 months preceding the study, there was one stillbirth and four neonatal deaths that occurred within a few hours after delivery. The other 342 were alive-infants during the data collection period. For alive infants, 131 (38%) of them received PNC from a SBA at a health facility within 45 days after birth.

6.3.5 Key factors influencing the utilisation of SBA for childbirth

The main and common factor that motivated women who delivered in a health facility to do so was knew that institution delivery is useful or home delivery is dangerous (143 or 57.7%). Other factors included educational status of the women. Women

who have educational status of reading, write, and had better educational status were more likely to have skilled care for childbirth than illiterate women were.

The majority (90.5%) of the study participants believed that SBAs should attend all births including normal labour. However, there were multiple factors that motivated women for home delivery. These were labour started suddenly and lasted a very short time. The interviewed women mentioned that, lack of knowledge on the last menstrual period and subsequently the estimated date of labour as contributing to lack of planning to deliver in health facilities by.

In addition, this research found out that lack of knowledge by the community on different and important issues related to childbirth conquest the use of skilled care for childbirth. The lack of knowledge among interviewed women included the importance of institutional delivery, dangers of home delivery, and free cost of health services. This study also identified a widespread lack of knowledge on birth preparedness and danger signs of pregnancy. Moreover, some community members in the study area believe that only the sick and women with complicated labour use health facilities. The community believed that pregnancy and childbirth to be normal events. Thus, special care and support including transportation to and delivery in health facilities is not required, especially since they involve unnecessary public attention that women do not like.

The community thinks that past successful deliveries as a guarantee for the future safe delivery. Referring to past successful childbirth events as a reason for home delivery was very common among interviewed women. Successful childbirths in the past and absence of any health problems during pregnancies were thought as confirmation that the next childbirth would also be concluded safely.

In this study, quality of services in the health facilities was one outstanding factor determining utilisation of skilled care for childbirth. Culturally insensitivity care at health facilities, lack of support for the woman in labour, inconvenience of the labouring environment for the labouring women, and restrictions to meeting needs of the women at health facilities.

The trust that women have in health care workers was an important enabling factor for childbirth assisted by SBA. Many women who wanted to give birth at a health facility expressed fear that a HCW assigned to assist them during childbirth might be one they do not know him/her before. There seemed to be a community belief that absence of trust in the HCWs by pregnant women was a factor that hindered health facility delivery.

Disrespect and abuse during childbirth in health facilities including care without consent, abandonment of care, undignified care, and non-confidential care were emphasised in the FGDs and IDIs. Besides, study participants claimed that there are skill gaps in some HCWs working in the health facilities they visited, sufficiently problematic to motivate the women to rely instead on TBAs.

Superstition, culture and religion played negative role in determining utilising SBA for childbirth. Some families have strong superstitious beliefs, and superstition has its role in determining health facility use for childbirth. The worshipers respect and trust what the Leaders says and out of fear of bad consequences laid on them or their families, are obliged to obey the instructions of the superstitionteacher.

Some community members assume that St Mary is incharge of the course and outcome of labour course and the first hand helper in a stressful childbirth period. If it is her will, the labour will be short and a woman can deliver at home without any complication for herself or the newborn. In many FGDs and IDI interviews, the sensitivity of women to exposing their private body parts to the health care workers was emphasised.

Events happening after childbirth also worries women and tempt them not to seek care from SBA. In the community, exposing the mother or her newborn to the sun or winddraft after birth, or to being seen by other people, were reported as major cultural concerns.

Perceived cost for delivery care, other indirect costs land long waiting times to get service in health facilities were important factors determining the choice of place of

delivery. Women who claim that the waiting time in the health facility is short were more likely to have SBA during childbirth.

With regard to social support, social network and women's autonomy, the quantitative study did not show any statistically significant association with health services utilisation for SBA and PNC. However, in the qualitative study the participants stressed the role of social support for health services utilisation of rSBA and PNC. From the social groups in which a woman was networked, coffee-drinking groups and Village Women's Saving Groups had relevance to women in labour by providing Instrumental, emotional and instrumental support. In addition, this research evidenced that the first easily accessible support person/s at the commencement of labour were neighbours followed by the husband. In this study, lack of approval from male partners or other family members as a reason for other women not to deliver in a health facility was a rare event.

6.3.6 Key factors influencing the utilisation of SBA for PNC for the health of the mothers

Awareness of the community in the study area on the importance of PNC for the mother appeared to be poor. The quantitative findings showed that the main reason for not attending PNC for their own care was lack of information on whether PNC was needed after childbirth (41%). FGD discussants described a lack of awareness in their community about the importance of PNC for the mother and the baby. It also appeared that the community might have not received sufficient education and counselling by the HCWs on PNC and its importance to have changed their behaviour.

There appeared a prevailing perception about postnatal period that the postnatal period should be a time of absolute rest and recovery during which women regain their strength and wellbeing. Moreover, in the study area, cultural and religious sanctification in the community play noteworthy and deeprooted role in hindering use of PNC for the mother. Religious sanctifications are preconditions that are highly required for a newly delivered mother and child before going out of home or any participation in public events including health care for wellness and care for sickness before 45 days of childbirth. In this study, HCWs knowledge and belief on the on PNC

including existing Guidelines was challenging for the provision of PNC services by the HCWs. Two hundred and seventy seven (79.8%) mothers believed that the mother and neonates should seek PNC within 45 days after delivery. However, the PNC they were referring to was vaccination, which is given at six weeks of delivery. In many of the FGDs and IDIs, the study participants discussed the widespread belief in the community that PNC within 45 days after delivery for the mother was not necessary.

6.3.7 Key factors influencing the utilisation of SBA for PNC for the neonates

Babies born from mothers that used PNC are from poor families are more likely to use PNC within 45 days after birth than babies born from mothers that haven't used PNC and babies from better families monthly income. On the other hand, the vast majority of the interviewed women asserted that neonates need PNC after delivery. In both IDI and IDIs, however, participants expressed the view that PNC for the neonate before 45 days was not necessary.

6.4 CONCLUSION

In the above paragraphs, we tried to consolidate and present factual and conceptual findings of the study. The main objective of this study was to develop evidence based Framework for utilisation of health services for SBA and PNC in Ethiopia. This study used a cross-sectional mixed-method research design to answer the study questions. The characteristics of the interviewed women were that they live in semi-urban towns; their average aged was 27, less educated, and majority of married Orthodox Christians. These women live in two public health centres provide labour, delivery, and other emergency services 24 hours a day and seven days a week, fulfil all six BEmONC Signal functions, and are each staffed with at least two Midwife nurses trained in BEmONC.

Two hundred and seventy seven (79.8%) women received ANC from SBA at either hospital or health centre or both. Two hundred and forty eight (71.5%) study participants delivered in a health facility with the assistance of SBAs. Only 55 (15.8%) of the interviewed women received PNC from a SBA within 45 days after childbirth. Among these, only one woman received a PNC check up within four hours

after delivery. The other 342 were alive infants during the data collection period. For alive infants, 131 (38%) of them received PNC from a SBA at a health facility within 45 days after birth.

Multiple factors determine use of SBA for childbirth and PNC. The Andersen's model helped to categorise and present these factors. The key factors influencing the utilisation of SBA for childbirth and PNC for the women and the neonates are many. The factors include educational status of the mother, family income, quality of the health service, knowledge and perception of the women and the community related to childbirth and PNC, perceived waiting time in the health facility, cost of health services, social support, and cultural, religious and superstitious factors.

In this study, social support, social network, and women's autonomy were integrated into the Andersen's Health Utilisation model to investigate the role of these factors for health services utilisation for SBA and PNC. However, none of these variables demonstrated statistically significant association with utilisation of SBA and PNC. However, the qualitative study identified the important contribution of social support and social network for utilisation of SBA and PNC.

Finally, using the Delphi method a potential health service utilisation Framework was developed using national experts as Delphi panel.

6.5 RECOMMENDATIONS

6.5.1 Recommendations for future research

The study recommends future researches to test different approaches to change the utilisation of PNC by the women and newborns. In addition, the study recommends a health services utilisation Tool kit that defines the details of the activities based on the Framework this current study proposed. The study recognises the importance of deeply exploring the role of social support, social network, and D/A.

6.5.2 Recommendations to improve the utilisation of SBA and PNC services

Based on the findings of this research and reviewed documents and consecutive review by experts, we have proposed a Framework to improve the utilisation of these services (see Annexure 7 for the detail). Therefore, we recommend that MOH, RHB, Zonal and Woreda Health Offices, and the health facilities take into account this Framework during planning and implementation of their programs to improve health services utilisation by mothers and children.

6.6 CONTRIBUTION OF THE STUDY

Irrespective of the qualities that the Andersen's model has, one of its drawbacks was that it does not include social support in the framework (Babitsch et al 2012:3). This study has attempted to address this concern and investigate the role of social support and autonomy on health services utilisation.

FMOH and other stakeholders can consult the Health Services Utilisation Framework proposed by this research to inform Maternal and Neonatal Health programme and policies in Ethiopia.

The framework deserves further research to validate its strategies and activities and to assess implementation costs and overall feasibility.

6.7 LIMITATIONS OF THE STUDY

This research is a community based cross-sectional study that additionally used the Delphi Method to solicit opinion, comments and feedback from experts. Therefore, it reflects the shortcomings of any cross-sectional study and Delphi method.

The geographic scope of the study was limited to communities living within a ten-kilometre radius of two selected health facilities and focused on towns that have better transportation and better access to other infrastructures. Therefore the findings can be generalised only to communities with similar characteristics.

The time selected for data collection was not optimal. During data collection, time the communities living at the outskirts of the study sites were busy harvesting their crops. It was challenging to find women participants at their homes during data

collection. In most cases, data collectors visited households more than twice, extending the data collection time and resulting in more labour cost.

The low response rate for the Delphi method was also a study limitation. The response rate gradually increased with a drop off rate of 20%, 33% and 30% in the first, second and third rounds.

6.8 CONCLUSION

Health service utilisation for SBA for childbirth and PNC has improved in the study area since the last few years. There are ongoing efforts by FMOH, the district administration, and other stakeholders to improve health service utilisation by pregnant, labouring and postpartum women and their babies through different strategies.

Nonetheless, in the perception of interviewed women living in the surrounding areas of the two sample health centres, the country's health system has many issues in terms of the quality of maternal, neonatal and child health services. In the eyes of people in the health system, a health centre that is believed to provide quality health services lacks the quality and the environment that the community expect to attract the women and to use the service from the community perspective. A health facility may be well –staffed with trained SBAs, well-equipped with the necessary materials to provide the service and able to perform the six signal functions of BEmONC). The community /clients' perspective on health utilisation and quality service should be included as an input to improve the quality health services and subsequently the service utilisation by the community.

The data confirms that the communities have deep rooted and persistent cultural, superstitious and religious barriers that hinder them from utilising SBA for childbirth and PNC for the mother and the neonate. Community women report meagre knowledge of important messages related to pregnancy, childbirth, and PNC. Educational status of the women, perceived cost of health services, waiting time in health facilities, and social support appeared to play important role in utilisation of SBA for childbirth and PNC.

The Andersen's Health Utilisation Model is a comprehensive and useful tool to study health services utilisation for SBA by women and their babies. In this study, the model integrated measures of social support; social network and autonomy of women into the enabling factors category to determine their role in health services utilisation of SBA for childbirth and PNC. We learned that Andersen's Health Utilisation model can integrate particularly into social support as a composite variable to understand its role in utilisation of SBA for childbirth and PNC.

Based on study findings and strengthened by review of current international relevant documents the author has proposed a Framework for utilisation of health services for SBA and PNC in Ethiopia. Next researches shall test this framework in the field for its cost and implementation feasibility before the FMOH and other relevant MNCH stakeholders in the country use it directly.

REFERENCES

Abebe, F., Berhane, Y & Girma, B. 2012. *Factors associated with home delivery in Bahirdar, Ethiopia: a case control study*. BMC Research Notes. From: [DOI:10.1186/1756-0500-5-653](https://doi.org/10.1186/1756-0500-5-653). (Accessed on 15/1/2013).

Abdella, A. 2010. Maternal mortality trend in Ethiopia. *Ethiopian Journal of Health Development*. 24(1):115-122.

Abuya, T, Warren, C, Miller, N, Njuki, R, Ndwiga, C, Maranga, A, Mbehero, F, Njeru, A & Bellows, B. 2015. Exploring the prevalence of disrespect and abuse during childbirth in Kenya. *PLOS/ONE* 10(4) From: [e012306.doi:10.1371/journal.one.0123606](https://doi.org/10.1371/journal.one.0123606). (Accessed on 15/5/2015).

Accorsi, S, Bilal, NJ, Farese, P & Racalbuto, V. 2010. Countdown to 2015: comparing progress towards the achievement of the health Millennium Development Goals in Ethiopia and other sub-Saharan African counties. Elsevier: *Society of Tropical Medicine and Hygiene*. From: [Doi:10.1016/j.trstmh.2009.12.009](https://doi.org/10.1016/j.trstmh.2009.12.009). (Accessed on 6/6/2013).

Aday, LA & Andersen, R. 1974. A framework for the study of access to medical care. *Health Services Research*: 9(3):208-220.

Adegoke, AA & Broek, N. 2009. Skilled birth attendance - lessons learnt. *BJOG* 116(Suppl. 1):33-40.

Adjiwanou, V & LeGrand, T. 2013. Does antenatal care matter in the use of skilled birth attendance in rural Africa: a multi-country analysis. *Social Science and Medicine* 86:26-34.

Alter, DA, Stukel, T, Chong, A & Henry, D. 2011. Lesson from Canada's universal care: socially disadvantaged patients use more health services, still have poorer health. *Health Affairs* 30(2):274-283.

Amano, A, Gebeyehu, A & Birhanu, Z. 2012. Institutional delivery service utilisation in Munisa woreda, south east Ethiopia: a community based cross-sectional study. *BMC Pregnancy and Childbirth* 12:105. From: [Doi:10/11861471-2393-12-105](https://doi.org/10.1186/1471-2393-12-105). (Accessed on 10/6/2013).

Andersen, RM. 1995. Revisiting the behavioural model and access to medical care: Does it matter? *Journal of Health and Social Behavior* 36(1). From: <http://www.jstor.org/stable/2137284>. (Accessed on 05/06/2012).

Andersen, RM & Davidson PL. 2001. Improving access to care in America: individual and contextual indicators. In: *Changing the U.S. health care system: Key issues in health services, policy, and management*, edited by RM Andersen, TH Rice and EF Kominski. San Francisco, CA: Jossey-Bass:3-30.

Angel, R.J. 2011. Agency versus structure: Genetics, group membership, and a new twist on an old debate. *Social Science and Medicine*:1-4.

Asefa, A & Bekele, D. 2015. Status of respectful and non-abusive care during facility-based childbirth in a hospital and health centers in Addis Ababa, Ethiopia. *Reproductive Health*. From: [DOI 10.1186/s12978-015-0024-9](https://doi.org/10.1186/s12978-015-0024-9). (Accessed on 15/6/2015).

Babbie, E. 2010. *The practice of social research*. 12th edition. USA: Wadsworth Cengage Learning.

Babitsch, B, Gohi, D & Lengerke, TV. 2012. Re-visiting Andersen's behavioral model of health services use: a systematic review of studies from 1998-2011. *Psychosocial Medicine*:9. From: [DOI:10.3205/psm000089](https://doi.org/10.3205/psm000089), [URN:urn.nbn](https://nbn-resolving.org/urn:nbn:de:bsz:psy-2012-000089). (Accessed on 15/12/2014).

Bayu, H, Adefris, M., Amano, A & Abuhay, M. 2015. Pregnant women's preference and factors associated with institutional delivery service utilisation in

DebreMarkosTown, North West Ethiopia: a community based follow up study. *BMC Pregnancy and Childbirth* 15:15. From: [DOI:10.1186/s12884-015-0437 z](https://doi.org/10.1186/s12884-015-0437-z). (Accessed on 15/10/2015).

Bayou, N & Gacho, H. 2013. Utilisation of clean and safe delivery service package of health services extension program and associated factors in rural kebeles of Kafa Zone, Southwest Ethiopia. *Ethiopian Journal of Health Sciences* 23(2):12-30.

Bedford, J, Gandhi, M, Admassu, M & Girma, A. 2012. A normal delivery takes place at home: a qualitative study of the location of childbirth in rural Ethiopia. *Maternal Child Health Journal* 17:230-239.

Bhutta, ZA, Ali, S, Cousens, S, Ali, TM, Haider, BA, Rizvi, A, Okong, P, Bhutta, SZ & Black, RE. 2008. Interventions to address maternal, newborn, and child survival: what difference can integrated primary health care strategies make? *The Lancet* 372(9642):972-989.

Bhutta, ZA & Black RE. 2013. Global maternal, newborn, and child health – so near and yet so far. *New England Journal of Medicine* 369(23):2226-2235.

Bhutta, Z, Cabral, S, Chan, C-W & Keenan, W. 2012. Reducing maternal newborn, and infant mortality globally: an integrated action agenda. *International Journal of Gynecology and Obstetrics* 119:S13-S17.

Bhutta, ZA, Das, JK, Bhl, R, Lawn, JE, Salam, RA, Paul, VK, Sankar, MJ, Blencowe, H, Rizvi, A, Chou, VB & Walker, N. 2014. Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost? *The Lancet* 384:347-370.

Bohren, M, Hunter, E, Munthe-Kaas, H, Souza, Joao, Vogel, J & Gulmezoglu, A. 2014. Facilitators and barriers to facility-based delivery in low-and middle-income countries: a qualitative evidence synthesis. *Reproductive Health* 11(21):71.

Bordens, KS & Abbott, B. 2013. *Research design and methods - a process approach*. 9th edition. Boston, MA: McGraw-Hill.

Bowling, A. 2009. *Research methods in health investigating health and health services*. 3rd edition. England: Open University Press.

Bowser, D & Hill, K. 2010. *Exploring evidence for disrespect and abuse in facility-based childbirth - report of landscape analysis*. USAID-Traction project.

Calvert, C & Ronsmans, C. 2013. HIV and the risk of direct obstetric complications: Systmatic revie and meta-analysis. *PLoS ONE* 8(10):29-31.

Choby, A & Clark, A. 2013.*Improving health: structure and agency in health interventions*. John Wiley & Sons. From DOI: [10.1111/nup.12018](https://doi.org/10.1111/nup.12018). (Accessed on 15/10/2014).

Clark, S. 2012. *Strategies for reducing maternal mortality*. Elsevier. From: [Doi:10.1053/j.semperi.2011.09.009](https://doi.org/10.1053/j.semperi.2011.09.009). (Accessed on 15/6/2013).

Creswell, JW & Clark, VLP. 2011. *Designing and conducting mixed methods research*. 2nd editon. Thousand Oaks, CA: Sage.

Creswell, JW, Klassen, AC, Clark, VL & Smith, KCS. 2011. *Best practices for mixed methods research in the health sciences*. Bethesda (Maryland): National Institutes of Health:2094-2103.

CSA [Ethiopia]. 2006. *Ethiopia demographic and health survey*. Sept, 2006. ORC Macro; Calverton, Maryland. USA.

CSA [Ethiopia]. 2012. *Ethiopia demographic and health survey*. Sept, 2006. ORC Macro; Calverton, Maryland. USA.

CSA [Ethiopia]. 2014. *Ethiopia mini demographic and health survey 2014*. The Central Statistical Agency.Addis Ababa. Ethiopia

CSA [Ethiopia] and ICF International 2012. *Ethiopia demographic and health survey 2011*. Addis Ababa and Calverton, Maryland, USA: CSA and ICF International.

Daniel, W & Turner, I. 2010. Qualitative interview design: a practical guide for novice investigators. *The Qualitative Report* 15(3):754-760.

Debelew, G, Afework, M & Yalew, A. 2014. Determinants and causes of neonatal mortality in Jimma zone, Southwest Ethiopia a multilevel analysis of prospective Bhutta follow up study. *PLoS ONE* 9(9):4.

From: www.1371/journal.pone.0107184. (Accessed on 12/2/2015).

Delamater, PL, Messina, JP, Grady, SC, & Shortridge, AM. 2012. Measuring geographic access to health care: raster and network-based methods. *International Journal of Health Geographics* 11(1):15-19..

Denzin, N. 2010. Moments, mixed methods, and paradigm dialogs. *Qualitative Inquiry* 16(16):419-442.

Dermstadt, G, Choi, Y, Arifeen, S, Bari, S, Rahman, S, Mannan, I, Seraji, H, Winch, P, Saha, S, Ahmed, S.M, Ahmed, S, Begum, N, Lee, A, Black, R, Santosham, M, Crook, D & Baqui, A. 2010. Evaluation of a cluster-randomized controlled trial of a package of community-based maternal and newborn interventions in Mirzapur, Bangladesh. *PLoS One* 5(3):4-5. From: [DOI:10.1371/journal.pone.0009696](https://doi.org/10.1371/journal.pone.0009696). (Accessed on 15/10/2013).

Derosé, K, Gresenz, C & Ringel, J. 2011. *Understanding disparities in health care access - and reducing them - through a focus on public health*. From: content.healthaffairs.org. (Accessed on 26/3/2013).

Edmonds, JK, Hruschka, D, Bernard, HR & Sibley, L. 2012. Women's social network and birth attendant decisions: application of the network-episode mode. *SocSci Med* 74(3):452-459.

EPCC. 2008. *Summary and statistical report of the 2007 population and housing census: Population size by age and sex*. Federal Democratic Republic of Ethiopia Population Census Commission. Addis Ababa, Ethiopia.

Essendi, H, Mills, S & Fotso, JC. 2010. Barriers to formal emergency obstetrics care services' utilisation. *Journal of Urban Healthin Bulletin of the New York Academy of Medicine* 88(2):356-369.

Ferlander, S. 2007. The importance of different forms of social capital for health in *Acta Sociologica* 50(2):115-128.

FMOFED (Federal Ministry of Finance and Economic Development). 2010. *Growth and transformation plan (2010/11 - 2014/15)*. Vol I:26-27.Main text. Addis Ababa.

Fekadu, M & Regassa, N. 2015. Skilled delivery care service utilisation in Ethiopia: analysis of rural-urban differentials based on national demographic and health survey (DHS) data. *African Health Sciences* 14(4):974-984.

Fotso, JC, Ezeh, AC & Essendi, H. 2009. Maternal health in resource-poor urban settings: how does women's autonomy influence the utilisation of obstetric care services. *Reproductive Health* 6(9):1-8.

Feilzer, M. 2010. Doing mixed methods research pragmatically: implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research* 4(1):6-16.

Freedman, LP, Ramsey, K, Abuya, K, Bellows, B, Ndwiga, C, Warren, CE, Kujawski, S, Moyo, W, Kruk, ME & Mbaruku, G. 2014. Defining disrespect and abuse of women in childbirth: a research, policy and rights agenda in *Bulletin of the World Health Organization* 92(12):915-917.

Gamarra, CJ, Paz, EPA & Griep, RH. 2009. Social support and cervical and breast cancer screening in Argentinean women from a rural population. *Public Health Nursing* 263(3):269-276.

Garson, G. 2014. *Logistic regression: binary and multinomial. Statistical associates blue book series*. From: www.statistical-associates.com. (Accessed on June 15, 2015).

Gayen, K & Raeside, R. 2007. Social networks, normative influence and health delivery in rural Bangladesh. *Social Science and Medicine* 65(200):900-914.

Gebrehiwot, T, Goicolea, I, Edin, K & Sebastian, MS. 2012. Making pragmatic choices: women's experiences of delivery care in Northern Ethiopia. *BMC Pregnancy and Childbirth* 12(1):113.

Geist, M. 2010. Using the Delphi method to engage stakeholders: a comparison of two studies. *Evaluation and Program Planning* 33(2):147-154.

Ghuman, SJ, Lee, HJ & Smith, HL. 2006. Measurement of women's autonomy according to women and their husbands: Results from five Asian countries. *Social Science Research* 35(1):1-28.

Glanz, K & Bishop, DB. 2010. The role of behavioral science theory in development and implementation of public health interventions. *Annual Review of Public Health* 31:399-433.

Glanz, K, Rimer, BK & Viswanath, K (eds.). 2008. *Health behavior and health education: Theory, research, and practice*. San Francisco; John Willey & Sons.

Goetz, K, Szecsenyi, J, Campbell, S, Rosemann, T, Rueter, G, Raum, E, Brenner, H & Miksch, A. 2012. The importance of social support for people with type 2 diabetes: A qualitative study with general practitioners, practice nurses and patients. *GMS Psycho-Social Medicine* 9:6.

Graham, WJ, Bell, JS, Bullough, CHW, De Brouwere, V & Van Lerberghe, W. 2001. Can skilled attendance at delivery reduce maternal mortality in developing countries. *Safe Motherhood Strategies: A Review of the Evidence* 17:97-130.

Green, J & Thorogood, N. 2009. *Qualitative methods for health research*. 2nd edition. London: Sage.

Grollman, C & Ronsmans, C. 2014. Systematic review of the proportion of pregnancy-related deaths attributed to HIV in population-based studies in sub-Saharan Africa. *Tropical Medicine and International Health* 19(1):83-97.

Harrits, GS. 2011. More than methods? A discussion of paradigm difference within mixed method research. *Journal of Mixed Methods Research* 5(2):150-166.

Haththotuwa, R, Senanayake, L, Senarath, U & Attygalle, D. 2012. Models of care that have reduced maternal mortality and morbidity in Sri Lanka. *International Journal of Gynecology and Obstetrics* 119:S45-S49.

Heaney, AC & Israel, AB. 2008. Social networks and social support. In *Health education and health behavior: Theory, research, and practice*, edited by K Glanz, B Rimer and K Viswanath. San Francisco: Jossey-Bass:189-207.

Hodgins, S. 2013. Achieving better maternal and newborn outcomes: coherent strategy and pragmatic, tailored implementation. *Global Health: Science and Practice* 1(2):147.

Hodnett, ED, Gates, S, Hofmeyr, G, Sakala, C & Weston, J. 2012. *Continuous support for women during childbirth*. Cochrane Database of Systematic Reviews, Issue 10.

Hurley, W, Denegar, C & Hertel, J. 2011. *Research methods: A framework for evidence-based clinical practice*. 5th edition. Philadelphia: Lippincott Williams & Wilkins.

JHPIEGO. 2001. *Maternal and neonatal health program. Birth preparedness and complication readiness: a matrix of shared responsibilities*. Baltimore, MD: JHPIEGO.

JHPIEGO. 2004. *Monitoring birth preparedness and complication readiness tools and indicators for maternal and newborn health*, edited by R Barco. Baltimore, Maryland: JHPIEGO.

Johnson, B & Christensen, L (eds). 2008. Mixed research. In *Educational research: quantitative, qualitative, and mixed approach*. Delhi: Sage:34.

Johnson, RB & Onwuegbuzie, AJ. 2004. Mixed methods research: A research paradigm whose time has come. *Educational Research* 33(7):14-26.

Jones, J & Hunter, D. 1995. Consensus method for medical and health services research. *British Medical Journal* 311(7001):376.

Karim, A, Betemariam, W, Yalew, S, Alemu, H, Carnell, M & Mekonnen, Y. 2010. Programmatic correlates of maternal healthcare seeking behaviors in Ethiopia. *Ethiopian Journal of Health Development* 24(1):94-97.

Kinney, M, Kerber, K, Black, R, Cohen, B, Nkrumah, F, Coovadias, H, Nampala P & Lawn, J. 2010. Sub-Saharan Africa's mothers, newborns, and children: where and why do they die? *PLoS Med* 7(6):e1000294.

From: [doi:10.1371/journal.pmed.1000294](https://doi.org/10.1371/journal.pmed.1000294). (Accessed 15/11/2013).

Kinney, MV, Lawn, JE, Howson, CP & Belizan, J. 2012. 15 million preterm births annually: what has changes this year? *Reproductive Health* 9(28):4.

Kitto, C, Chesters, J & Gribich, C. 2008. Review: Quality in qualitative research criteria for authors and assessors in the submission and assessment of qualitative research articles for the Medical Journal of Australia. *Medical Journal of Australia* 188(4):244.

Knite, H, Self, A & Kennedy, S. 2013. Why are women dying when they reach hospital on time? A systematic review of the 'Third Delay'. *PLoS ONE* 8(5):e63846. From: [DOI:10.1371/journal.pone.0063846](https://doi.org/10.1371/journal.pone.0063846). (Accessed on 11/17/2013).

Koblinsky, M, Chowdhury, ME, Moran, A & Ronsmans, C. 2012. Maternal morbidity and disability and their consequences: neglected agenda in maternal health. *Journal of Health Population and Nutrition* 30(2):124-130.

Langer, A, Horton, R & Chalamilla, G. 2013. A manifesto for maternal health post - 2015. *The Lancet* 381(9867):601-602.

Langlois, E, Miskurka, M, Zunzunegui, MV, Ghaffar, A, Ziegler, D & Karp, I. 2015. Inequities in postnatal care in low-and middle-income countries: a systematic review and meta-analysis. *Bulletin World Health Organization* 93(4):259-270.

Lawn, JE, Blencowe, H, Pattinson, R, Cousens, S, Kumar, R, Ibiebele, I, Gardosi, J, Day, LT & Stanton, C. 2011. Stillbirths: where? When? Why? How to make the data count? *Lancet* 377:1448-1463.

Leal, MdC, Pereira, APE, Lamarca, GdA & Vettore, MV. 2011. The relationship between social capital, social support and the adequate use of prenatal care. *Cadernos De Saude Publica* 27(Supl 2):s237-s253.

Lee, A, Cousens, S, Darmstadt G, Blencowe, H, Pattinson, R, Moran, N, Hofmeyr, J, Haws, R, Bhutta, S & Lawn, J. 2011. Care during labor and birth for the prevention of intrapartum-related neonatal deaths: a systematic review and Delphi estimation of mortality effect.. *BMC Public Health* 11(Suppl 3):S10. From: <http://www.biomedcentral.com/1471-2458/11S3/S10>. (Accessed on 10/6/2013).

Leech, NL & Onwuegbuzie, AJ. 2009. A typology of mixed methods research designs. *Quality and Quantity* 43:265-275.

Lohr, S & Julet, M (ed). 2010. *Sampling: Design and analysis*. 2nd edition. USA: Brooks/Cole.

Mackian, S, Bedri, N & Lovel, H. 2004. Up the garden path and over the edge: where might health-seeking behaviour take us?. *Health Policy and Planning* 19(3):137-146.

McMahon, S, George, A, Chebet, J, Mosha, I, Mpembeni, R & Winch, P. 2014. Experiences of and responses to disrespectful maternity care and abuse during childbirth; a qualitative study with women and men in Morogor region, Tanzania. *Bio Medical Central Pregnancy and Childbirth*. 14:268 From: <http://www.biomecentral.com/1471-2393/14/>. (Accessed on 12/12/2014).

Malarcher, S. 2010. *A view of sexual and reproductive health through the equity lens. Social determinants of sexul and reproductive health - informing future research and programme implementation*:1-11. Available at: <https://www.prezi.com>. Accessed 12th May 2014

Mason, M. 2010. Sample size and saturation in PhD studies using qualitative interviews. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* 11(3):13.

Markos, D & Bogale, D. 2014. Birth preparedness: A complication readiness among women of child bearing age group in Gobaworeda, Oromiya region. *BMC Pregnancy and Childbirth* 14:282. From: [DOI:10.1186/1471-14-282](https://doi.org/10.1186/1471-14-282). (Accessed on 10/2/15.).

Maulik, P, Eaton, W & Bradshaw, C. 2011. The effect of social networks and social support on maternal health services use, following a life event, among the Baltimore epidemiologic catchment area cohort. *The Journal of Behavioral Health Services* 38(1):29-50.

McMahon, S, George, A, Chebet, J, Mosha, I, Mpembeni, R & Winch, P. 2014. Experiences of and responses to disrespectful maternity care and abuse during childbirth; a qualitative study with women and men in Morogoro Region, Tanzania. *BMC Pregnancy and Childbirth* 14(268): 2-13.

Medhanyie, A, Spigt, M, Dinant, GJ & Blanco, R. 2012. Knowledge and performance of the Ethiopian health extension workers on antenatal and delivery care: a cross-sectional study. *Human Resources for Health* 10:44. From [DOI:10.1186/1478-4491-10-14](https://doi.org/10.1186/1478-4491-10-14). (Accessed on 11/5/2013).

Migiroy, SO & Magangi, BA. 2011. Mixed methods: a review of literature and the future of the new research paradigm. *African Journal of Business Management* 5(10):3757-3764.

Mirkuzie, A. 2014. Exploring inequities in skilled care at birth among migrant population in a metropolitan city Addis Ababa, Ethiopia: A qualitative study. *International Journal for Equity in Health* 13(110):3.

Nair, M, Yoshida, S, Lambrechts, T, Boschi-Pinto, C, Bose, K, Mason, EM & Mathai, M. 2014. Facilitators and barriers to quality of care in maternal, newborn and child health: a global situational analysis through metareview. *British Medical Journal Open* 4(5):e004749. From [DOI:101136/bmjopen-2013-004749](https://doi.org/10.1136/bmjopen-2013-004749). (Accessed on 2/6/2014).

Negron, R, Martin, A, Almog, M, Balbierz, A & Howell, EA. 2013. Social support during the postpartum period: mothers' views on needs, expectations, and mobilization of support during the postpartum period: mothers' views on needs, expectations, and mobilization of support. *Maternal and Child Health Journal* 17(4):616-623.

Nigatu, D, Gebremariam, A, Abera, M, Setegn, T & Deribe, K. 2014. Factors associated with women's autonomy regarding maternal and child health care utilisation in Bale Zone: a community based cross-sectional study. *BMC Women's Health* 14(1):79.

Nyamtema, A, Urassa, D & Roosmalen, JV. 2011. Maternal health interventions in resource limited countries: a systematic review of packages, impacts and factors for change. *BMC Pregnancy and Childbirth* 11:30.

Okoli, C & Pawlowski, SD. 2004. The Delphi method as a research tool: an example, design considerations and applications. *Information and Management* 42(1):15-29.

Polit, DF & Beck, CT. 2013. *Essentials of nursing research: Appraising evidence for nursing practice*. 2nd edition. Philadelphia; Lippincott Williams & Wilkins.

Prata, N, Sreenivas, A, Vahidnia, F & Potts, M. 2009. Saving maternal lives in resource-poor settings: facing reality. *Health Policy* 89:131-148.

Prochasta, J, Redding, CA & Evers, K. 2008. *The Transtheoretical model and stages of change in Health behaviour and health education: Theory, research, and practice*. 4th edition. San Francisco; John Wiley & Sons:97-117.

Regassa, N. 2011. Antenatal and postnatal care service utilisation in southern Ethiopia: a population-based study. *African Health Sciences* 11(3):390-397.

Rickwood, D & Thomas, K. 2012. Conceptual measurement framework for help-seeking for mental health problems. *Psychology Research and Behavior Management* 5:173-183.

Ring, NA, Ritchie, K, Mandava, L & Jepson, R. 2011. *A guide to synthesizing qualitative research for researchers undertaking health technology assessments and systematic reviews*. Available from: <http://www.nhshealthquality.org>. Accessed 9th June 2014

Roost, M, Jonsson, C, Liljestrang, J & Essen, B. 2009. Social differentiation and embodied dispositions: a qualitative study of maternal care-seeking behaviour for near-miss morbidity in Bolivia. *Reproductive Health* 6(13):1-10.

Royse, D. 2011. *Research methods in social work*. 6th edition. New York: Brooks/Cole Cengage Learning.

Salmela-Aro, K, Read, S, Rouhe, H, Halmesmaki, E, Toivanen, RM Tokola, MI & Saisto, T. 2011. Promoting positive motherhood among nulliparous pregnant women with an intense fear of childbirth: RCT intervention. *Journal of Health Psychology* 17(4):520-534.

Sarason, IG, Sarason, BR, Shearin, EN & Pierce, GR. 1987. A brief measure of social support: Practical and theoretical implications. *Journal of Social and Personal Relationships* 4(4):497-510.

Say, L, Chou, D, Gemmill, A, Tuncalp, O, Moller, AB, Daniels, J, Gulmezoglu, A, Temmerman, M & Alkema, L. 2014. *Global causes of maternal death: a WHO systematic analysis*. From [http://dx.doi.org/10.1016/S2214-109X\(14\)70227-X](http://dx.doi.org/10.1016/S2214-109X(14)70227-X). (Accessed on 11/5/2014).

Shiferaw, S, Spigt, M, Godefrooij, M, Melkamu, Y & Tekie, M. 2013. Why do women prefer home births in Ethiopia? *BMC Pregnancy and Childbirth*. From: [Doi:10.1186/1471-2393-13-5](https://doi.org/10.1186/1471-2393-13-5). (Accessed on 12/1/2014.)

Sibley, LM & Weiner, JP. 2011. An evaluation of access to health care services along the rural-urban continuum in Canda. *BMC Health Services Research* 11(1): From DOI:[10:1186/1472-6963-11-20](https://doi.org/10.1186/1472-6963-11-20). (Accessed on 6/10/2013).

Singh, A., Pandamas, SS., Mishra US., Pallikadavath, S., Johnson, FA. & Matthews, Z. 2012. Soci-economic inequalities in the use of postnatal care in in India. *PLosone* 7(5),1-9

SPSS, I. 2011. *IBM SPSS statistics for Windows, version 20.0*. New York: IBM Corp.

Teferra, AS, Alemu, FM & Woldeyohannes, SM. 2012. Institutional delivery service utilisation and associated factors among mothers who gave birth in the last 12 months in Sekela District, North West of Ethiopia: A community-based cross sectional study. *BMC Pregnancy and Childbirth* 12(1):74. From DOI: [10.1186/1471-2393-12-74](https://doi.org/10.1186/1471-2393-12-74). (Accessed on 5/12/2013).

Tesfahun, F, Worku, W, Mazengiyya, F & Kifle, M. 2014. Knowledge, perception and utilisation of postnatal care of mothers in Gondar Zuria District, Ethiopia: A cross-sectional study. *Maternal and Child Health Journal* 18(10):2341-2351.

Tong, A, Sainsbury, P & Craig, J. 2007. Consolidated criteria for reporting qualitative research (QOREQ): A 32-item checklist for interviews and focus group. *International Journal for Quality in Health Care* 19(6):352-356.

Tura, G, Afework, M & Yalew, A. 2014. The effect of birth preparedness and complication readiness on skilled care use: a prospective follow-up study in Southwest Ethiopia. *Reproductive Health* 11(60):4755-4711.

Uchino, BN. 2009. Understanding the links between social support and physical health: A life-span perspective with emphasis on the separability of perceived and received support. *Perspectives on Psychological Science* 4(3):236-255.

UNFPA. 2011. *The state of the world's midwifery; delivering health, saving lives*. New York: United Nations Population Fund.

UN. 2013a. *Millennium development goals indicators*. From <http://mdgs.un.org>. (Accessed on 3/10/2013).

UN. 2013b. *The millennium development goals report*. New York; United Nations.

UNICEF, WHO, The World Bank and UN. 2013. *Levels and trends in child mortality*. New York: UNICEF.

Viswanath, K. 2008. Perspectives on models of interpersonal health behavior. In *Health belief and health education: Theory, research, and practice*, edited by K Glanz and B Rimer . San Francisco: Jossey-Bass:276.

Wado, YD, Afework, MF & Hindin, MJ. 2013. Unintended pregnancies and the use of maternal health services in southwestern Ethiopia. *BMC International Health and Human Rights* 13(1):36. From [DOI:10.1186/1472-698Z-13-36](https://doi.org/10.1186/1472-698Z-13-36). (Accessed on 5/12/2013).

Warren, C. 2010. Care seeking for maternal health: challenges remain for poor women. *Ethiopian Journal Health Development* 24(Special Issue 1):100-104.

Warren, C., Daly, P., Toure, L & Mongi, P. 2012. Postnatal care. WHO bulletin, 80-90

Woldemicael, G & Tenkorang, EY. 2010. Women's autonomy and maternal health-seeking behavior. *Ethiopia, Maternal Child Health Journal* 14(6):988-998.

Workie, NW & Ramana, GMN. 2013. *UNICO Studies Series 10. The health extension program in Ethiopia*. The World Bank; Washington DC.

Workineh, Y, Hailu, D, Gultie, T, Degefu, N, Mihrete, M, Shimeles, M, Mahino, M, Guesh, M & Alemu, M. 2014. Knowledge of obstetric danger signs and its associated factors in Arba Minch town, Ethiopia. *American Journal of Health Research* 2(5):255-259.

Worku, A, Yalew, A & Afework, M. 2013a. Maternal complications and women's behavior in seeking care from skilled providers in North Gondar, Ethiopia. *PloS ONE* 8(3). From: [doi:10.1371/journal.pone.0060171](https://doi.org/10.1371/journal.pone.0060171). (Accessed on 8/1/2014).

Worku, A, Yalew, A & Afework, M. 2013b. Factors affecting utilisation of skilled maternal care in Northwest Ethiopia: a multilevel analysis. *BMC International Health and Human Rights*; 13(20). From: <http://www.biomedcentral.com/1472-698X/13/20>. (Accessed on 10/6/2014).

World Bank. 2014. Essential newborn care. Available from: <https://www.worldbank.org>. Accessed 2nd may, 2013.

World Health Organization. 2004. *Making pregnancy safer: the critical role of the skilled birth attendant - A joint statement by WHO, ICM & FIGO*. Geneva: World Health Organization.

World Health Organization. 2006. *Reproductive health indicators: Guidelines for their generation, interpretation and analysis for global monitoring*. Geneva: World Health Organization.

WHO. 2010. WHO Technical consultation on postpartum & Postnatal care. WHO, Geneva.

World Health Organization. 2011. *Essential interventions, commodities and Guidelines for reproductive, maternal, newborn and child health – a global review of the key interventions related to reproductive, maternal, newborn and child health (RMNCH)*. Geneva: World Health Organization.

WHO, UNFPA, UNICEF and The World Bank. 2010. *Joint country support accelerated implementation of maternal and newborn: continuum of care as part of improving reproductive health: mapping of in-country activities*. Geneva: World Health Organization.

WHO & UNICEF. 2013. *Accountability for maternal, newborn and child survival*. The 2013 update. Geneva: World Health Organization.

WHO, World Bank, UNFPA & UNICEF. 2014. *Trends in maternal mortality: 1990 to 2013*. Geneva: World Health Organization.

Wouters, E, Damone, WV, Rensburg, DV, Masquinier, C & Mevlemans, H. 2012. Impact of community-based support services on antiretroviral treatment programme delivery and outcomes in resource-limited countries: a synthetic review. *BMC Health Services Research*. From: [DOI: 10.1186/1472-6963-12-194](https://doi.org/10.1186/1472-6963-12-194). (Accessed on 30/3/2013).

Yakoub, M, Ali, M, Ali, M, Imdad, A, Lawn, J, Broek, N & Bhutta, Z. 2011. The effect of providing skilled birth attendance and emergency obstetric care in preventing stillbirth. *BMC Public Health* 11(Suppl 3):57. From: [DOI:10.1186/1471-2458-11-S3-57](https://doi.org/10.1186/1471-2458-11-S3-57). (Accessed on 5/3/2013).

Yar'Zever, IS & Said, IY. 2013. Knowledge and barriers in utilisation of maternal health care services in kano state, Northern Nigeria. *European Journal of Biology and Medical Science Research* 1(1):1-14.

Yebyo, H, Gebreselassie, MA & Kahsay, AB 2014. *Individual and community-level predictors of home delivery in Ethiopia: a multilevel mixed-effect analysis of the 2011 Ethiopia National Demographic and Health Survey*. Maryland, USA: ICF International.

ANNEXURES

Annexure 1 ETHICAL CLEARANCE FROM UNISA



**UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE**

HS HDC/125/2012

Date: 12 December 2012

Student No: 5088-562-6

Project Title: A framework for the utilization of health services for skilled birth attendance and postnatal care in Ethiopia.

Researcher: Yoseph Woldegebriel Gessesse

Degree: D Litt et Phil

Code: DIS890B

Supervisor: Prof GB Thupayagale-Tshweneagae

Qualification: D Tech

Joint Supervisor: -

DECISION OF COMMITTEE

Approved



Conditionally Approved



for Prof L Roets

CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

Prof MM Moleki

ACTING ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES

Annexure 2 ETHICAL CLEARANCE FROM AMHARA RHB

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Amhara National Regional State
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Health Bureau

ቁጥር HOTT/11/32/06
Ref.no.....
ቀን 16/12/06
Date.....

To: - Yoseph Woldegebriel
Addis Ababa

Subject: Health Ethical Clearance

You have submitted a project proposal entitled with "A Framework for the Utilization of Health Services for Skilled Birth Attendance and Postnatal Care in Ethiopia" to Regional Health Bureau Review Board for ethical approval.

The Regional Health Bureau Research Ethics Review Committee /RERC/ has reviewed the submitted project proposal critically. We are writing to advise you that the RERC has granted **Full approval**.

The project indicated above for a period of 1 year (2014/2015). All your more recently submitted documents have been approved for use in this study. The study should comply with the standard international and national scientific and ethical guideline. Any change to the approved protocol or consent material must be reviewed and approved through the amendment process prior to its implementation. In addition, any adverse or unanticipated events should be reported within 24-48 hours to RERC. Please insure that you submit progressive report prior the expiry date of project.

We, therefore, request your esteemed organization to ensure the commencement and conduct of the study accordingly and wish for the successful completion of the project.

With regards
Endalkachew Desalegn
Health Research and Technology Transfer Core Process Owner

C.C:-
➤ ARHB Health programs deputy head

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Tell. 0582201698
0582220191
Fax. 0582266701 : 0582262396
Take care from AIDS

Annexure 3 INTERVIEW GUIDE FOR THE SURVEY

Name of the Study: FRAMEWORK FOR UTILIZATION OF ABA AND PNC IN ETHIOPIA

Investigator: YOSEPH WOLDEGEBRIEL GESSESSE

Supervisor: PROF. G. THUPAYAGALE-TSHWENEAGAE

INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you decide if you would like to participate, before you agree to take part in the study, you should fully understand what is involved. If you have any questions which are not fully explained in this leaflet, do not hesitate to ask the investigator. You may call me, Yoseph Woldegebriel Gessesse at 251913883100. If you have any further questions, you should not agree to take part unless you are completely happy about all the procedures.

WHAT IS THE PURPOSE OF THE STUDY

The study will develop a framework that will assist women of childbearing age to understand and appreciate the services of the SBA and PNC as assisting them to reduce maternal and neonatal morbidity and mortality.

WHAT WILL BE EXPECTED OF ME

If you decide to take part you will be among the many women who gave birth in the last 12 months on utilization of SBA and PNC services. You will also be required to complete a survey that will take 40 minutes of your time.

HAS THE STUDY RECEIVED ETHICAL APPROVAL

The study received approval from the Department of health studies at UNISA and Amhara RHB in Ethiopia. The North Shoa Zonal Health Office also has approved this study.

WHAT ARE MY RIGHTS AS A PARTICIPANT

Your participation in this study is voluntary; that means you do not have to take part if you do not want to and after you take part you are free to withdraw at any time during the interviews.

WHAT ARE THE RISKS INVOLVED

The study proceeds involve no foreseeable risks to you or your family

INFORMED CONSENT

I hereby confirm that the investigator has informed me about the nature, conduct, benefits and risks of the study. I have also received, read and understood the above written information (information leaflet) regarding the study.

I am aware that the results of this study may be published but that my name and any other identifying information will be excluded from such publications.

I am also aware that I may, at any stage, without prejudice, withdraw my consent and participation in the study. I had sufficient opportunity to ask questions and of my own free will declare myself prepared to participate in the study.

Study Participant's (Initial only):..... (please print)

Study participant signature or thumb print..... Date:

Investigator's name.....

Investigator's signature:..... Date:

Annexure 4 ENGLISH QUESTIONNAIRE FOR THE QUANTITATIVE STUDY

| IDENTIFICATION | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|
| Catchment area: _____ KEBELE _____ Got/Village: _____ RESPONDENT NUMBER | <table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td style="width: 50%; height: 25px;"></td><td style="width: 50%; height: 25px;"></td></tr> <tr><td style="height: 25px;"></td><td style="height: 25px;"></td></tr> <tr><td style="height: 25px;"></td><td style="height: 25px;"></td></tr> <tr><td style="height: 25px;"></td><td style="height: 25px;"></td></tr> </table> | | | | | | | | |
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| INTERVIEWER VISITS | | | |
|--|---|---|---|
| VISIT ATTEMPT | | <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> | |
| DATE | | <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> Day Month Year </div> | |
| INTERVIEWER'S NAME | | | Interviewer's code <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px;"></div> |
| RESULT CODE | | Result code* <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px;"></div> | |
| *RESULT CODES: <div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> 1 COMPLETED 2 POSTPONED 3 REFUSED </div> <div style="text-align: left;"> 4 PARTLY COMPLETED 5 OTHER (SPECIFY) </div> </div> | | | |
| SUPERVISOR | | FIELD EDITOR | |
| NAME | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> | NAME | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> |
| DATE | | DATE | |
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Part II: Interview Questions

| Variable code | Question | Response category | | | | Remark |
|-------------------------------------|--|--|--|--|--|--------|
| General Socio-demographic Questions | | | | | | |
| G01 | How old are you? (in years) | YEARS | | | | |
| G02 | Ethnicity of the respondent | 01=Amhara 02=Oromo 03=Tigre 07=Others (Specify)_____ | | | | |
| G03 | Marital Status of the respondent | 01= Married 02= Divorced/Separated 03= Widowed 04= Never married/Single 02= Lived together | | | | * |
| G04 | Religion of the respondent | 01= Orthodox 02= Catholic 03= Protestant 04= Muslim 07= Others (specify)_____ | | | | |
| G05 | Have you ever been to school? | 01= No 02= Yes | | | | |
| G06 | Educational status of the respondent. What is the highest grade you completed? | 01= Illiterate 02= Read and write only 03= First Cycle (1-4 grades)_____ 04= Second Cycle (5-8 grades)_____ 05= High school (9-12 grades)_____ 06=Technical School 07=Tertiary | | | | |
| G07 | What is your occupation? | 01= No job 02= Farmer 03=Self-employed (other than farmer) 04= Daily labourer 05= Government employee 06= House wife 07= other (Specify)_____ | | | | |
| G08 | What is the average monthly income of your family (in Birr)? | | | | | |
| G09 | Is the father of your last baby ever attended school? | 01= No 02= Yes 99= Don't know | | | | |
| G10 | What is the highest grade your husband completed (your last child's father)? | 01= Illiterate 02= Read and write only 03= First Cycle (1-4 grades)_____ 04= Second Cycle (5-8 grades)_____ 05= High school (9-12 grades)_____ 06=Technical School 07=Tertiary 99= I don't know | | | | * |
| G11 | What is the occupation of your husband (your last child's father)? | 01= No job 02= Farmer 03=Self-employed (other than farmer) 04= Daily labourer 05= Government employee 05= other (Specify)_____ | | | | |
| G12 | Who is the head of your family | 01= I myself 02= My husband | | | | |

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| | | 03= Others (specify)_____ | |
| G13 | What is your family size? —those who live in the house and cook and consume food together) (<i>including the respondent</i>) | 01= One 02= Two 03= Three 04= Four 05= Five and above | |
| G14 | How many births have you had? | 01= One 02= Two 03= Three 04= Four 05= Five and above | * |
| G15 | How many alive children do you have? (Means to a child who ever breathed or cried or shown other signs of life - even if he or she lived only a few minutes or hours) | 01= One 02= Two 03= Three 04= Four 05= Five and above | |
| IV. Health Behaviour and related questions | | | |
| HB01 | Did you seek advice for antenatal care during the last pregnancy? | 01= Yes 02= No If “No”, go to HB27 | If “yes” go to HB02 |
| HB02 | Whom did you visit? (<i>For the interviewer: Please probe the respondent to identify each type of person and record all mentioned</i>) Probe to identify each type of person and record all mentioned | 01= Doctor 02= Health Officer 03= Nurse/Midwife 04= HEW 05= Trained Traditional Birth Attendant 06= Untrained Traditional Birth Attendant 07=Others(Specify)_____ | |
| HB03 | Where did you attend your antenatal during the last pregnancy? (<i>For the interviewer: Please probe the respondent to identify the type of health facility</i>) Anywhere else? PROBE TO IDENTIFY TYPE(S) OF SOURCE(S) IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE HEALTH FACILITY _____ (NAME OF THE HEALTH FACILITY) | HOME 01= Your own home 02= Other home Government 01= Government Hospital 02= Government Health Centre 03= Health Post NGO 01= Hospital 02= Health centre 03= Specialised clinic 04= Others (Specify):_____ PRIVATE MED. SECTOR 01= Hospital 02= Higher Clinic 03= Special Clinic 04= Others (Specify):_____ | |
| HB04 | How many times did you go for ANC during your last pregnancy? | 01= Once 02= Twice 03= Trice 04= Four times 05= More than four times 99= I don't know | |
| HB05 | Were you happy with the services provided during ANC | 01= No, I was not happy 02= Neither happy nor unhappy 03= Yes, I was happy 99= I don't know | |
| HB06 | During (any of) your antenatal care visit(s), were you told about the signs of pregnancy complications? | 01= No—If “No”, go to HB07 02= Yes 99= I don't know | |

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| | | | |
| HB07 | Which signs of pregnancy complications were told to you? | 01= Vaginal bleeding 02= Vaginal gush of fluid 03= Severe head ache 04= Blurred vision 05= Fever 06= Abdominal pain 07= Others (Specify): _____ | |
| HB08 | During your last pregnancy, where did you plan to delivery? | 01= No plan 02= Home 03= Health facility 04= I don't remember | If "No plan" or "I don't remember" skip to "HB10"; If home, go to HB09 |
| HB09 | If the answer to HB08 was "Home", Probe: Why did you plan to deliver at home? <i>(Multiple response is possible)</i> | Please, choose all the responses that the interviewee responds 01= Cost of transportation 02= Fear of lack of transportation 03= Fear of cost of medical care 04= Fear of getting permission 05= I don't favour/support towards health facility 06= Home delivery gives me comfort 07= I don't think that institutional delivery is necessary 08= Others (Specify) _____ | |
| HB10 | Why did you plan to deliver at health facility? <i>(Multiple response is possible)</i> | Please, choose all the responses that the interviewee responds 01= For the health safety of my kid and myself 02= I don't have anyone at home to assist 03= I was aware of health problem with my baby or myself 04= I understood that institutional delivery is useful 05= I knew that home delivery is dangerous 06= Others (Specify) _____ | |
| HB11 | Where was the place of delivery for your last pregnancy? | HOME 01= Your own home 02= Other home Government 01= Government Hospital 02= Government Health Centre 03= Health Post NGO 01= Hospital 02= Health centre 03= Specialised clinic 04= Others (Specify): _____ PRIVATE MED. SECTOR 01= Hospital 02= Higher Clinic 03= Special Clinic 04= Others (Specify): _____ | * |

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| HB12 | Why did you deliver at home? | <p>Please, choose all the responses that the interviewee responds</p> <p>01= Lack of money to pay for transportation</p> <p>02= Lack of transportation to go to a health facility</p> <p>03= Lack of money to pay for medical care</p> <p>04= Couldn't assure permission</p> <p>05=I don't favour/support towards health facility</p> <p>06= Home delivery gives me comfort</p> <p>07= I don't think that institutional delivery is necessary</p> <p>08=Others (Specify)_____</p> | If the answer to Question "HB11" above is "Home" ask this question |
| HB13 | Who assisted with the last delivery? | <p>HEALTH PERSONEL</p> <p>1= Doctor</p> <p>2= Health Officer</p> <p>3= Nurse/Midwife</p> <p>4= HEW</p> <p>5= Others (Specify):_____</p> <p>OTHER PERSON</p> <p>01= Trained Traditional Birth Attendant</p> <p>02= Untrained Traditional Birth Attendant</p> <p>03= Others (Specify):_____</p> | |
| HB14 | <p>Why didn't you deliver at health facility?</p> <p>Probe: Any other reason?</p> <p>Record all mentioned</p> | <p>Please, choose all the responses that the interviewee responds</p> <p>01= For the health safety of my kid and myself</p> <p>02= I don't have anyone at home to assist</p> <p>03= I was aware of health problem with my baby or myself</p> <p>04= I understood that institutional delivery is useful</p> <p>05=I knew that home delivery is dangerous</p> <p>06= Others (Specify)_____</p> | If the answer to Question "HB11" above is "Health facility" |
| HB15 | <p><i>(if delivered in a health facility)</i></p> <p>Were you happy with the services provided?</p> | <p>01= Yes—If "Yes", go to HB15</p> <p>02= Neither happy nor unhappy</p> <p>03= Un happy</p> | |
| HB16 | <p>What made you unhappy with the service?</p> <p><i>(Multiple response is possible)</i></p> | <p>Please, choose all the responses that the interviewee responds</p> <p>01= The health care workers were unfriendly;</p> <p>02=The health care workers were not responsive;</p> <p>03= The health providers were abusive</p> <p>04= The delivery set up was not comfortable</p> <p>05= The room was unclean and foul odour</p> <p>06= The room lacks privacy</p> <p>07= They charged me too much</p> <p>08=The health facility does not have the necessary drugs, commodities, equipment, etc to provide the service</p> <p>09= Others specify</p> | |

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| HB17 | What was the outcome of the labour? | 01= Still birth 02= Dead baby after some hours/days 03= Alive and healthy | | | |
| HB18 | What do you hate most about health facility delivery? | 01= The distance to the health facility 02= The cost of transportation 03= Male Midwife 04= The health care workers attitude 05= The uncleanness of the health facility 06= The lack of privacy during labour 07= The delivery Couch 08= The poor knowledge and practice of the providers 09= Others (Specify): _____ | | | |
| HB19 | After you gave your last birth did anyone check on your health? | 01= Yes 02= No—If “No” got to HB21 99=I don't know | | | If “No” got to HB21 |
| HB20 | Who checked on your health at that time? Probe for most qualified person | HEALTH PERSONEL 1= Doctor 2= Health Officer 3= Nurse/Midwife 4= HEW 5= Others (Specify): _____ OTHER PERSON 01= Trained Traditional Birth Attendant 02= Untrained Traditional Birth Attendant 03= Others (Specify): _____ | | | |
| HB21 | How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS IF LESS THAN ONE WEEK RECORD DAYS | Hours <input type="text"/> <input type="text"/> <input type="text"/> Day <input type="text"/> <input type="text"/> <input type="text"/> Week <input type="text"/> <input type="text"/> <input type="text"/> s <input type="text"/> <input type="text"/> <input type="text"/> | | | |
| HB22 | Where did you get checked on your health after delivery | HOME 01= Your own home 02= Other home Government 01= Government Hospital 02= Government Health Centre 03= Health Post NGO 01= Hospital 02= Health centre 03= Specialised clinic 04= Others (Specify): _____ PRIVATE MED. SECTOR 01= Hospital 02= Higher Clinic 03= Special Clinic 04= Others (Specify): _____ | | | |
| HB23 | If not checked on your health, why? | Please, choose all the responses that the interviewee responds 01= Lack of transportation 02= No money to pay for transportation 03= Fear of cost of medical care 04= Disapproval/ lack of decision 05= I don't favour/support towards health facility 06= For fear of bad sprit 07= For fear of evil eye 08= Postnatal after delivery care is not necessary for the baby | | | |

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| | | 09= Postnatal after delivery care is not customary for the baby 06= Others (Specify)_____ | | | | | | | | | | |
| HB24 | What are the reasons for women in your area for not wanting to go to a health facility during labour? | Please, choose all the responses that the interviewee responds 01= Distance 02= Lack of approval by their husbands 03= Lack of approval by other family members (03= Financial problems 04= Absence of support person to look for the kids and other responsibilities at home 05= Others (Specify)_____ 99= I don't know | | | | | | | | | | |
| HB25 | What do you think are the reasons that women go to health facilities during labour for child birth? | Please, choose all the responses that the interviewee responds 01= When they don't get somebody to attend the labour at home 02= When complications occur and during prolonged labour 03= When they anticipate problem will happen during labour or childbirth 04= Possession of knowledge on advantages of institutional delivery 05= Possession of Knowledge on the risks of home delivery 06= Other (Specify)_____ 99= I don't know | | | | | | | | | | |
| HB26 | After you gave birth in your last baby, did anyone check on your BABY'S health? | 01= Yes 02= No 99=I don't know | | | | | | | | | | |
| HB27 | Who checked on your BABY'S health at that time? Probe for most qualified person | HEALTH PERSONEL 1= Doctor 2= Health Officer 3= Nurse/Midwife 4= HEW 5= Others (Specify):_____ OTHER PERSON 01= Trained Traditional Birth Attendant 02= Untrained Traditional Birth Attendant 03= Others (Specify):_____ | | | | | | | | | | |
| HB28 | Probe: How long after delivery did the first check take place for your BABY? IF LESS THAN ONE DAY, RECORD HOURS IF LESS THAN ONE WEEK RECORD DAYS | <table><tr><td>Hours</td><td></td><td></td></tr><tr><td>Day</td><td></td><td></td></tr><tr><td>Weeks</td><td></td><td></td></tr></table> | Hours | | | Day | | | Weeks | | | |
| Hours | | | | | | | | | | | | |
| Day | | | | | | | | | | | | |
| Weeks | | | | | | | | | | | | |
| HB29 | Where did your BABY get checked on your health after delivery? | 01= Home 02= Health post 03= Health Centre 04= Hospital 05= Others (Specify):_____ | | | | | | | | | | |
| HB30 | If you your newborn was not taken to a health facility within 40 days after delivery, what were the reasons? | 01= Lack of transportation 02= No money to pay for transportation 03= Fear of cost of medical care 04= Disapproval/ lack of decision 05= I don't favour/support towards health facility 06= For fear of bad sprit 07= For fear of evil eye | | | | | | | | | | |

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| | | 08= Postnatal/ after delivery care is not necessary for the baby 09= Postnatal /after delivery care is not customary for the baby 10= Others (Specify): _____ | |
| HB31 | Where did you deliver your previous (other) babies? (Multiple answers are possible) | (Please, circle all the replies) 01= Home 02= Health Centre 03= Hospital 04= Private Clinic 05= other (specify): _____ | |
| HB32 | If you have a plan to have baby in the future, where do you want to give your future birth? | 01= I don't have a plan to have more babies 02= Home 03= Health Centre 04= Hospital 05= Private Clinic 06= Other (specify): _____ 99. I don't know | |
| HB33 | Generally, how do you judge the quality health service provided in the health facility you commonly visit? | 1. It is poor 2. It is neither poor or good 3. It has a good quality 99. I don't know | |
| HB34 | To improve the quality of the service that the health facilities provide, what is your one strong suggestion that you wanted to make. | | |
| II.1. Predisposing Factors | | | |
| PA01 | How important is visiting a health facility for you? | 01= No, It is not important 02= Not sure 03= Yes, it is important 99= Do not know | |
| PK022 | Have you ever heard about birth preparedness/complication readiness ? | 01=No 02= Yes 99= I don't know | |
| PA03 | Do you believe that birth preparedness/complication readiness is important? | 01= No, I don't believe 02= Not sure 03= Yes, I believe it is important 99= Do not know | |
| PA04 | What are the key danger signs during labour and delivery? (Multiple answers are possible) | 01= Severe vaginal bleeding 02= Prolonged labour > 12 hours 03= Hand, feet, cord or face appears first 04= Retained placenta 05= Fits or loss of consciousness 08= Others (Specify): _____ 99= I don't know | |
| PK05 | What are the birth preparedness/complication readiness plans that you know? | 01= What to expect during pregnancy 02= Identify support people to help 03= Be able to identify signs of obstetric emergency 04= Know importance of seeking care without delay when complications occur 05= Have a plan to be able to respond immediately in the event of emergency to avoid delays 06= Know the location of the | |

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| | | nearest health facility where emergency service is provided 07= Others (Specify): 99= I don't know | |
| PK06 | What are the common health complications that occur on mothers during childbirth? (Multiple answers are possible) | (Please, circle all the replies) 01= Bleeding 02= Physical damage to the mother 03= Fistula 04= Sepsis/infection 05= Prolonged labour 06= Excessive passage of liquor 07= Death 08= Others (Specify): 99= I don't know | |
| PF07 | What are the common health complications that occur on the neonate during childbirth? (Multiple answers are possible) | (Please, circle all the replies) 01= Asphyxia 02= Birth Injury or trauma 03= Long term health problem 04= Difficulty to thrive and develop 05= Death 06= Others (Specify):_____ 99= Do not know | |
| Women's autonomy | | | |
| PAUC | Control over finance | | |
| PAU1 | Do you have a regular access to money? | 01= No 02= Yes | |
| PAU2 | Can you spend money without consulting anyone? | 01= No 02= Yes | |
| PAutD | Decision making power | | |
| PAU3 | Do you make decisions ordinarily accorded to the women in the district/surrounding (e.g. small purchase from the local shops) | 01= No 02= Yes 99= Don't know | |
| PAU4 | Do you participate in important/critical decisions such as where to deliver your baby and taking your baby/ies to a health facility? | 01= No 02= Yes 99= Don't know | |
| PAU5 | Do you need to secure permission before leaving your house for any reason (e.g. Fetch water or for coffee with neighbour)? | 01= No 02= Yes | |

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|--------------------------------|--|--|------------------------------------|
| PAU6 | In your family, who is the most decision maker related to your health service utilisation? | 01= My husband 02= My step mother 03= My step sister 04= My mother 05= My grand mother 06= My husband's grandmother 07= Others (Specify)):_____ | |
| PAU7 | Who else has a decision on your health service utilisation? | 01= My husband 02= My step mother 03= My step sister 04= My mother 05= My grand mother 06= My husband's grandmother 07= Others (Specify)):_____ | |
| <i>PAuF</i> | <i>Freedom of movement</i> | | |
| PAU8 | Can you leave your house on errands alone/without the company of another adult? | 01= No 02= Yes | |
| PAU9 | Can you take your child to a health facility alone? | 01= No 02= Yes | |
| PAU10 | Can you visit a health facility alone? | 01= No 02= Yes | |
| PAU11 | Can you leave your house to visit your friends or relatives without permission? | 01= No 02= Yes | |
| III.2. Enabling Factors | | | |
| EF01 | How many hours/minutes does it take for you to reach to the nearest health facility on foot ? | 01= Less than an hour 02= 1:00 to 2:00 hours 03= 2:00 to 3:00 hours 04= 3:00 to 4:00 hours 05= 4:00 to 5:00 hours 06= More than 5 hours | |
| EF02 | How do you judge the distance from your home to the health facility? | 01= very far 02= Far 03= Not far nor near 04= Near 05= Very near | |
| EF03 | How do you see the waiting time in the health facility? Multiple answers are possible | 01= Too long 02= Long 03= Moderate 04= Short 05= Too short 06= I don't like it 07= I like it 99= I don't know | |
| EF04 | Do you think that health facility service charge for maternity-care ever becomes a concern/barrier for seeking service for institutional delivery? | 01= No, I don't think 02= I'm not sure 03= Yes, I think so 99= I don't know | |
| EF05 | Do you believe that the fee that mothers/families are asked for postnatal care in a health facility has affected the number of families going to health facilities for postnatal care? | 01= No, I don't believe so 02= I'm not sure 03= Yes, I believe so 99= I don't know | |
| EF06 | In the last one year, do you remember any situation where you or another person you know was denied of health services for childbirth? | 01= No, I don't remember 02= I'm not sure 03= Yes, I remember 99= I don't know | If "No" or "not sure" skip to NF01 |

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| EF07 | What was/were the reasons, for denying you/that person the health services for childbirth? | 01= The health facility was closed 02= There was no drug 03= There was no health worker 04= The problem was more than the capacity of the health facility 05= There was no equipment 06= Others (Specify):..... | |
| III.3. Need Factors | | | |
| NF01 | Do you believe that, even if a woman doesn't have a health problem, labour and delivery should be conducted by skilled birth-attendant during child birth? | 01= No, I don't believe 02= I am not sure 03= Yes, I believe so 99= I don't know | |
| NF02 | Do you believe that, even if a woman doesn't have a health problem, labour and delivery should take place in a health facility? | 01= No, I don't believe 02= I am not sure 03= Yes, I believe so 99= I don't know | |
| NF03 | Do you believe that, even if a woman doesn't have a health problem, that she should seek postnatal care within 42 days after delivery? | 01= No, I don't believe 02= I am not sure 03= Yes, I believe so 99= I don't know | |
| NF04 | Do you think that even if the neonate doesn't have health problem, he deserves postnatal care within 42 days after delivery? | 01= No, I don't believe 02= I am not sure 03= Yes, I believe so 99= I don't know | |
| NF05 | Whom do you prefer to assist you during labour and childbirth? | 01= Nobody, only myself 02= Mother-in-law or family member 03= Friend, neighbours 04= Health extension worker 05= TBA 06= Health facility staff 07= Others (specify)_____ | |
| III.4. Social Network/Support (uses modified Sarason and colleagues SS Items)* | | | |
| SN06 | In how many social organizations (e.g Idir, , Iqub, Tsewa etc) do you belong to | 01= None 02= One 03= Two 04= Three 05= Four 06= Five and above | |
| SS01 | Whom can you really count on to be dependable when you need any help? (Multiple answers are possible) | 1= No one 2= My husband 3= My mother 4= My father 5= My intimate friend 6= My neighbour 7= My grand mother/ father 8= My step mother 9= Others (Specify)_____ | |
| SS02 | What is the level of your satisfaction with the person you depend on for help? | 1 – Very dissatisfied 2 – Fairly dissatisfied 3 – A little dissatisfied 4 – A little satisfied 5 – Fairly satisfied 6 – Very satisfied | |
| SS03 | Whom can you really count on to help you feel more relaxed when you are under pressure or tense? | 1) No one 2) My husband 3) My mother 4) My father 5) My intimate friend | |

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| | | 6) My neighbour 7) My grand mother 8) My grand father 9) My step mother 10) Others (Specify)_____ | |
| SS04 | What is the level of your satisfaction with the person you depend on to get relieved/relaxed whenever you are under pressure or tense? | 1 – Very dissatisfied 2 – Fairly dissatisfied 3 – A little dissatisfied 4 – A little satisfied 5 – Fairly satisfied 6 – Very satisfied | |
| SS05 | Who accepts you totally, including both your worst and your best points? | 1= No one 2= My husband 3= My mother 4= My father 5= My intimate friend 6= My neighbour 7= My grand mother 8= My grand father 9= My step mother 10= Others (Specify)_____ | |
| SS06 | What is the level of your satisfaction with the person who accepts your ideas? | 1 – Very dissatisfied 2 – Fairly dissatisfied 3 – A little dissatisfied 4 – A little satisfied 5 – Fairly satisfied 6 – Very satisfied | |
| SS07 | Whom can you really count on to care about you, regardless of what is happening to you? | 1= No one 2= My husband 3= My mother 4= My father 5= My intimate friend 6= My neighbour 7= My grand mother 8= My grand father 9= My step mother 10= Others (Specify)_____ | |
| SS08 | What is the level of your satisfaction with the person who cares for you? | 1 =Very dissatisfied 2 = Fairly dissatisfied 3 = A little dissatisfied 4 = A little satisfied 5 = Fairly satisfied 6 = Very satisfied | |
| SS09 | Whom can you really count on to help you feel better when you are feeling generally down-in-the dumps? | 1= No one 2= My husband 3= My mother 04= My father 05= My intimate friend 06= My neighbour 07= My grand mother 08= My grand father 09= My step mother 10= Others (Specify)_____ | |
| SS10 | What is the level of your satisfaction with the person who helps you in feeling better? | 1 – Very dissatisfied 2 – Fairly dissatisfied 3 – A little dissatisfied 4 – A little satisfied 5 – Fairly satisfied | |

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| | | 6 – Very satisfied | |
| SS11 | Whom can you count on to console you when you are very upset? | 1= No one 2= My husband 3= My mother 4= My father 5= My intimate friend 6= My neighbour 7= My grand mother 8= My grand father 9= My step mother 10= Others (Specify) _____ | |
| SS12 | What is the level of your satisfaction with the person who consoles you? | 1 – Very dissatisfied 2 – Fairly dissatisfied 3 – A little dissatisfied 4 – A little satisfied 5 – Fairly satisfied 6 – Very satisfied | |

*Modified form of Sarason IG, Sarason BR, Shearin EN, Pierce GR. A brief measure of social support: Practical and theoretical implications. J Soc Pers Rela 1987, 4:498-507

I have finished my interview. I thank you very much for taking your time to participate and for the valuable answers.

Annexure 5 AMHARIC QUESTIONNAIRE FOR THE QUANTITATIVE STUDY

| | | | | | | | | | |
|------------------|--|--|--|--|--|--|--|--|--|
| የመጠይቁ መለያ | | | | | | | | | |
| የአካባቢ ዉስጥ፡ _____ | <table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="width: 50%; height: 30px;"></td><td style="width: 50%; height: 30px;"></td></tr> <tr><td style="height: 30px;"></td><td style="height: 30px;"></td></tr> <tr><td style="height: 30px;"></td><td style="height: 30px;"></td></tr> <tr><td style="height: 30px;"></td><td style="height: 30px;"></td></tr> </table> | | | | | | | | |
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| ቀበሌ _____ | | | | | | | | | |
| የጎጡስ ም፡ _____ | | | | | | | | | |
| የመላሹ ቁጥር | | | | | | | | | |

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|---|----------|---|
| ቃለመጠይቅ አድራጊ ወያደረገዉ ጉብኝት | | |
| የተደረገዉ ጉብኝት ብዛት | | <div style="display: flex; justify-content: flex-end; gap: 10px;"> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> </div> |
| DATE | | ቀን ወረዓ.ም <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> </div> |
| ሥም | | የጠያቂ ወ.መለያኮድ <div style="display: flex; justify-content: flex-end; gap: 10px;"> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> </div> |
| *የወ.ጤቱ መለያኮድ፡ | | <div style="border: 1px solid black; width: 40px; height: 40px;"></div> |
| *የወ.ጤቱ መለያኮድ፡ <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> 1 ተሞልተዋል 2 በቀጠሮተላልፈዋል 3 ፈቃደኛ አልሆኑም </div> <div style="width: 30%;"> 4 በከፊልተሞልቶአል 5 ሌሎች (ጥቀስ) _____ </div> </div> | | |
| ሱፐርቫይዘር | የመስከአራሚ | ፊርማ |
| ሥም _____ | ሥም _____ | |
| ቀን _____ | ቀን _____ | |

| ኮድ | ጥያቄ | ምላሽ/ምርጫ | አስተያየት |
|-----|--|--|--------|
| I | አጠቃላይ የማህበራዊና ሥነ ሕዝብ ከጥያቄዎች | | |
| G01 | እድሜዎትስንትነው (በአመት) | አመት ----- | |
| G02 | ብሄርዎትምንድንነው | 01-አማራ 02- አሮሞ 03- ትግሬ 04- ሌሎች (ጥቀስ/ሺ) ----- | |
| G03 | የትዳርዎትሁኔታምንድንነው ? | 01-ባለትዳር 02- ፈት/ተለያይተናል 03- ባለቤቴ አርፋል 04- አግብቼ አላወቅም/ያላገባ 05- አብረን እንኖራለን | |
| G04 | ሐይማኖትዎትምንድንነው ? | 01-ኦርቶዶክስ 02- ካቶሊክ 03- ፕሮቴስታንት 04- እስላም 05- ሌላ (ጥቀስ/ሺ)----- | |
| G05 | ትምህርት ቤት ገብተው ያውቃሉ ? | 01- አይ 02- አዎ | |
| G06 | የትምህርት ደረጃዎትስንትነው (ያጠናቀቅ የትምህርት ደረጃ) ? | 01-ያልተማረ 02- መፃፍና ማንበብ 03- የመጀመሪያ ሳይክል (1-4 ክፍል)---- 04- ሁለተኛ ሳይክል (5-8 ክፍል)----- 05- ከፍተኛ ሁለተኛ ደረጃ (9-12 ክፍል)- 06- ዲፕሎማ ደረጃ 07- ድግሪ ወይም ከዚያ በላይ | |
| G07 | የሥራ ዘርፍዎትምንድንነው ? | 01-ስራ የለኝም 02- ገበሬ 03- ተቀጣሪ (ከግብርና ሌላ) 04- የጉልበት ሰራተኛ 05- የመንግስት ሰራተኛ 06- የቤት እመቤት 07- ሌሎች (ጥቀስ/ሺ)----- | |
| G08 | የቤተሰባችሁ የነፍስ ወከፍ ገቢ በአማካኝ በወር ምን ያህል ነው ? | | |
| G09 | የመጨረሻው ያረገ ዘለት/ያስረገዘዎትሰው ትምህርት ቤት ገብቶ ያውቃል ? | 01-አይ 02- አዎ 03- አኔ እንጂ | |

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| G10 | የመጨረሻያረዝተለት/የስረዝዎትሰውየትምህርትደጃስንትነው (የጠናቀቀውየትምህርትደረጃ) ? | 01-ያልተማረ 02- መፃፍናማንበብ 03- የመጀመሪያሳይክል (1-4 ክፍል)-- -- 04- ሁለተኛሳይክል (5-8ክፍል)----- 05- ከፍተኛሁለተኛደረጃ (9-12 ክፍል)- 06- ዲፕሎማደረጃ 07- ድግሪወይምከዚያበላይ | |
| G11 | የባለቤትዎትየሥራዘርፍምንድንነው ? | 01-ስራየለዉም 02- ገበሬ 03- ተቀጣሪ (ከግብርናሌላ) 04- የጉልበትሰራተኛ 05-የመንግስትሰራተኛ 06- ሌሎች(ጥቀስ/ሽ)----- | |
| G12 | የቤታችሁመሪማነዉ ? | 01-እኔእራሴ 02- ባለቤቴ 03- ሌላ (ጥቀስ/ሽ)----- | |
| G13 | የቤተሰባችሁብዛትስንትነዉ? (እርስዎንጨምሮበቤታችሁየሚኖሩእናምግብበጋራየሚመገቡ) | 01- አንድ 02- ሁለት 02- ሦስት 03- አራት 04- አምስትእናከዚያበላይ | |
| G14 | ሥንትልጆችወልደዎል ? | 01-አንድ 02-ሁለት 03-ሦስት 04-አራት 05-አምስትእናከዚያበላይ | |
| G15 | በሕይወትያሉስንትልጆችአሉዎት ? (ተወልደውመተንፈስ/መህ/ሌላየሕይወትምልክቶችያሳየ) | 01-አንድ 02-ሁለት 03- ሦስት 04- አራት 05- አምስትእናከዚያበላይ | |

IV የጤናባህሪያትእናተዛማችጥያቄዎች HEALTH BEHAVIOR AND RELATED QUESTION

| | | | |
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| HB01 | በመጨረሻውእርግዝናዎወቅትየቅድመወሊድምርመራ/ክትትልአድርገውነበር ? | 01- አላደረሱም 02- አድርጌአለሁ | ወደ HB08 ዝለል |
| HB02 | በወቅቱየቅድመወሊድምርመራማነውያደረገልዎት ? (ከአንድበላይመልስይቻላል) | የጤናባለሙያ 01- ዶክተር 02- ጤናመኮንን 03- ነርስ/ አዋላጅነርስ 04- የጤናልማትሠራተኛ (HEW) 05- ሌሎች (ጥቀስ/ሺ)----- ሌሎችሰዎች 01- የሰለጠነች/የልምድአዋላጅ 02- ያልሰለጠነች/የልምድአዋላጅ 03- ሌሎች (ጥቀስ/ሺ)----- | |

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| HB0 3 | የቅድመወሊድምርመራከትትሉንየትአደረጉ ? (ሌላስ) ተጨማሪበታከትትልአድርገዉከሆነአንድትጠቅስአበረታታቸዉ የጤናተቋሙየግልወይምየመንግስትወይምሌላመሆኑንመለየትካልተቻለየጤናተቋሙንስምፍ/ፊ | በቤትውስጥ 01- በአኔቤት 02- በሌላሰውቤት የመንግስትየጤናተቋም 01- ሆስፒታል 02- ጤናጣቢያ 03- ጤናኬላ የግብረሰናይድርጅትጤናተቋም 01- ሆስፒታል 02- ጤናጣቢያ 03- ልዩ (Special) ክሊኒክ 04- ሌሎች (ጥቀስ/ሺ)----- የግልየጤናተቋም 01- ሆስፒታል 02- ከፍተኛክሊኒክ 03- ልዩ (Special) ክሊኒክ 04- ሌሎች (ጥቀስ/ሺ)----- | |
| HB0 4 | በመጨረሻውእርግዝናሽወቅትሥንትጊዜየቅድመወሊድየጤናከትትልአደረጉ? | 01-አንዴ 02- ሁለቴ 03- ሦስቴ 04- አራቴ 05- አምስትጊዜወዲናከዚያበላይ | |
| HB0 5 | ለተደረገልሽበቅድመወሊድየጤናከትትልደስተኛነበሩ ? | 01- አይ፣ደስተኛአልነበርኩም 02- ደስተኛምየከፋኝምአልነበርኩም 03- አዎ፣ደስተኛነበረኩ 99- አላውቅም | |
| HB0 6 | ለቅድመወሊድየጤናከትትልበሄድሽባቸውወቅቶችበእርግዝናወቅትስለሚከሰቱአደገኛየጤናችግሮችተነግሮዎትነበር ? | 01- አልተነገረኝም 02- ተነግሮኛል 03- አላስታውስም 99- አላውቅም | |
| HB0 7 | ከተነገሩሽበእርግዝናወቅትየሚከሰቱአደጋናምልክቶችየሚያስታውሱትንይዘርዝሩልኝ ? (ከአንድበላይመልስይቻላል) | የሚጠቀሱትንከአንድበላይምላሾችንአክብብ/ቢ 01- በማሕፀንደምመፍሰስ 02- በማሕፀንበዛያለፈሳሽድንገተኛመፍሰስ 03- ከባድየራስምታት 04- የዓይንብዥታ 05- ትኩሳት 06- የሆድሕመም 07- ሌሎች (ጥቀስ/ሺ)----- | |
| HB0 8 | በእርግዝናሽወቅትየትእወልዳለሁበለውነበርያቀዱት? | 01- ዕቅድአልነበረኝም 02- አቤቴ 03- በጤናተቋም 04- አላስታውስም 99- አላውቅም | በጤናተቋምከሆነወደ HB10 |
| HB0 9 | እቤትለመውለድለምንአቀዱ? (ከአንድበላይመልስይቻላል) | የሚጠቀሱትንከአንድበላይምላሾችንአክብብ/ቢ 01- የመጓጓዣዋጋውድነትፍራቻ 02- የመጓጓዣእጥረትፍራቻ 03- የሕክምናክፍያወጪፍራቻ 04- ፍቃድአላገኝምብዬ 05- ጤናተቋምመውለድስለማልፈልግ | |

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| | | 06- በቤትመወለድምቶች ስለሚሰጠኝ 07- በጤናተቆምመወለድ አስፈላጊነው በዩስለማሰብ 08- ሌሎች (ጥቀስ/ሺ)----- | |
| HB1 0 | በጤናተቆምመወለድ ለምን አቀዱ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብ/ቢ 01- ለእኔና ለልጄ ደህንነት አስቤ 02- እቤት ውስጥ የሚያዋልደኝ ስላጣሁ 03- በእርግዝና ወቅት ግርጌን ያለስለተነገረኝ 04- በጤናተቆምመወለድ ጠቃሚ እንደሆነ ስለተረዳሁ 05- በእቤት መወለድ አደገኛ እንደሆነ ስለተረዳሁ 06- ሌሎች (ጥቀስ/ሺ)----- | |
| HB1 1 | የመጨረሻውን እርግዝናዎትን የትተገላገሉ ? | በቤት ውስጥ 01- በእኔ ቤት 02- በሌላ ሰው ቤት የመንግስት የጤና ተቋም 01- ሆስፒታል 02- ጤና ጣቢያ 03- ጤና ኬላ የግብረሰናይ ድርጅት ጤና ተቋም 01- ሆስፒታል 02- ጤና ጣቢያ 03- ልዩ (Special) ክሊኒክ 04- ሌሎች (ጥቀስ/ሺ)----- የግል የጤና ተቋም 01- ሆስፒታል 02- ከፍተኛ ክሊኒክ 03- ልዩ (Special) ክሊኒክ 04- ሌሎች (ጥቀስ/ሺ)----- | |
| HB1 2 | ለምን እቤት ሊወለዱ ቻሉ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብ/ቢ 01- ለመጓጓዣ የምከፍለው ቸግሮኝ 02- የመጓጓዣ እጥረት 03- የሕክምና የምከፍለው ስላልነበረኝ 04- ፍቃድ ላገኝ ስላልቻልኩኝ 05- ጤናተቆምመወለድ ስለማልፈልግ 06- በቤት መወለድምቶች ስለሚሰጠኝ 07- በጤናተቆምመወለድ አስፈላጊነው በዩስለማሰብ 08- ሌሎች (ጥቀስ/ሺ)----- | |

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| HB1 3 | የመጨረሻውን እርግዝና ሲገልጽ ማን አዋለደዎት ? | የጤና ባለሙያ 01- ደክተር 02- ጤና መኮንን 03- ነርስ/ አዋላጅ ነርስ 04- የጤና ልማት ሠራተኛ (HEW) 05- ሌሎች (ጥቀስ/ሺ)----- ሌሎች ሰዎች 01- የሰለጠነች የልምድ አዋላጅ 02- ያልሰለጠነች የልምድ አዋላጅ 03- ሌሎች (ጥቀስ/ሺ)----- | |
| HB1 4 | በጤና ተቋም እንዴት ሊወልዱ ቻሉ ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብ/ቢ 01- ለእኔ ነበረጄ ደህንነት አስቤ 02- እቤት ውስጥ የሚያዋልድኝ ስለጣሁ 03- በእርግዝና ወቅት በኔ/በሕፃኑ ላይ ጥገና እንዳለ ስለተነገረኝ 04- በጤና ተቋም መውለድ ጠቃሚ እንደሆነ ስለተረዳሁ 05- በእቤት መውለድ አደገኛ እንደሆነ ስለተረዳሁ 06- ሌሎች (ጥቀስ/ሺ)----- | |
| HB1 5 | በጤና ተቋም ሲገልግሉ ለተደረገ ልዎት አገልግሎት (እርዳታ) ደስተኛ ነበሩ ? | 01- ደስተኛ አልነበርኩም 02- ደስታም መከፋትም አልነበረኝም 03- ደስተኛ አልነበርኩም 99- አላውቅም | |
| HB1 6 | በጤና አገልግሎቱ ደስተኛ ያልነበሩ በትምክንያት ምንነበር ? (ከአንድ በላይ መልስ መስጠት ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብ/ቢ 01- የጤና ባለሙያዎቹ አይመቹኝም 02- የጤና ባለሙያዎቹ ለፍላጎቴ ታችን መላሾች አልነበሩም 03- የጤና ባለሙያዎቹ ሰውተዳፋሪዎች ነበሩ 04- የማዋለጃው አካባቢ ምቹ አልነበረም 05- የማዋለጃው ክፍል ንፅህና የጎደለው ነበረው 06- የማዋለጃ ክፍሉ ለእይታ /ድምፅ የተጋለጠ ነበር 07- ለወሊድ አገልግሎት በዙብ ስለሰጠኝ 08- የጤና ተቋሙ ተፈላጊ መድሐኒት/የህክምና መገልገያ የጎደለው ስለነበር 09- የጤና ተቋሙ ሁልጊዜ ክፍት ስለማይሆን (አገልግሎት ስለማይሰጥ) 10- ሌሎች (ጥቀስ/ሺ)----- | |
| HB1 7 | ምጡ እንዴት ተጠናቀቀ ? | 01- ሕፃኑ ሞቶተ ወለደ 02- ሕፃኑ ከተወለደ ከጥቂት ሰዓት/ቀን በኋላ ሞተ 03- ጤነኛ ሕፃን በሕይወት ተገላግለው 04- ሌሎች (ጥቀስ/ሺ)----- | |

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| HB18 | በጤናተቋምስለመገልገልጉዳይላይበጣምየሚጠሉትነገርምንድንነው ? (ከአንድበላይመልስመስጠትይቻላል) | የሚጠቀሱትንከአንድበላይምላሾችንአክብብ/ቢ 01- የምጠላውነገርየለኝም 02- የጤናተቋሙከአካባቢውያለውርቀት 03- ወደጤናተቋሙለመጓዝየሚጠየቀውክፍያመጠን 04- መጓጓዣበማግኘትትግል 05- የወንድአዋላጅየጤናባለሙያ 06- የጤናባለሙያዎችለወላድያላቸውመጥፎአመለካከት 07- የጤናተቋሙየንፅህናጉድለት 08- የጤናተቋሙለአይታናለድምፅማጋለጥ 09- የማዋለጃአልጋውምቶትአለመስጠት 10- የአዋላጆችክህሎትማነስ 11. የምጠላውነገርየለኝም 11- ሌሎች (ጥቀስ/ሺ) ----- | | | | | | | |
| HB19 | ከመጨረሻውወሊድዎበኃላበአርባቀንውስጥየድህረወሊድየጤናምርመራአድርገውነበር ? | 01- አላደረሁም 02- አድርጌነበር 99- አላውቅም | "አልነበረም / "አላውቅም " ከሆነወደ HB16 ዝለል | | | | | | |
| HB20 | ከወሊድበኃላየድህረወሊድምርመራያደረገልዎትማነው ? | የጤናባለሙያ 01- ዶክተር 02- ጤናመኮንን 03- ነርስ/ 04- የጤናልማትሠራተኛ አዋላጅነርስ (HEW) 05- ሌሎች (ጥቀስ/ሺ)----- ሌሎችሰዎች 01- የሰለጠነች/የልምድአዋላጅ 02- ያልሰለጠነች/የልምድአዋላጅ 03- ሌሎች (ጥቀስ/ሺ)----- | | | | | | | |
| HB21 | ከወሊድበኃላበስንትጊዜነውየድህረወሊድምርመራየተደረገልዎት ? | <table><tr><td>ሰዓት</td><td></td></tr><tr><td>ቀን</td><td></td></tr><tr><td>ሳምንት</td><td></td></tr></table> <p>ከሳምንትባነሰጊዜከሆነበቀንያነሰከሆነበሰዓትባፈው</p> | ሰዓት | | ቀን | | ሳምንት | | |
| ሰዓት | | | | | | | | | |
| ቀን | | | | | | | | | |
| ሳምንት | | | | | | | | | |
| HB22 | ከወሊድበኃላየድህረወሊድምርመራየተደረገልዎትየትነበር ? | በቤትውስጥ 01- በእኔቤት 02- በሌላሰውቤት የመንግስትየጤናተቋም 01- ሆስፒታል 02- ጤናጣቢያ 03- ጤናኬላ የግብረሰናይድርጅትጤናተቋም 01- ሆስፒታል 02- ጤናጣቢያ 03- ልዩ (Special) ክሊኒክ 04- ሌሎች (ጥቀስ/ሺ)----- የግልየጤናተቋም 01- ሆስፒታል 02- ከፍተኛክሊኒክ 03- ልዩ (Special) ክሊኒክ 04- ሌሎች (ጥቀስ/ሺ)----- | | | | | | | |

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| HB2 3 | ከወሊድ በኋላ የድህረ ወሊድ ምርመራ ያላደረገልህ ዎት ለምን ድንከር ? (ከአንድ በላይ መልስ መስጠት ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብ/ቢ 01- ወደ ጤና ተቋም የመጓጓዣ እጦት 02- በመጓጓዣ የሚከፈልን ዘብብ ስላልነበረኝ 03- ለምርመራ እና መድሃኒት የሚጠየቀውን ክፍያ ስላልላኝ 04- ለምርመራ እንድሄድ ፍቃድ ስለተሰጠ ስላልኩ 05- የጤና ተቋምን ስለማልመርጥ 06- መጋኛ ወይም ልክፍት ምክንያት እታመማለሁ ብዬ ፈርቼ 07- የሰው ዓይን/ቡዳፈር ጭንቀት 08- የድህረ ወሊድ ምርመራ አስፈላጊነት ብዬ ስለማሳስብ 09- የድህረ ወሊድ ምርመራ ያልተለመደ ነው ብዬ ስለማስብ 10- ሌሎች (ጥቀስ/ሺ)----- | |
| HB2 4 | በሚኖሩበት አካባቢ ሴቶች በምጥ/ወሊድ ጊዜ በ ጤና ተቋም መወለድ የማይፈልጉበት በምን ምክንያት ይመስሉታል? (ከአንድ በላይ መልስ መስጠት ይቻላል) | 01, የጤና ተቋም ከአካባቢያችን ጋር በመሆኑ 02- ባሎቻቸው ስለማይፈቅዱ ላቸው 03- ሌሎች የቤተሰብ አባላት ስለማይፈቅዱ ላቸው 04- የገንዘብ ብቸኛ ግርምክንያት 05- በቤት ውስጥ ልጆች የሚንከባከብ ናቸው ብሎ ስላልሌለ 06- ሌሎች (ጥቀስ/ሺ)----- 99- አላወቅም | |
| HB2 5 | በሚኖሩበት አካባቢ ሴቶች በምጥ/ወሊድ ጊዜ በ ጤና ተቋም የሚወለዱት በምን ምክንያት ይመስሉ ሎታል? (ከአንድ በላይ መልስ መስጠት ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብ/ቢ 01- እቤት የሚያዋልዳቸው ሰው ሲያጡ 02- ምጡ ብቻ ሲያጋጥመው እና ሲራዘም 03- ችግር ይኖረዋል ብለው ሲገምቱ 04- ሥለ በጤና ተቋም መወለድ ጥቅም እወቀት ሲኖራቸው 05- ሥለ በእቤት መወለድ ጉዳት እወቀት ሲኖራቸው 06- ሌሎች (ጥቀስ/ሺ)..... 99- አላወቅም | |
| HB2 6 | በመጨረሻው ወሊድ በኋላ ለጨቅላው ሕፃን የጤና ምርመራ ተደርጎ ጤናማ ታል ? | 01- አልነበረም 02- ነበረ 99- አላወቅም | |
| HB2 7 | ለጨቅላው ሕፃን ከወሊድ በኋላ የጤና ምርመራ ያ ደረገለት ማንነበር ? | የጤና ባለሙያ 01- ዶክተር 02- ጤና ሙከንን 03- ነርስ/ አዋጅ ነርስ 04- የጤና ልማት ሠራተኛ (HEW) 05- ሌሎች (ጥቀስ/ሺ)----- ሌሎች ሰዎች 01- የሰለጠነች የልምድ አዋጅ 02- የልሰለጠነች የልምድ አዋጅ 03- ሌሎች (ጥቀስ/ሺ)----- | |

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| HB28 | ከወሊድ በኋላ ጨቅላው ሕፃን ምርመራ የተደረገለት በስንት ጊዜ ነው ከወሊድ በኋላ ጨቅላው ሕፃን ምርመራ የተደረገለት በስንት ጊዜ ነው? | <table><tr><td>ሰዓት</td><td></td></tr><tr><td>ደቂቃ</td><td></td></tr><tr><td>ሰዓት</td><td></td></tr></table> ከሳምንት ባንሰጥ ጊዜ ከሆነ በቀን ያንሰከሆነ በሰዓት ያፈው/ፈው | ሰዓት | | ደቂቃ | | ሰዓት | | |
| ሰዓት | | | | | | | | | |
| ደቂቃ | | | | | | | | | |
| ሰዓት | | | | | | | | | |
| HB29 | ከወሊድ በኋላ ጨቅላው ሕፃን ምርመራ የተደረገለት የትክክር ? | 01- አቤት 02- ጤና ኬላ 03- ጤና ጣቢያ 04- ሆስፒታል 05- ሌሎች (ጥቀስ/ሺ)----- | | | | | | | |
| HB30 | ጨቅላው ልጅ ሽከተ ወለደበኋላ በ40 ቀናት ውስጥ ምርመራ ያልተደረገለት ለምን ድንኳን ነው? (ከአንድ በላይ መልስ መስጠት ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብ/ቢ 01- ወደ ጤና ተቋም የመጓጓዣ እጦት 02- በመጓጓዣ የሚከፈል ገንዘብ ስላል ነበረኝ 03- ለምርመራ እና መድኃኒት የምከፍለው ስለሌለኝ 04- ለምርመራ እንድሄድ ፍቃድ ስለተከለከልኩ 05- የጤና ተቋምን ስለማልመርጥ 06- መጋኛ ወይም ልክ ፍትም ከንያት ፈርቼ 07- የሰው ዓይን/ቡዳር ጭንቀት 08- የድህረ ወሊድ ምርመራ ለህፃን አስፈላጊነው በዩ-ስለማላሰብ 09- ለህፃን የድህረ ወሊድ ምርመራ ያልተለመደ ነው በዩ-ስለማላሰብ 10- ሌሎች (ጥቀስ/ሺ)----- 99- አላውቅም | | | | | | | |
| HB31 | የቀደሙትን ልጆች ምትን የትክክር የወለዱ ዋቸው? (ከአንድ በላይ መልስ ይቻላል) | ሚጠቀሱትን መልሶችን በሙሉ አክብብ/ቢ 01- አቤት 02- ጤና ጣቢያ 03- ሆስፒታል 04- የግል ጤና ተቋም 05- ሌሎች (ጥቀስ/ሺ)----- | | | | | | | |
| HB32 | ባለፈው አንድ አመት የተወለደ ወልደልጅ በሕይወት አለ? | 01 - አይደለም 02- አዎን አለ | | | | | | | |
| HB33 | ባለፈው አንድ አመት የተወለደ ወልደልጅ በሕይወት ከሌለ መቼ ነው የሞተው? | 01- ሕፃኑ በተወለደበት 24 ሰዓት ውስጥ 02- ሕፃኑ ከተወለደበት 7 ቀን ውስጥ 03- ሕፃኑ ከተወለደበት 28 ቀን ውስጥ 04- ሌሎች (ጥቀስ/ሺ)----- | | | | | | | |
| HB34 | ለወደፊት ተጨማሪ ልጅ እንዲኖር ምት ከፈለጉ የትለመደላድ ያስባሉ | 01- ለመወለድ ሀሳብ የለኝም 02- ጤና ጣቢያ 03- ሆስፒታል 04- የግል ጤና ተቋም 05- ሌሎች (ጥቀስ/ሺ)----- 99- አላውቅም | | | | | | | |
| HB35 | ባጠቃላይ በጤና የቋሙን ጥራት እንድትይዝ መግባቱ ታስባ? | 01- ደካማ/ መጥፎ ነው 02- መጥፎ ምጥፋ ምንም እይደለም 03- ጥሩ ነው 99- አላውቅም | | | | | | | |
| HB36 | የጤና ተቋም ከዚህ በላይ ጥራቱን የጠበቀ የወሊድ እና ድህረ-ወሊድ አገልግሎት እንዲሰጥ ምን ያስፈልጋል? | | | | | | | | |

| II | አጋላጭጉዳዮች (Presdisposing factors) | | |
|--------|---|---|--|
| PA01 | እንደእርስዎሀሳብ፣በአጠቃላይ፣ የጤናተቋምመገልገልምንያህልጠቃሚነው? | 01- ጠቃሚአይደለም 02- እርግጠኛአይደለሁም 03- ጠቃሚነው 99- አላውቅም | |
| P K 02 | ስለወሊድእናበወሊድወቅትለሚከሰቱየጤናችግሮችቅድ መዝግጅትስምተወያወቃሉ ? | 01- ሰምቼአላውቅም 02- አዎንሰምቼአወቃለሁኝ 99- ሰምቼአላውቅም | |
| PA03 | በእርግዝናእናበምጥወቅትለሚከሰቱየጤናችግሮችቅድ መዝግጅትያስፈልጋልብለወያምናሉ ? | 01- አይ፣አላምንም 02- እርግጠኛአይደለሁም 03- አዎን፣ያስፈልጋልብዬአምናለሁ 99- አላውቅም | |
| PK04 | በምጥወቅትስለሚከሰቱዋነኛእናአደገኛየጤናማስጠንቀ ቂያምልክቶችጥቀሱልኝ ? (ከአንድበላይመልስይቻላል) ? | የሚጠቀሱትንከአንድበላይምላሾችንአክብብ/ቢ 01- ከፍተኛደምበማህጸንመፍሰስ 02- ከ12 ሰአትበላይየቆየምጥ 03- የሕጻኑእጅ፣እግር፣ ወይምየእንግዲወልጅገመድቀድሞመታየት/ መወጣት 04- የእንግዲወልጅመቅረት 05- የሰውነትመንዘፍዘፍወይምእራስንመሳት 06- ሌሎች (ጥቀስ/ሽ) 99- አላውቅም | |
| PK05 | የሚያወቁዋቸውንየወልድወቅትለሚከሰቱችግሮችየዝግ ጁነትእቅዶችይጥቀሱልኝ ? (ከአንድበላይመልስይቻላል) ? | የሚጠቀሱትንከአንድበላይምላሾችንአክብብ/ቢ 01- በእርግዝናወቅትምንመጠበቅእንዳለብን 02- ሊረዱየሚችሉሰዎችንመለየት 03- የአጣዳፊየጤናችግሮችንምልክቶችንማወቅ መቻል 04- የጤናችግሮችሲከሰትበአስቸኩዋይወደጤናተ ቁዋምየመሄድንአስፈላጊነትመረዳት 05- የጤናችግሩሲከሰትበአስቸኩዋይወደጤናተቁ ዋምለመሄድየሚያስችልእቅድመኖር 06- የአጣዳፊየጤናችግሮችሲከሰቱበአስቸኩዋይ ሊረዱየሚችለወንደጤናተቁዋምማወቅ 07- ሌሎች (ጥቀስ/ሽ) 99- አላውቅም | |
| PK06 | በወሊድወቅትበእናትየዋላይየሚከሰቱየተለመዱየጤናች ግሮችምንድንናቸው (ከአንድበላይመልስይቻላል) ? | የሚጠቀሱትንከአንድበላይምላሾችንአክብብ/ቢ 01- በማሕፀንደምመፍሰስ 02- በእናትየዋላይየሚከሰትየአካልመገጫዳት 03- የመመርቀዝ (ኢንፌክሽን) 05- የምጥጊዜመራዘም 06- ሞት | |

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| | | 07- ሌሎች (ጥቀስ/ሽ)----- 99- አላውቅም | |
| PF07 | በጨቅላህጻናት ላይ በወሊድ ወቅት የሚከሰቱ የተለመዱ የጤና ችግሮች ምን ድንገቶች ናቸው ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብ/ቢ 01- መታፈን 02- የአካል ጉዳት 03- የሚጸና የጤና እክል 04- የእድገት መታወክ/መቀጨጭ 05- ሞት 07- ሌሎች (ጥቀስ/ሽ)----- 99- አላውቅም | |
| የሴቶች የራስ አስተዳደር (Women's Autonomy) | | | |
| PAU | ገንዘብ የመቆጣጠር አቅም | | |
| PAU1 | በየተወሰነ ጊዜ/በተከታታይ ገንዘብ ያገኛሉ ? | 01- አይ 02- አዎ | |
| PAU2 | ሌላ ማንንም ሳያማክሩ ገንዘብ ማግኘት ይችላሉ ? | 01- አይ፣ አልችልም 02- አዎ፣ እችላለሁ | |
| PAuTD | ውሳኔ የመስጠት አቅም | | |
| PAU3 | አካባቢዎት እንዳሉ ሌሎች ሴቶች ከአቅራቢያዎት ካሉ ሱቅ/ገበያ አነስ አነስ ያሉ ነገሮችን እንደ መግዛት የመሳሰሉ ውሳኔዎች ይወስናሉ ? | 01- አይ 02- አዎ 99- አላውቅም | |
| PAU4 | እንደ የትመውለድ እንዳለብሽ፣ ልጅሽን ወደ ጤና ተቋም መውሰድ የመሳሰሉትን ልልቅ ውሳኔዎች ላይ ይሳተፋሉ ? | 01- አይ 02- አዎ 99- አላውቅም | |
| PAU5 | በሆስፒታል ያገኙትን ከቤት ውጭ ድረስ ያለብዎት ቦታ ወይም ጉዳይ ካለብዎት (ለምሳሌ፡ ወሃ ማምጣት) ማስፈቀድ አለብዎት ? | 01- አይ 02- አዎ | |
| PAU6 | በቤተሰባችሁ ውስጥ የአንድን የጤና ቅጥም መጠቀም በተመለከተ ውሳኔ ለከተዋነኛ ውሳኔ ስጭ ማንነዉ ? | ባለቤቴ የባለቤቴ እናት የባለቤቴ እህት እናቴ አያቴ የባለቤቴ አያት ሌሎች (ጥቀስ/ሽ) | |
| PAU7 | ሌሎች የአንድን የጤና ቅጥም መጠቀም በተመለከተ ውሳኔ ስጭ ማንነዉ ? | 01- ባለቤቴ 02- የባለቤቴ እናት 03- የባለቤቴ እህት 04- እናቴ 05- አያቴ 06- የባለቤቴ አያት 99- ሌሎች (ጥቀስ/ሽ) | |
| PAuF | የመንቀሳቀስ ነፃነት | | |

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| PAuF8 | አዋቂሰውሳያጅብዎትወይምሳይሸኝዎትለጉዳይብቻዎት ንከቤትወጥተውመሄድዎታሉ ? | 01- 02- አዎ | አይ |
| PAuF9 | ብቻዎትንልጅይዘወደሐኪምቤትመሄድዎታሉ ? | 01- 02- አዎ 99- አላወቅም | አይ |
| PAuF10 | ብቻዎትንሐኪምቤትመሄድዎታሉ ? | 01- 02- አዎ 99- አላወቅም | አይ |
| PAuF11 | ያለፈቃድጓደኞችዎትንዘመድወይምቤተሰብዎትንሄደው መጠየቅዎታሉ ? | 01- 02- አዎ 99- አላወቅም | አይ |
| አስቻይጉዳዮች (Enabling factors) | | | |
| EF01 | ከሚኖሩበትአካባቢወደሚቀርብየወሊድአገልግሎትወደ ሚሰጥየጤናተቋምበአግርለመሄድምንያክልሰዓት/ደቂቃይ ፈጃል | 1- ከአንድሰዓትበታች 2- ከ 1 እስከ 2 ሰዓት 3- ከ 2 እስከ 3 ሰዓት 4- ከ 3 እስከ 4 ሰዓት 5- ከ 4 እስከ 5 ሰዓት 6- ከ 5 ሰዓትበላይ | |
| EF02 | ከሚኖሩበትአካባቢእስከሚቀርብዎትየወሊድአገልግሎት ወደሚሰጥየጤናተቋምያለውንርቀትእንዴትይገመግሙታ ል ? | 01- በጣምሩቅነው 02- እሩቅነው 03- እሩቅምቅርብምአይደለም 04- ቅርብነው 05- በጣምቅርብነው | |
| EF03 | በጤናተቋምከደረሱበኃላአገልግሎትወስደውእስኪጨርሱ ያለውንየቆይታጊዜእንዴትይገመግሙታል ? (ከአንድበላይመልስይቻላል) | የሚጠቀሱመልሶችንበሙሉአክብብ/ቢ 01- በጣምረጅምነው 02- ረጅምነው 03- መካከለኛነው 04- አጭርነው 05- በጣምአጭርነው 06- ለኔአይመቸኝም 07- ለኔይመቸኛል 99- አላውቅም | |
| EF04 | በጤናተቋምበወሊድአገልግሎትበሚጠየቀውከፍያምከንያ ትበጤናተቋምለወሊድአገልግሎትተጠቃሚቁጥርመቀነስ ላይተጽእኖፈጥሯልብለውይገምታሉ ? | 01- አልገምትም (አይመስለኝም) 02- አዎንተፅዕኖፈጥሯል 03- ለወሊድአገልግሎትከፍያአይጠየቅም 99- አላውቅም | |
| EF05 | በጤናተቋምለድህረወሊድጤናአገልግሎትበሚጠየቀውከ ፍያምከንያትበጤናተቋሙየድህረ- ወሊድአገልግሎትተጠቃሚቁጥርመቀነስላይተፅዕኖፈጥሯ ልብለውይገምታሉ ? | 01- አይ፣ አልገምትም (አይመስለኝም) 02- እርግጠኛአይደለሁም 03- አዎን፣ይመስለኛል 99- አላውቅም | |
| EF06 | ባለፈውአንድአመትእርሶምወይምሌላየሚያውቁትሰውበ ምጥጊዜለወሊድወደአቅራቢያውወደሚገኝየጤናተቋምሄ ዳአገልግሎትየተነፈገችእናትያውሉ? | 01- አይ፣አልነበረም 02- እርግጠኛአይደለሁኝም 03- አዎን፣ነበረ 99- አላውቅም | አይወይምአ ላውቅምከሆ ነወደጥያቄ NF1 ዝለል |

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| EF07 | ባለፈው አንድ አመት እርሶም ወይም ሌላ የሚያውቁት ሰው በምጥጊ ዘመናዊ ወደ አቅራቢያው ወደሚገኝ የጤና ተቋም ሄዶ አገልግሎት ሳያገኝ የቀረበትን ምክንያት ምንድን ነበር ? | 01- የጤና ተቋም በመዘጋቱ 02- መድሀኒት ስላልነበረ 03- የጤና ባለሙያ ባለመኖሩ 04- አጤና ተቋሙ አቅም በላይ ችግር በማጋጠሙ 05- መሳርያ ባለመኖሩ 06- ሌሎች (ጥቀስ/ሽ)፡..... 99- አላውቅም |
| NF | NEED FACTORS | |
| NF1 | በምጥጊ ዘመናዊ ተቋማት ግርባጭ ምን ዓይነት ችግር ሊኖረው ምን ሊቀላጅ የጤና ባለሙያ መረዳት ይጠበቅባቸዋል ብለው ያምናሉ ? | 01- አይ፣ አላምንም 02- እርግጠኛ አይደለሁም 03- አዎን፣ አስባለሁኝ 99- አላውቅም |
| NF2 | በምጥጊ ዘመናዊ ተቋማት ግርባጭ ምን ዓይነት ችግር ሊኖረው ምን ሊቀላጅ የጤና ባለሙያ መረዳት ይጠበቅባቸዋል ብለው ያምናሉ ? | 01- አይ፣ አላምንም 02- እርግጠኛ አይደለሁም 03- አዎን፣ አስባለሁኝ 99- አላውቅም |
| NF3 | እናት የዋና የጤና ተቋማት ግርባጭ ምን ዓይነት ችግር ሊኖረው ምን ሊቀላጅ የጤና ባለሙያ መረዳት ይጠበቅባቸዋል ብለው ያምናሉ ? | 01- አይ፣ አላምንም 02- እርግጠኛ አይደለሁም 03- አዎን፣ አስባለሁኝ 99- አላውቅም |
| NF4 | ጨቅላ ሕፃናት የጤና ተቋማት ግርባጭ ምን ዓይነት ችግር ሊኖረው ምን ሊቀላጅ የጤና ባለሙያ መረዳት ይጠበቅባቸዋል ብለው ያምናሉ ? | 01- አይ፣ አላስብም 02- እርግጠኛ አይደለሁም 03- አዎን፣ አስባለሁኝ 99- አላውቅም |
| NF5 | በእርስዎ ምርጫ ቢሆን ማንን ቢያወጥስ ይመስልዎታል ? | 01- ማንም፣ እኔ ወይም ሌላ 02- የባለቤትነት / የቤተሰብ አባል 03- ጉዋደኛ ወይም ጎረቤት 04- የጤና ኤክስቴንሽን ሰራተኛ 05- የልምድ አዋጅ 07- የጤና ባለሙያ 08- ሌሎች (ጥቀስ/ሽ)፡..... |
| | ማህበራዊ ተሳታፊነትና ማህበራዊ ድጋፍ (Social Network and Social Support) | |
| SNO 1 | በአካባቢያችሁ ካሉ ሰፊ ማህበራዊ ድርጅቶች (እድር፣ እቅብ፣ ጽዋ ወዘተ) አባል ነዎት ? | 01- ከየቱም ጋር አባል አይደለሁም 02- አንድ 03- ሁለት 04- ሶስት 05- አራት 06- አምስት ካህዲያ በላይ |

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| SS01 | እርዳታ በሚያስፈልግ ወቅት እርዳታ በማግኘት ለሚመካሉ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብብ/ቢ 01- ማንም የለኝም 02- ባለቤቴ 03- በእናቴ 04- በአባቴ 05- በቅርብ ጓደኛዬ 06- በጎረቤቴ/ቶቼ 07- በኢያቴ 08- በባለቤቴ እናት/አባት 09- ሌሎች (ጥቀስ/ሺ)----- | |
| SS02 | በዚህ ሰው እርዳታ ላይ ምን ያህል ደስተኝ ነዎት ? | 01- በጣም ደስተኝ አይደለሁም 02- በመጠኑ ደስተኝ አይደለሁም 03- ደስተኝ አይደለሁም 04- ደስተኝ ነኝ 05- በመጠኑ ደስተኝ ነኝ 06- በጣም ደስተኝ ነኝ 99- አላውቅም | |
| SS03 | መጨናነቅ እና ጫና ሲኖር በዎት ጭንቀት ዎትን ማንነው ያቃልልልኛል ብለው የምትተማመኑበት ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብብ/ቢ 01- ማንም የለኝም 02- ባለቤቴ 03- በእናቴ 04- በአባቴ 05- በቅርብ ጓደኛዬ 06- በጎረቤቴ/ቶቼ 07- በኢያቴ 08- በባለቤቴ እናት/አባት 09- ሌሎች (ጥቀስ/ሺ)----- | |
| SS04 | በዚህ ሰው እርዳታ ላይ ምን ያህል ደስተኝ ነዎት ? | 01- በጣም ደስተኝ አይደለሁም 02- በመጠኑ ደስተኝ አይደለሁም 03- ደስተኝ አይደለሁም 04- ደስተኝ ነኝ 05- በመጠኑ ደስተኝ ነኝ 06- በጣም ደስተኝ ነኝ 99- አላውቅም | |
| SS05 | አርስ ዎን ከነድክ መትዎና ጥሩነት ዎ በርስ ዎን ትዎ የሚቀበል ዎስ ውማነው ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብብብ/ቢ 01- ማንም የለኝም 02- ባለቤቴ 03- በእናቴ 04- በአባቴ 05- በቅርብ ጓደኛዬ 06- በጎረቤቴ/ቶቼ 07- በኢያቴ 08- በባለቤቴ እናት/አባት 09- ሌሎች (ጥቀስ/ሺ)----- | |
| SS06 | በዚህ ሰው እርዳታ ላይ ምን ያህል ደስተኝ ነዎት ? | 01- በጣም ደስተኝ አይደለሁም 02- በመጠኑ ደስተኝ አይደለሁም | |

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| | | 03- ደስተኛ አይደለሁም 04- ደስተኛ ነኝ 05- በመጠኑ ደስተኛ ነኝ 06- በጣም ደስተኛ ነኝ 99- አላውቅም | |
| SS07 | አንቸላይ በኃዘን ምትምብ ደስታ ምትምብ ገጽ ምትምብ የማይለይ ምትምብ/የሚንከባከብ ምትምብ ማለት ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብሩ/በ/ቢ 01- ማንም የለኝም 02- ባለቤቴ 03- በእናቴ 04- በአባቴ 05- በቅርብ ጓደኛዬ 06- በጎረቤቴ/ቶቼ 07- በኢያቴ 08- በባለቤቴ እናት/አባት 09- ሌሎች (ጥቅስ/ሺ)----- | |
| SS08 | በዚህ ሰው ላይ እንክብካቤ ላይ ምን ያክል ደስተኛ ነዎት ? | 01- በጣም ደስተኛ አይደለሁም 02- በመጠኑ ደስተኛ አይደለሁም 03- ደስተኛ አይደለሁም 04- ደስተኛ ነኝ 05- በመጠኑ ደስተኛ ነኝ 06- በጣም ደስተኛ ነኝ 99- አላውቅም | |
| SS09 | በደበረዎት (ድብርት በተጫጫነዎት ወቅት ከዚህ ሥሜት እንድትወጣ ይረዳኛል ብለው የሚተማመኑበት ሰው ማለት ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብሩ/በ/ቢ 01- ማንም የለኝም 02- ባለቤቴ 03- በእናቴ 04- በአባቴ 05- በቅርብ ጓደኛዬ 06- በጎረቤቴ/ቶቼ 07- በኢያቴ 08- በባለቤቴ እናት/አባት 09- ሌሎች (ጥቅስ/ሺ)----- | |
| SS10 | በዚህ ሰው እርዳታ ምን ያክል ደስተኛ ነዎት ? | 01- በጣም ደስተኛ አይደለሁም 02- በመጠኑ ደስተኛ አይደለሁም 03- ደስተኛ አይደለሁም 04- ደስተኛ ነኝ 05- በመጠኑ ደስተኛ ነኝ 06- በጣም ደስተኛ ነኝ 99- አላውቅም | |
| SS11 | በጣም ሲበሳጩ ያረጋጋኛል ብለው የሚተማመኑበት ሰው ማለት ? (ከአንድ በላይ መልስ ይቻላል) | የሚጠቀሱትን ከአንድ በላይ ምላሾችን አክብሩ/በ/ቢ 01- ማንም የለኝም 02- ባለቤቴ 03- በእናቴ 04- በአባቴ | |

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| | | 05- በቅርብ ዓመታት | |
| | | 06- በጉረቤት/ቶች | |
| | | 07- በአያቱ | |
| | | 08- በባለቤትነት/አባት | |
| | | 09- ሌሎች (ጥቅስ/ሺ)----- | |
| SS12 | በዚህ ሰው እርዳታ ምን ያህል ደስተኝነት ? | 01- በጣም ደስተኝ አይደለሁም | |
| | | 02- በመጠኑ ደስተኝ አይደለሁም | |
| | | 03- ደስተኝ አይደለሁም | |
| | | 04- ደስተኝ ነኝ | |
| | | 05- በመጠኑ ደስተኝ ነኝ | |
| | | 06- በጣም ደስተኝ ነኝ | |
| | | 99- አላውቅም | |

ቃለመጠይቁን እዚህ ላይ አብቃለሁኝ፡፡ ለተሳተፎ ምክልብ አመሰግናለሁኝ!

Annexure 6 QUESTIONNAIRE FOR THE QUALITATIVE STUDY

Interview Questionnaire II

For the KII

(KII are: Health Extension Workers Midwives, Nurses, Woreda Health Office RH focal person, Religious leaders (Muslim and Christians), TBAs, local community leaders, and other VIPs in the community.)

What are the barriers to health services utilisations for labouring women and postnatal women in your community?

- Predisposing factors
 1. What are the reasons for the preferences of pregnant women and their families to give birth at home?
 2. What is the role of (on labour and child birth):
 - Culture ?
 - Religion ?
 - Family members ?
 3. What is your thought about health risk posed to the mother or the baby during labour and child birth?
 - How do these health risks occur?
 - How can these risks prevented?
 - What should the woman/her family do to alleviate such health risks?
 4. Is there any difference whether a woman give birth at home or at a health facility?
 5. What are the services available for labouring mothers at the community level?
 - How do labouring women and their families benefit from these services?
 - How do the women or their family get those services?

6. If a women decides to give birth at a health facility or wanted to have follow up in a health facility after delivery, what are the most important barriers?
7. What are the major health facility factors that discourage the use of skilled birth attendance by pregnant women?
 - How do you evaluate the quality of the service provided in the health facility?
 - How does the community perceive the attitude and motivation of the health workers?
- Others: What solutions do you propose to improve/alleviate these challenges of health services utilisations for labouring women and postnatal women in your community?

ቃለ መጠይቅ 2

ለዚህ ቃለ መጠይቅ የተመረጡ የጤና ኤክስቴንሽን ሰራተኞች፣ አዋላጅ ነርሶች፣ ነርሶች፣ የጤና መኮንኖች፣ የወረዳ ጤና መምሪያ ሀላፊዎች/ ባለሙያዎች፣ እቤታቸው/ በጤና ተቁዋም የወለዱ ሴቶች፣ የልምድ አዋላጆች ወዘተ ይሆናሉ።

8. በአካባቢዎ ነፍሰጡር እናቶች እና ቤተሰቦቻቸው በምጥ ወቅት እቤት መወለድ የሚፈልጉት በምን ምክንያት ነዉ ?

9. የሚከተሉት በምጥ እና ወሊድ ወቅት ያላቸው ሚና ምንድን ነዉ?

- ባሕል
- ሐይማኖት
- ሌሎች የቤተሰብ አባላት (ባል፣ የባል እናት፣ እናቶች፣ ወዘተ)

10. በምጥ እና ወሊድ ወቅት በእናትየዋ እና በ ህፃኑ ላይ ስለሚከሰቱ የጤና ችግሮች/አደጋዎች ምን አመለካከት አለዎት ?

- እነዚህ የጤና ችግሮች እንዴት ነዉ የሚከሰቱት ?
- እነዚህን የጤና ችግሮች እንዴት ነዉ ልንከላከል የምንችለዉ ?
- ወላጅ ሴቶች እና ቤተሰቦቻቸው ይህንን ችግር ለመፍታት ምን ማድረግ አለባቸዉ ብለዉ ያስባሉ ?

11. እቤት መወለድ እና በ ጤና ተቁዋም መወለድ ልዩነት አለዉን ?

12. በአካባቢዉ በ ምጥወቅት ለእናትየዉና ለቤተሰቡ ምን አይነት አገልግሎቶች አሉ?

- እናትየዉና ለቤተሰቡ ከነዝህ አገልግሎቶች እንዴት ነዉ የሚጠቀሙት ?
- እናትየዉና ቤተሰቡ እነዚህን አገልግሎቶች እንዴት ሊያገኙ ይችላሉ?

13. እናቶች በጤና ተቁዋም ለመወለድ ቢወስኑ ወይም ከወሊድ በሁዋላ የጤና ክትትል ማድረግ ቢፈልጉ የሚያጋጥሙባቸዉ ዋና ዋና ተግዳሮቶች ምንድን ናቸዉ ?

14. በጤና ተቁዋማት በወልድ ወቅት የሚያጋጥሙ ዋና ዋና ችግሮች ምንድን ናቸዉ ?

- በጤና ተቁዋሙ የሚሰጠዉን አገልግሎት ጥራት እንዴት ይገመግሙታል ?
- ሕብረተሰቡ የጤና ባለሙያዎቹን ያላቸዉን የስራ መነሳሳት እና አመለካከታቸዉን እንዴት ነዉ የሚያስበዉ ?

- ሌላች፡ በአካባቢዎ እናቶች በጤና ተቁዋም እንዳይወልዱ ወይም ከወሊድ በሁዋላ የጤና ክትትል እንዳያደርጉ የሚያወኩትን ተግዳሮቶች ለመፍታት ምን የመፍትሄ ሃሰብ አለዎት ?

Annexure 7 FEEDBACK FORM FOR THE DELPHI PANAL

Comment sheet on the proposed Framework for Utilisation of SBA and Postnatal Care

| Issues | Comments | Suggestion points for improvement |
|--|----------------------------|-----------------------------------|
| General opinion on the proposed framework | • | |
| Comprehensiveness of the proposed strategic objectives | | • |
| Level of detail of the activities | • • • • • • | • • • • • |
| Appropriateness | • • • • • • | • • • • • • |