



ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF NURSING AND MIDWIFERY

**DEPARTMENT OF PEDIATRICS-CHILD HEALTH NURSING AND
MIDWIFERY**

**POSTNATAL CARE UTILIZATION AND ASSOCIATED FACTORS AMONG
WOMEN WHO HAVE GIVEN BIRTH IN THE LAST 12 MONTHS IN EAST
AZERNET BERBERE DISTRICT, SILTIE ZONE, CENTRAL ETHIOPIA, 2025 :
A MIXED-METHODS STUDY**

BY:

FEDLU JEMAL (BSC)

**A THESIS SUBMITTED TO THE PEDIATRICS-CHILD HEALTH NURSING
AND MIDWIFERY DEPARTMENT, SCHOOL OF NURSING AND MIDWIFERY,
COLLEGE OF HEALTH SCIENCES, ADDIS ABABA UNIVERSITY, IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF
SCIENCE IN MATERNITY AND REPRODUCTIVE HEALTH NURSING**

DECEMBER, 2025

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES,
SCHOOL OF NURSING AND MIDWIFERY
DEPARTMENT OF PEDIATRICS-CHILD HEALTH NURSING AND MIDWIFERY

Name and address of principal investigator	Fedlu Jemal Esman (BSC) Cell phone; +251954773550 Email; fedlujemal2015@gmail.com
Name and address of advisors	1. Dr. Semarya Berhe. (PhD, Assistant Professor) Cell phone; +251911010347 Email; semitaye@yahoo.com 2. Dr. Endalew Gemechu. (RN, PhD, Associate Professor) Cellphone; +251911196298 Email- endalewaau2012@gmail.com 3. Ms. Hana Hailu. (MSC) Cellphone; +251948858381 Email: hannahailu5@gmail.com
Full title of the research project	Postnatal care utilization and associated factors among women who have given birth in the last 12 months in East Azernet Berbere district, Siltie zone, Central Ethiopia, 2025 : a mixed-methods study
Study period	From February 15 to April 28/2025.
Study area	East Azernet Berbere district, Siltie zone, Central Ethiopia
Total budget	41,778 ETB

APPROVAL SHEET

ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF NURSING AND MIDWIFERY

DEPARTMENT OF PEDIATRICS-CHILD HEALTH NURSING AND MIDWIFERY

I, the undersigned, declare that I have submitted my original work on Postnatal care utilization and associated factors among women who have given birth in the last 12 months in East Azernet Berbere district, Siltie zone, Central Ethiopia, 2025 : a mixed-methods study

Submitted by:

Fedlu Jemal (BSC)

Name of Student

Signature

Date

Approved by:

1. Dr. Semarya Berhe (MSC, PhD)

Name of Major Advisor

Signature

Date

2. Dr. Endalew Gemechu (RN, PhD)

Name of Co-Advisor

Signature

Date

3. Ms. Hana Hailu (MSC)

Name of Co-Advisor

Signature

Date

4. _____

Name of Evaluator/Examiner

Signature

Date

5. _____

Name of Chairman,

Signature

Date

STATEMENT DECLARATION

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of scholarship in the preparation, data collection analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis. This thesis is submitted in partial fulfillment of the requirement for a graduate degree from Addis Ababa University at College of Health Sciences, School of Nursing and Midwifery. The thesis is deposited in the Addis Ababa University Digital Library and is made available to the local, national, and international scientific communities. Solemnly declare that this thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma or certificate. Brief quotations from my thesis may be used without special permission provided that accurate and complete acknowledgment of the source is made. Requests for permission for extended quotations from, or reproduction of, this thesis in whole or in part may be granted by the Head of the Department or all advisors of these when in his or her judgment the proposed use of the material is in the interest of scholarship and publication. In all other instances, however, permission must be obtained from the author of the thesis.

Fedlu Jemal (BSC)

Name of Student

Signature

Date

Approved by:

1. Dr. Semarya Berhe (MSC, PhD)

Name of Major Advisor

Signature

Date

2. Dr. Endalew Gemechu (RN, PhD)

Name of Co-Advisor

Signature

Date

3. Ms. Hana Hailu (MSC)

Name of Co-Advisor

Signature

Date

Acknowledgments

I would like to extend my deepest appreciation to Addis Ababa University, College of Health Sciences, School of Nursing and Midwifery, Department of Pediatrics-Child Health Nursing and Midwifery, for providing me with the opportunity and resources to conduct this study.

Next, warm gratitude goes to my advisors, Dr. Semarya Berhe, Dr. Endalew Gemechu, and Ms. Hana Hailu, for their advice, comments, and consistent support at the different stages of my thesis.

My appreciation goes to data collectors and study participants for giving of their time and participation in the study. I also would like to thank the concerned bodies for the information that they have given me and for their cooperation.

Finally, I would like to thank my family and friends for their moral support, patience, and encouragement throughout this journey.

List of Acronyms and abbreviations

AAU	Addis Ababa University
ANC	Antenatal care
AOR	Adjusted odds ratio
CHMIS	Community health management information system
CI	Confidence interval
COR	Crude Odd ratio
CS	Caesarean section
DCs	Data collectors
HC	Health Center
HP	Health Post
HEW	Health Extension Workers
IDI	In-depth interview
LMIC	Low- and middle-income countries
MCH	Maternal and child health
MNCH	Maternal, Newborn, and Child Health
PNC	Postnatal care
SDGs	Sustainable Development Goal
SSA	Sub Sharan Africa
UNICEF	United Nations International Children's Fund
WHO	World Health Organization

Contents

Acknowledgments	I
List of Acronyms and abbreviations	II
List of tables	VI
List of figures	VI
Abstract	1
1. Introduction	3
1.1. Background	3
1.2. Statement of the problem	4
1.3. Significance of the study	5
2. Literature Review	7
2.1. Postpartum care coverage	7
2.2. Factors Associated with Postnatal Care Utilization	7
2.2.1. Socio-Demographic and economic factors	7
2.2.2. Cultural and social norms	8
2.2.3. Healthcare facility accessibility	9
2.2.4. Obstetrics related factors	9
2.3. Conceptual Framework	10
3. Study objectives	12
3.1. General Objective	12
3.2. Specific objectives	12
4. Methods	13
4.1. Study Area	13
4.2. Study design	13
4.3 Quantitative Part	13
4.3.1 Study design	13
4.3.2 Population	13
4.3.2.1 Source population	13
4.3.2.2 Study population	13
4.3.2.3 Sample population	14
4.3.3. Eligibility criteria	14
4.3.3.1. Inclusion criteria:	14

4.3.4. Sample size determination and sampling techniques	14
4.3.4.1. Sample size determination	14
4.3.4.2. Sampling technique	14
4.3.5. Study Variables	16
4.3.5.1. Dependent Variable	16
4.3.6. Operational definitions	17
4.3.7. Data collection material and methods	17
4.3.7.1. Data collection tools	17
4.3.7.2. Data collection methods	17
4.3.8. Data quality assurance	18
4.3.9. Data processing and analysis	18
4.4. Qualitative Part	19
4.4.1. Study design	19
4.4.3. Eligibility criteria	19
4.4.3.1 Inclusion criteria	19
4.4.4. Data collection tools and procedure	19
4.4.5. Trust worthiness	20
4.4.6 Data analysis	21
4.5. Ethical Consideration	21
4.6. Dissemination of Results	21
5. Results	22
5.1. Quantitative part	22
Reasons for non-utilization of PNC services	25
Factors associated with postnatal care utilization	26
5.2. Qualitative part:	29
5.3. Integration of Quantitative and Qualitative Findings (points of convergence)	32
6. Discussion	33
7. Strength and Limitations	34
8. Conclusion and Recommendation	34
References;	37
ANNEXES	44
Annex I: English version Information Sheet	44

Annex II: English version Informed Consent	45
Annex III: English version questionnaire	45
Annex IV: Amharic version Information Sheet	53
Annex V: Amhari version informed consent:	53
Annex VI: Amhari version questionnaire:	54
Annex V: Siltigna version Information Sheet	61
Annex VI: Siltigna version informed consent:	61
Annex VII: Siltigna version questionnaire:	62

List of tables

Table 2: Socio demographic characteristics of women who gave birth in the last one year in East Azernet berbere district, Siltie Zone, Central Ethiopia,(n = 433)2025.....	22
Table 3: Obstetric characteristics of participants	24
Table 4: Factors associated with PNC utilization among mothers who gave birth in the last 12 months in East Azernet Berbere district, Central Ethiopia, 2025	27

List of figures

Figure 1 : Conceptual framework adapted from previous literatures on the factors that affect PNC utilization	2
Figure 2: Schematic presentation of sampling procedure of study on Utilization of PNC and associated factors among mothers who gave birth in the last 12 months in East Azernet berbere district, Siltie zone, Central Ethiopia, 2025	2
Figure 3: Over all PNC utilization and service recieved among mothers who gave birth in the last 12 months in East Azernet Berbere district, Central Ethiopia, 2025	2
Figure 4: <i>Reasons for not utilizing PNC services among mothers who gave birth in the last 12 months in East Azernet Berbere district, Central Ethiopia, 2025</i>	2

Abstract

Background: Postnatal care utilization, defined as receiving at least one check up within the first 42 days after delivery, is crucial for detecting maternal complications. However, globally and particularly in Sub-Saharan regions, a significant number of maternal mortalities occur in the postnatal period, reflecting serious gaps in PNC use. The postnatal period continues to be a time of heightened risk In Ethiopia, despite reduction in overall maternal mortality. Furthermore, PNC utilization in the country is still low. This indicates the need for further plan and intervention.

Objective: To assess the prevalence of PNC service utilization and associated factors among mothers who have given birth in the last 12 months in East Azernet Berbere district, Siltie zone, Central Ethiopia.

Methods: A mixed methodS study was conducted from February 15 to April 28, 2025. Quantitative data was collected from 433 women who gave birth within a year before the study using an interviewer-administered questionnaire. These women were selected through multistage sampling. Qualitative data was gathered from purposively sampled postnatal women, Health extension workers, and other health professionals working in the MCH departments of health facilities within the district, through in-depth interviews. Thematic analysis was used to analyze the qualitative data. For the quantitative data, SPSS version 27 was used for analysis, and logistic regression was used to determine associations. A p-value of <0.05 was used to declare statistical significance.

Results: Out of the 433 mothers who participated, the proportion of PNC utilization was 38.6% (95% CI: 34% – 43%). Factors that showed statistical significance with PNC utilization were women with a diploma or higher education, who experienced pregnancy complications, delivered via cesarean section, lived within 30 minutes of a health facility, or used maternity waiting homes, and house hold monthly income At P-value < 0.05 . Thes findings were supported by qualitative results, and showed lack of awareness, financial constraints, transportation difficulties, and social stigma were major barriers to PNC utilization.

Conclusion: PNC utilization in the study area remains low as compared to the WHO's recommendation for PNC coverage. Targeted interventions to educating the community, improving access to health services, and strengthening supportive environments are essential to enhance PNC use in rural Ethiopia.

Key words: Postnatal care, Utilization, Barriers, Maternal health, Mixed-method study, Central Ethiopia

1. Introduction

1.1. Background

PNC refers to the care that is tend to be provided to the mother and her baby during the postpartum period, by skilled health care professional. This care starts immediately after the birth of the baby and extends up to six weeks (42 days) postpartum according to WHO (1). WHO also states that, all postpartum woman, regardless of the location of delivery, should have at least four checkup visits during the postpartum period. These visits should be scheduled for the first 24 hours following delivery, day 3, days 7-14, and finally, the 42nd day following delivery. This structured approach facilitates comprehensive monitoring and care for both mothers and her baby (2).

PNC contains a variety of interventions focused at improving the health and wellness of the mother and the newborn(1,3). The Key components of PNC include; screening and management of maternal anemia, and nutritional counseling, promoting exclusive breastfeeding, and provision of modern contraceptive methods (4). PNC includes postpartum complication assesments like hemorrhage, infection, hypertension, and genital tract injuries, enabling timely identification and management of potentially life threatening conditions (5). Thus, robust postnatal care is fundamental to addressing complications, promoting healthy behaviors, and improving survival and quality of life for both mothers and their newborns (6).

Globally, postpartum periods contribute to the high numbers of maternal deaths. This happens particularly within the first 24 hours and first week after giving birth, the time on which immediate and skilled healthcare is required. Sub Saharan African countries, including Ethiopia, carry a disproportionately high percentage of this burden. For instance, a study conducted in Ethiopia in 2022 reported that 65.1% of all maternal deaths were occurred during the postpartum period. These deaths were predominantly linked to common postpartum complications such as hemorrhage, infections, hypertensive disorders, and perineal trauma(7). These deaths were, however, largely preventable through effective maternal health services, including high quality PNC (2,6,8).

Evidence has indicated that maternal health services, such as prenatal, postnatal, and delivery care, are helpful in reducing the morbidity and mortality rates of both mothers and newborns. These health services offer crucial health information for the best possible pregnancy outcomes and timely management of health issues. Expanding coverage of maternal care, that includes postnatal care, is one of the key steps towards eradicating preventable causes of maternal and newborn deaths (2,8,9).

1.2. Statement of the problem

Globally, an estimated 287,000 maternal deaths were occurred in 2020. Of these, Ninety-five percent of these deaths were documented in LMIC countries. A significant percentage of these deaths can be averted and prevented by appropriate medical interventions (9,10). Sub-Saharan Africa bears the highest distribution of maternal mortality, accounting for 70% of maternal mortality rates in developing countries (11). Maternal death rate in Ethiopia has decreased from 953 deaths per 100,000 in 2000 to 267 deaths per 100,000 in 2020. However, this number falls well short of the sustainable development goal's (SDG's) target for maternal health (12).

A great number of these maternal deaths can be prevented with the application of effective postnatal care. Yet the use of postnatal care remains appallingly low in the LMIC countries in spite of the attested importance of the intervention for mothers and their newborn (13,14). The combined prevalence for the utilization of postnatal care in the Sub-Saharan region is 52.48%, whereas the disparities range from 73.51% in the Central Africa region to as low as 31.71% in the East Africa region, in which the Republic of Ethiopia belongs (15). More current national studies in our country showed as around 36.8% of postpartum women used these PNC services, and this finding indicates a major gap in the care that has been delivered to the mothers and their baby (16).

The reported low PNC utilization in Ethiopia is further exaggerated by the existence of large disparities between rural and urban areas. Mothers residing in rural area are much less likely than their urban counterparts to have PNC services (17–20). The country statistics show PNC usage rates in rural areas of 28.85% and 47.93% for urban areas (21,22). Variables other than the location residence, and can affect PNC use include; limited awareness of danger signs that may indicate obstetric complications, social beliefs, low spouse's education, previous ANC contact,

and institutional delivery. These all factors can affect the ability of the women to reach and utilize the PNC service (16,23,24).

The Ethiopian government through Ministry of Health (FMOH), and Non-governmental Organizations (NGOs) has been implementing different interventions to prevent maternal and neonatal mortality and morbidity by launching different global and local strategies such as; community education programs, launching national PNC guidelines, deployment of health extension workers who identify mothers and provide antenatal and postnatal care services, and initiatives to widen PNC service provision to rural areas (25,26). Although all these efforts, as well as massive investment to curb maternal and newborn mortality and morbidity, the recent study finding that shows only around thirty-six percent of mothers accessing PNC services, is an evidence for the existence of a gap that has been remained untouched (16).

Although various studies have been conducted regarding Postnatal care utilization, the majority of them are quantitative, limited to the urban community, and give little emphasis to the qualitative understanding of the factors discouraging the utilization of PNC. Moreover, there has been little emphasis on the extent of Postnatal care utilization and the associated factors in the East Azernet Berbere district. This study will therefore address these concerns by assessing PNC utilization, the factors that contribute to the utilization, and the factors discouraging the utilization of PNC among women who have given birth within the last 12 months within the East Azernet Berbere district, Siltie Zone, Central Ethiopia, and will support the work towards reducing the morbidity and deaths associated with PNC underutilization in our country.

1.3. Significance of the study

Despite many studies conducted on the utilization of postnatal care (PNC) and factors associated with it among women in Ethiopia, to date, there is limited qualitative investigation of factors that inhibit the utilization of PNC, particularly in the rural areas. Moreover, to the best of our knowledge, there is no study conducted to measure the magnitude of PNC utilization, factors associated with it, and district specific factors in East Azernet Berbere, Siltie Zone.

This study proposes to fill these gaps by producing up-to-date and context-specific information on the use and determinant factors of PNC service for women who gave birth in the last 12 months in East Azernet Berbere woreda. By using both quantitative and qualitative methods, this study aims to gain an understanding on the level of use of PNC service and its associated facilitators and barriers in this largely rural area. producing context specific evidence for East Azernet Berbere woreda will be pivotal for planning and implementing appropriate and context specific interventions.

Our study finding will also play a critical role in informing policy makers that work at the district, zonal, regional, and national levels as they develop and improve, maternal and child health programs for enhanced PNC coverage, which will help to decline maternal and newborn mortality and morbidity. findings regarding barriers to PNC use can inform tailored activities to scale up PNC coverage and improve quality care.

In addition, this research will provide a basis for future studies and evaluations within the district, as well as other rural areas. it will also provide information that will help researchers, health care personnel, and other stakeholders wishing to evaluate trends related to maternal and child health care the utilization. Overall, it will help to produce broader improvements in maternity and child healthcare activities in rural and hard to reach parts of the country.

2. Literature Review

2.1. Postpartum care coverage

Globally, the use of PNC services by postnatal mothers is low, with just 69% of them receiving these services within the required time in 2023 (27). This is evidenced by a range of studies conducted in LMIC countries, indicating low utilization of PNC services (15,28,29).). For instance, a study undertaken in Nepal in 2023, just 47.3% of mothers have utilized the PNC services in the rural areas (30). In another setting, a multilevel analysis conducted in Tanzania demonstrated a significantly low use of PNC services, with just only 15.9% use (31).

Among the sub-Saharan African countries, the use of PNC is still alarmingly low, with a pool coverage rate of 52.48%. There are disparities in SSA, with the highest level of PNC use in the Central Africa region (73.51%), while the lowest use is recorded in Eastern Africa Region (31.71%) (15). A study conducted in Rwanda in 2022, one of the SSA states, showed a meager rate of access to full PNC care among postpartum mothers, which was 44.3% (32). A report published in Benin in 2018 also showed a PNC access rate of a mere 18.4% in the country, thus supporting the idea of poor use of PNC care in the region (33). Additionally, A study in Nigeria in the year 2021 showed a noticeable non-use of PNC care, which was about three-quarters or 75.8% of respondents (34).

In Ethiopia, According to a 2020 multilevel analysis, only 36.8% of postnatal women received PNC services within six weeks of delivery (16). Studies from different regions of the country also revealed similar trends in PNC use. For instance, A 2021 study in East Gojjam zone found a PNC service utilization rate of 34.6% (35), and a more recent study in Aysaeta district, Northeast Ethiopia reported that only less than half (45.1%) of the postpartum mothers have received PNC service following their most recent delivery(24).

2.2. Factors Associated with Postnatal Care Utilization

2.2.1. Socio-Demographic and economic factors

Age significantly affects PNC utilization. Various literatures showed as there is a direct relationship between women's age and PNC utilization. For example, a study in Ghana found

that mothers aged 25-39 years were seven times more likely to use PNC than those under 25 (36). Similar study from Afghanistan also reported that mothers with ages between 30–39 were 1.6 times more likely to utilize PNC compared to those with the age of less than 20 years(37). However, in Ethiopia, according to Study conducted in Hawasa zuriya woreda, younger mothers (below 25 years) were more likely to utilize early postnatal-care services compared to those above 35 years (38).

Education is another critical factor. A number of literatures revealed that women with higher educational level were more likely to receive postpartum care services. For instance, a cross-sectional study carried out in Northern Ethiopia found that mothers with more than secondary education were three times more likely to utilize PNC than illiterate women (39). Similar trends were observed in Bangladesh and Sierra Leone(40,41). Husband's education also positively impacts PNC utilization, with literate husbands being more likely to ensure their wives receive PNC. A recent study from Hyolmo community of Nepal reported that, more than half (66.2%) of mothers with literate husbands had received postnatal care, while only 33.8% of mothers with illiterate husbands utilized PNC (42).

Economic and employment status are significantly associated with PNC utilization. Mothers with higher monthly income were found to be more likely to utilize PNC services. According to a study conducted in Dessie town, Northern Ethiopia, mothers earning more than 1500 ETB were more likely to use PNC services than those with lower incomes (39). Additionally, a report from Malawi revealed that, working mothers were 1.44 times more likely to be checked by a health professional within 42 days of delivery than those who did not have a job(43).

Location of residence was also found to have a significant effect on PNC utilization. According to the study conducted in South Gondar Zone District, Mothers who live in urban areas were five times more likely to have early utilization than those living in rural areas(44). Another study also reported that mothers who resided in urban areas were 3.69 times more likely to use postnatal-care services compared with those who resided in rural areas (24).

2.2.2. Cultural and social norms

Cultural and social norms also play a vital role in PNC utilization. Social support from spouses significantly impacts women's PNC use. A study conducted in rural Myanmar revealed that

mothers who received support from their spouses to use PNC were 2.19 times more likely to utilize full PNC than those who did not receive male involvement(45). However, since reproductive health has been viewed as only a woman's issue, partner involvement remains as a major challenge in developing countries, including Ethiopia(46).

2.2.3. Healthcare facility accessibility

Distance to healthcare facility was found to impact PNC utilization, with mothers living closer to facilities being more likely to use PNC services. For instance, a 2020 report from Adigrat town, Northern Ethiopia, revealed that mothers who travel less than a one hour distance on foot to get services were five times more likely to use early PNC than those who travel more than one hour (47). A similar report from Uganda also found out that postnatal care services were more likely to be utilized by mothers who resided in less than one kilometer from the health care facility as compared to mothers who travelled long distances(48).

2.2.4. Obstetrics related factors

Mode of delivery have a significant association with PNC service utilization. Mothers who gave birth through instrumental vaginal delivery were two times more likely to use early PNC service than their counterparts(44). Similarly, mothers who gave birth by cesarean section were 4.8 times more likely to get postnatal care services than those mothers who gave birth by spontaneous vaginal delivery (49).

Place of delivery also matters, with mothers who gave birth in health facilities being more likely to use PNC services than those who delivered at home. For instance, a Study conducted in Dessie town found that mothers who gave birth in a health facility were 3 times more likely to use PNC services than those who gave birth at home(39). Another research also revealed that, Compared to mothers who gave birth at home, those who gave birth in a medical institution and whose pregnancy was supported were 5.91 times more likely to use postnatal care services(24).

Antenatal care follow-up also increases the utilization of PNC. A 2022 study demonstrated that mothers who attend ANC follow-up were twice as likely to use early PNC compared to those who did not attend ANC follow-up (50). Likewise, a 2020 meta-analysis revealed that women with ANC visits were 1.53 times more likely to receive PNC services compared with those who did not attend ANC during pregnancy (51).

The reviewed literatures in general showed that the usage of postnatal care services is still low in most low- and middle-income countries, especially in sub-Saharan Africa. Various socio-demographic factors, cultural beliefs, and healthcare-related variables, including maternal education level, financial capability, area of residence, supportive partner presence, proximity to healthcare facilities, and maternity-related factors, have been recognized as significant determinants of the use of PNC. However, considerable regional and contextual disparities persist, with rural and less-educated women being disproportionately underserved. Despite global and national efforts to expand maternal health services, many mothers still fail to receive PNC within the critical postpartum period. These gaps highlight the need for further context-specific research to identify effective strategies for improving PNC coverage and equity.

2.3. Conceptual Framework

This conceptual framework was modified based on a review of various studies concerning postnatal care utilization and associated factors(30–42,52). It highlights multiple factors that influence postnatal care utilization. The framework includes maternal socio-demographic factors, obstetric Characteristics, Family Characteristics, socio-cultural factors, healthcare facility accessibility, and the outcome variable PNC utilization.

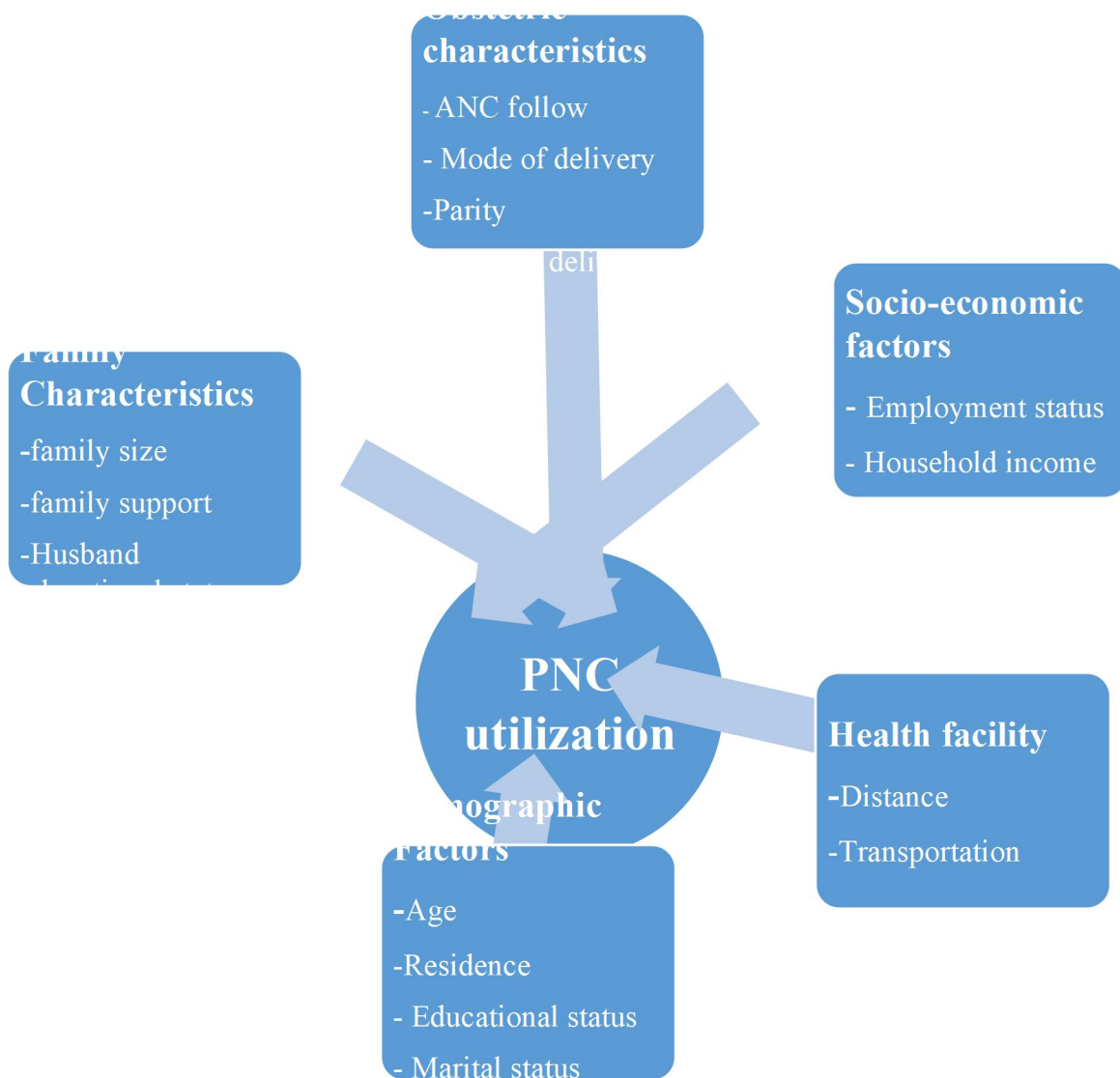


Figure 1 : Conceptual framework adapted from previous literatures on the factors that affect PNC utilization

3. Study objectives

3.1. General Objective

- To assess the prevalence of PNC utilization and associated factors, and to explore barriers to PNC utilization among mothers who have given birth in the last 12 months in East Azernet Berbere district, Silite zone, Central Ethiopia

3.2. Specific objectives

- To assess the prevalence of PNC utilization among mothers who gave birth in the last 12 months in East Azernet Berbere district, Silite zone, central Ethiopia.
- To identify factors associated with PNC utilization among mothers who gave birth in the last 12 months in East Azernet Berbere district, Silite zone, Central Ethiopia.
- To explain qualitatively barriers to PNC utilization among mothers who gave birth in the last 12 months in East Azernet Berbere district, Silite zone, central Ethiopia.

4. Methods

4.1. Study Area

The study was conducted in East Azernet Berbere district, which is found in Siltie zone, Central Ethiopia. It is bordered on the south by the Hadiya Zone, on the west by Mirab Azernet Berbere woreda, on the northwest by Gurage Zone, on the northeast by Alichu Werero woreda, and on the east by Wulbareg woreda. It is located 172km south west of Addis Ababa, and around 40 KM away from Worabe town, the capital of Siltie zone. The district is predominantly rural, with a population relying mainly on subsistence farming. According to the Ethiopian National statistical service's data, as of July 2023, the total population size of the district was about 133,105 and among them 67,903 were females and 65,202 were males(53). The district has Twenty one Kebeles, four health centers and 21 health posts(54). The study was conducted from February 15 to April 28/2025.

4.2. Study design

This study employed a mixed-methods design. The quantitative component was used to determine the prevalence of postnatal care utilization, while the qualitative component explained the barriers influencing women's postnatal care service utilization.

4.3 Quantitative Part

4.3.1 Study design

Community based cross sectional study design was used in order to determine the prevalence of postnatal care utilization among mothers who have given birth in the last 12 months in E.Azernet Berbere district, Central Ethiopia, 2025.

4.3.2 Population

4.3.2.1 Source population

All women of reproductive age residing in East Azernet Berbere District, Siltie Zone, Central Ethiopia, who had given birth within the last 12 months preceding the study

4.3.2.2 Study population

All women residing in East Azernet Berbere District, who have given birth within the past 12 months prior to the study period, who met the inclusion criteria and were available during the study period (living in selected kebeles).

4.3.2.3 Sample population

A randomly selected postpartum women from the identified eligible list in the selected kebeles of East Azernet Berbere District.

4.3.3. Eligibility criteria

4.3.3.1. Inclusion criteria:

- Women aged 15–49 years who delivered within the last 12 months.
- Permanent residents of the district (living there for ≥ 6 months).
- Willing to participate and provide informed consent.

4.3.4. Sample size determination and sampling techniques

4.3.4.1. Sample size determination

The sample size for the quantitative part was calculated using a single population proportion formula with the assumptions of;

- Proportion of postnatal care utilization; 23.9% ($P = 0.239$) taken from the previous study conducted in Southern Ethiopia (55),
- 95% CI ($\alpha = 0.05$, $Z = 1.96$)
- 5% Margin of error ($d = 0.05$)

$$n = \frac{Z_{\alpha}^2}{d^2} * P * (1 - P)$$
$$n = \frac{1.96^2}{0.05^2} * 0.239 * (1 - 0.239) = 279.5 \approx 280$$

Since multistage sampling was applied, a design effect of 1.5 was used:

$$n = 280 * 1.5 = 420$$

By adding 5% non-response rate, the final sample size;

$$n = 420 + (420 * 0.05) = 441$$

Thus, the final sample size was 441 women.

4.3.4.2. Sampling technique

A stratified multistage sampling technique was used. In the first stage, the district was stratified into four catchment areas (Kilto, Wero, Adazer, and Emejar). According to the 2023/2024 MCH department data of East Azernet Berbere woreda health office, a total of 2,714 mothers gave birth in the last 12 months in the district (Kilto 1126, Wero 531, Adazer 831, and Emejar 221).

Then the total number of postnatal mothers ($N = 2,714$) was stratified by catchment area. The sample size for each stratum was then determined using proportionate allocation:

$$n_i = \left(\frac{N_i}{N} \right) * n$$

Where n_i is the sample size for stratum i , N_i is the population size for stratum i , N is the total population size (2,714), and n is the total sample size (441). Using this formula:

- Kילו catchment: $n_1 = \left(\frac{1126}{2714} \right) * 441 \approx 183$
- Wero: $n_2 \approx 86$
- Adazer: $n_3 \approx 135$
- Emejar: $n_4 \approx 36$

And each catchment contains several kebeles. Kילו, 9; Wero, 4; Emejar, 2; and Adazer, 6; kebeles. Because it was not feasible to include all kebeles for financial, transport, and time reasons kebeles were selected by simple random sampling; 4 kebeles from Kילו Catchment, 2 from Wero, 3 from Adazer, and 1 from Emejar.

The catchment-level sample sizes were then allocated to the selected kebeles by equal allocation within each catchment:

- Kילו (with 4 selected kebeles): $183 \div 4 \approx 42$ mothers per selected kebele,
- Wero (with 2 selected kebeles): $86 \div 2 \approx 40$ mothers per selected kebele,
- Adazer (with 3 selected kebeles): $135 \div 3 \approx 41$ mothers per selected kebele, and
- Emejar (with 1 selected kebele): $36 \div 1 \approx 36$ mothers.

In each selected kebele, a sampling frame was developed by listing all households and identifying those with mothers who had given birth in the last 12 months. Maternity registry books from the health posts were used to verify and complete this list. From this sampling frame, systematic random sampling was applied to select the required number of mothers in each kebele. The sampling interval (k) for each kebele was calculated by dividing the total number of eligible mothers by the allocated sample size for that kebele.

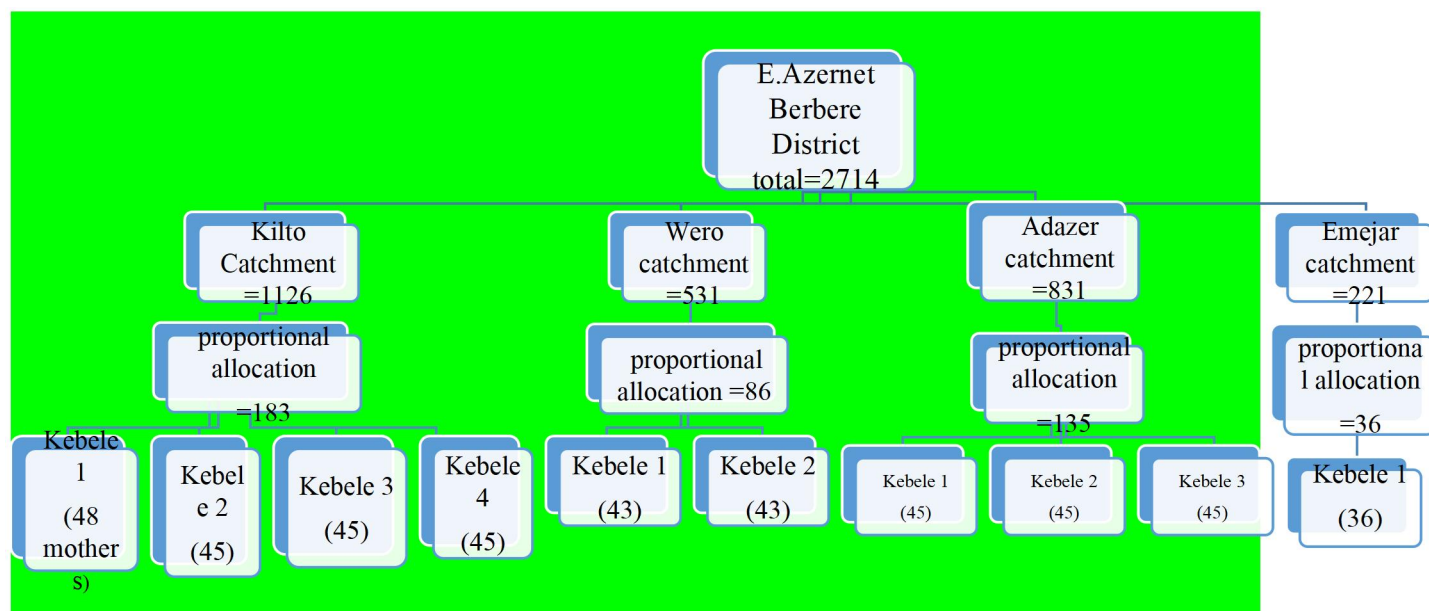


Figure 2: Schematic presentation of sampling procedure of study on Utilization of PNC and associated factors among mothers who gave birth in the last 12 months in East Azernet berbere district, Siltie zone, Central Ethiopia, 2025

4.3.5. Study Variables

4.3.5.1. Dependent Variable

- Postnatal care utilization

4.3.5.2. Independent variables

Socio-Demographic Variables:	Family Characteristics	Obstetric characteristics;	Socio-cultural factors
- Age - Residence - Educational status - Marital status - Monthly income	- Family size - Family support - Husband Occupational status - Husband educational status	- Parity - ANC follow up - Mode of delivery - Place of delivery	- Cultural beliefs - Social norms

4.3.6. Operational definitions

Postnatal period- is a time frame that starts right after the baby is born and lasts for up to six weeks (42 days) (1).

Postnatal care utilization- is when women use postnatal care services, including medical check-ups, counseling, and other necessary treatments, at least once in health facilities within 42 days after giving birth(1).

Early postpartum care: A postnatal care which is given during the early postpartum period (within 7 days after delivery)(50).

Skilled health personnel- Is a health professional that is trained in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns(56).

Catchment area: refers to a group of kebeles (the smallest administrative units) that are all served by a single health center(54).

4.3.7. Data collection material and methods

4.3.7.1. Data collection tools

After reviewing of the relevant literature, the questionnaire was adopted & modified as appropriate to address the study objectives. For the Quantitative part, a structured interviewer administered questionnaire which was developed and adopted by principal investigator from different literatures(35,57) was used to collect data from the study participants. The questionnaire was designed in English and translated in to Amharic and Siltigna language by principal investigator, and then translated back to English by a third person to check for consistency. The tool has four sections; the first section consists of Socio-demographic information: This section gathers information about the background and demographics of the participants; the second section consists of Obstetrics characteristics; the third section consists of Health facility characteristics, and the fourth section contains PNC Knowledge related characteristics.

4.3.7.2. Data collection methods

The data collection process was facilitated by the principal investigator to gather information from the study participants. This process took place from February 15 to April 28/2025. Five

clinical nurses were participated in the data collection, under the supervision of one designated supervisor.

The data collectors and supervisors were trained by the principal investigator before data collection, about the objectives of the study and how to collect the data. The data was collected through interviewer administered questionnaires at the respondent's home maintaining privacy. Before the start of the interview, the data collectors clearly communicated that participation in the study was voluntary and no incentive were given. From each respondent, data was collected considering both independent and dependent variables of the study.

4.3.8. Data quality assurance

A comprehensive set of data quality assurance methods were implemented to ensure the integrity of the data throughout the various stages of the research process. Initially, the questionnaire was translated from English into Amharic, and then to Siltigna, and subsequently back into English by two independent individuals to verify consistency. The data gathering tool was pre-tested in another district (Alicho woreda). Based on the result, possible revisions were made. For the pretest, around ten percent, which is 41 participants, were included. Furthermore, for accurate collection of the data, a one day orientation was given for the data collectors and supervisors. During data collection, data was checked for its completeness, and missing information at each point by both principal investigator and data collectors themselves. In addition, data was rechecked during data entry into the computer software before analysis, and also dummy table were prepared to prevent missing of important data.

4.3.9. Data processing and analysis

After the data collection, the questionnaires was checked for completeness and any missing information. The data was then entered into and analyzed with SPSS version 27. The data was rechecked for accuracy during data entry to prevent errors. Dummy tables were prepared to ensure that no important data is missed. The data was described using frequency, percentage and/or cross-tabulation for categorical variables.

Bivariate logistic regression was used to select candidate variables for multivariable logistic regression. Variables with a p-value ≤ 0.2 was included in the multivariable logistic regression model. Multivariable logistic regression was then conducted to identify factors associated with PNC utilization. Finally, variables with the a P-value ≤ 0.05 and 95%CI in the multivariable

logistic regression were considered statistically significant. Adjusted odds ratios were used to determine the strength of association between outcome and independent variables.

4.4. Qualitative Part

4.4.1. Study design

Explanatory qualitative study was used to explain barriers that influence PNC utilization

4.4.2. Study participants

The study participants were mothers who gave birth in the last 12 months in E.Azernet Berbere district, and health care providers working in MCH departments of government health facilities in E.Azernet Berbere district. They were selected on account of the researcher's assessment of people that are representative of the study phenomenon, and based on the ability of the participant to provide sufficient information. Finally, a total of twelve postpartum women, and eleven health professionals were recruited.

4.4.3. Eligibility criteria

4.4.3.1 Inclusion criteria

- All women who are residents of East Azernet Berbere district, willing to participate in the study and have given birth in the last 12 months
- All health professionals working in MCH departments of government health facilities in E.Azernet Berbere district, and willing to participate in the study.

Sample size determination:

A purposive sampling technique was used to select participants for the qualitative part. The sample included both postpartum mothers and health care providers working in MCH departments within East Azernet Berbere district. The final sample size was determined by data saturation. Finally, Saturation was reached after conducting a total of twenty three (23) in-depth interviews, comprising twelve postpartum women and eleven health professionals.

4.4.4. Data collection tools and procedure

A face-to-face in-depth interview (IDI) that was guided by a semi-structured questionnaire was employed. The semi-structured questionnaire was modified and developed after reviewing relevant literatures(35,57). The questionnaire (interview guide) was prepared in English and

translated first into Amharic, and then in to local Siltigna language. And finally translated back to English by two independent individuals to check for consistency.

Throughout the interviews, probes were used to offer clarification and encourage elaboration from the participants on specific issues or topics that are domains of interest to the researcher. Instead of relying on the number of participants, the research was focused on the quality of information from the participants and different perspectives and opinions of participants.

Postpartum mothers and health care providers who met the eligibility criteria were contacted through the supervisor to discuss the purpose of the study, and requested participation in the study. The researcher was ensuring that all study participants who agreed to take part in the interviews were reminded of the purpose of the study, expected benefit, their right to withdraw from the study and protection of confidentiality before they signed consent forms. With participant approval, face-to-face interviews were used and audio-recorded prepared for analysis, which ensures a complete transcript and notes to capture the original accounts of the participant's responses. We saw nonverbal clues from participants' actions, using this strategy, gave us a rich form of data. The interview guide contained a set of questions with probes to help drive the interview in a conversational manner in a specific direction. The interviews were held at their homes for postpartum women, and at their offices for health care providers.

4.4.5. Trust worthiness

Credibility

To ensure credibility, the researcher discussed data coding, data analysis, and interpretations continuously throughout the research process with peers. Member checking with participants was also carried out by probing questions, and these occurred by reiterating statements made by participants.

Dependability

Reviewing the audio recording and writing notes allowed facilitation to confirm the manual transcription. The procedure of data collection, processing, and study findings were assessed by peers who did not participate in data analysis.

Transferability

The investigator provided details to explain the entire research procedure, starting from data collection to the final report.

Conformability

In order to achieve conformability, field notes were taken; furthermore, each interview was tape-recorded, therefore the raw data is available. By refining the data collection instrument in the course, by using codes and categorization and by developing themes from the coded data, the data was analyzed without personal biases by using participants' own words instead of the researchers' opinions and biases.

4.4.6 Data analysis

The audio recordings from the in-depth interviews were transcribed verbatim. Then the transcribed data was analyzed through thematic analysis. Initially, familiarization with the data was achieved by reading and re-reading the transcripts. Next, using deductive coding approach, codes were developed to identify and categorize the data into significant segments. Then, these codes were organized into broader themes. The identified themes were interpreted to provide a comprehensive understanding of the barriers and facilitators related to PNC utilization. Finally, triangulation of the data was employed to compare and integrate the qualitative findings with the quantitative results, and to provide a more holistic picture of PNC utilization and its associated factors.

4.5. Ethical Consideration

Ethical clearance was obtained from School of Nursing and Midwifery Research Ethics Committee. The letter was then sent to E.Azernet Berbere woreda health Bureau, and to each of the selected kebeles. At each of the selected study kebeles, officials were contacted for consent prior to data collection. Then the data Collectors have explained purpose of the study, procedures to be carried out, expected benefits, compensation, and confidentiality of information for the study participants, and finally obtained an informed consent from the study participants. The names of participants were replaced by codes, to assure anonymity and confidentiality.

4.6. Dissemination of Results

The final thesis will be presented to Addis Ababa University, College of Health Science, school of Nursing and Midwifery, Department of Midwifery as partial fulfillment of the requirements for Masters of Science in Maternal and Reproductive Health Nursing. In addition, the results of the study will be disseminated through provision of hard copies to the concerned bodies,

presentation on professional conferences and putting the result documents in the libraries and through publications in scientific journals.

5. Results

5.1. Quantitative part

Socio-demographic characteristics

A total of 433 women completed the questionnaires, resulting in a response rate of 98.1%. Roughly 45% of the participants were in the age group 25–29 years and the minimum and maximum ages were 17 and 43 years, respectively, with a mean age of 27.7 (± 4.2) years. Three hundred ninety eight (92%) of the respondents were married, and nearly one-quarter (25.4%) of them achieved elementary education. The majority of the respondents (55.4%) were housewives. (Table 2)

Table 2: Socio demographic characteristics of women who gave birth in the last one year in East Azernet berbere district, Siltie Zone, Central Ethiopia,(n = 433)2025.

Variables	Categories	Frequencies	Percentages (%)
Age (in years)	< = 24	88	20.3
	25-29	194	44.8
	30-34	105	24.2
	35 and above	46	10.6
Marital status	Married	398	91.9
	Divorced	28	6.5
	Widowed	7	1.6
Maternal educational status	Cannot read and write	56	12.9
	Can read and write only	73	16.9
	Elementary school	110	25.4
	Secondary school	107	24.7
	Diploma /degree	87	20.1

Maternal occupation	House wife	240	55.4
	Farmer	27	6.2
	Merchant	106	24.5
	Government employee	60	13.9
Husband educational status	Cannot read and write	47	10.9
	Can read and write only	96	22.2
	Elementary school	117	27.0
	Secondary school	91	21.0
	Diploma /degree	75	17.3
Husband occupation	Farmer	256	59.1
	Merchant	99	22.9
	Government employee	62	14.3
	Daily laborer	16	3.7
House hold monthly income(ETB)	< 2000	57	13.2
	2000-4000	99	22.9
	4001-6000	238	55.0
	> 6000	39	9.0

Obstetric characteristics of participants

Nearly half (48.3%) of the respondents were multi parous in terms of their parity. More than three-quarters (77.6%) of the current pregnancies were planned and supported. Almost all of the mothers had antenatal care follow-up during the last pregnancy, among them only 111 (25.6%) of mothers had complete ANC visit. Regarding to the mode of delivery, most respondents 306 (70.7%) have given birth through spontaneous vaginal delivery. About three-fifths (59.6%) of the respondents were unaware of the availability of PNC services and more than half (57.3%) were unaware of postpartum maternal danger signs ([Table 3](#))

Table 3: Obstetric characteristics of participants

Characteristics	Category	Frequency	Percentage %
Parity	Primi para	139	32.1
	Multi para	209	48.3
	Grand multi para	85	19.6
Pregnancy	Planned	336	77.6
	Unplanned but wanted	97	22.4
ANC Visit status	Incomplete	322	74.4
	Complete	111	25.6
Advices on PNC during ANC Visits	Yes	342	79.0
	No	91	21.0
Mode of delivery	Spontaneous vaginal delivery	306	70.7
	Instrumental delivery	46	10.6
	Cesarean section	81	18.7
Experienced complications during pregnancy	Yes	92	21.2
	No	341	78.8
Counseled on maternal danger signs	Yes	185	42.7
	No	248	57.3
Know the availability of PNC service	Yes	175	40.4
	No	258	59.6
Have you been Admitted to maternity waiting home	Yes	181	41.8
	No	252	58.2

Proportion of postnatal care utilization:

From total respondents, 167 (38.6%) mothers utilized postnatal care services with confidence interval of (34%–43%). Among them 24 (14.4%) participants had one PNC visit, 105 (62.9%) women had two PNC visit, and the remaining 38 (22.8%) were having three or more PNC visits within six weeks after delivery.

Regarding types of service received during the postnatal visit, slightly more than two-third (68.9%) of the respondents got general health checkups, nearly one-fifth (18%) of them got counseling on postpartum danger signs, and the remaining 22 (13.2%) respondents used family planning services (**Figure 3**)

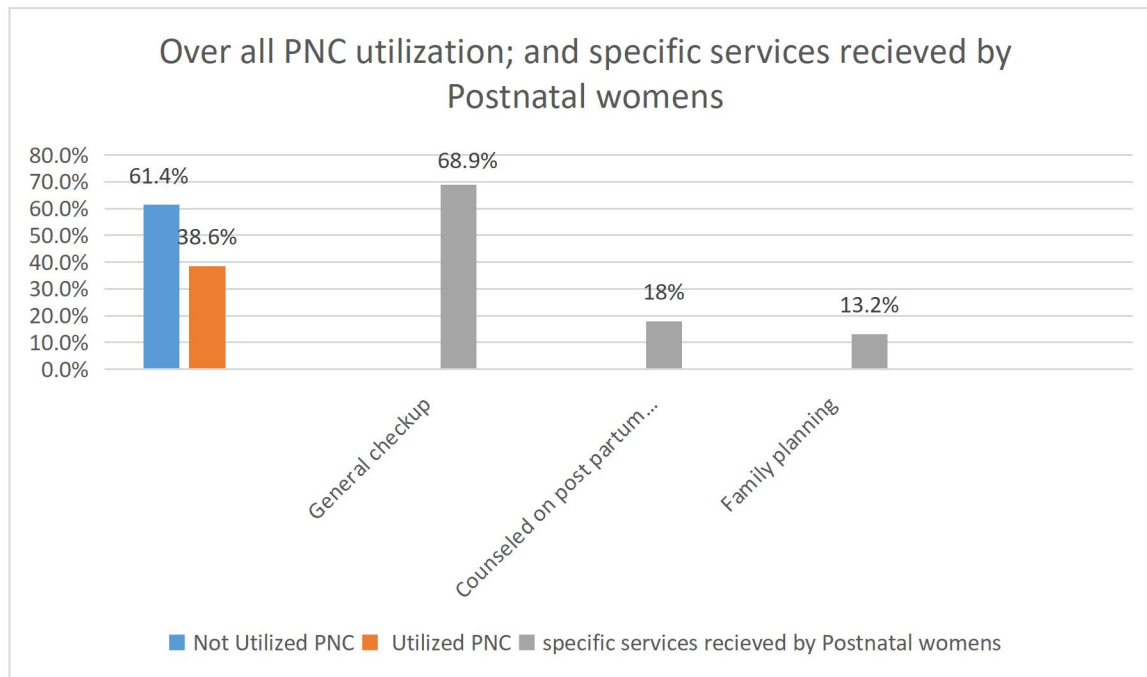


Figure 3: Over all PNC utilization and service received among mothers who gave birth in the last 12 months in East Azernet Berbere district, Central Ethiopia, 2025

Reasons for non-utilization of PNC services

Different reasons were given by the participants for not attending postnatal care services. The most common reason mentioned by the participants for missing postnatal care service was feeling fine (healthy) (41.4%). (**Figure 4**)

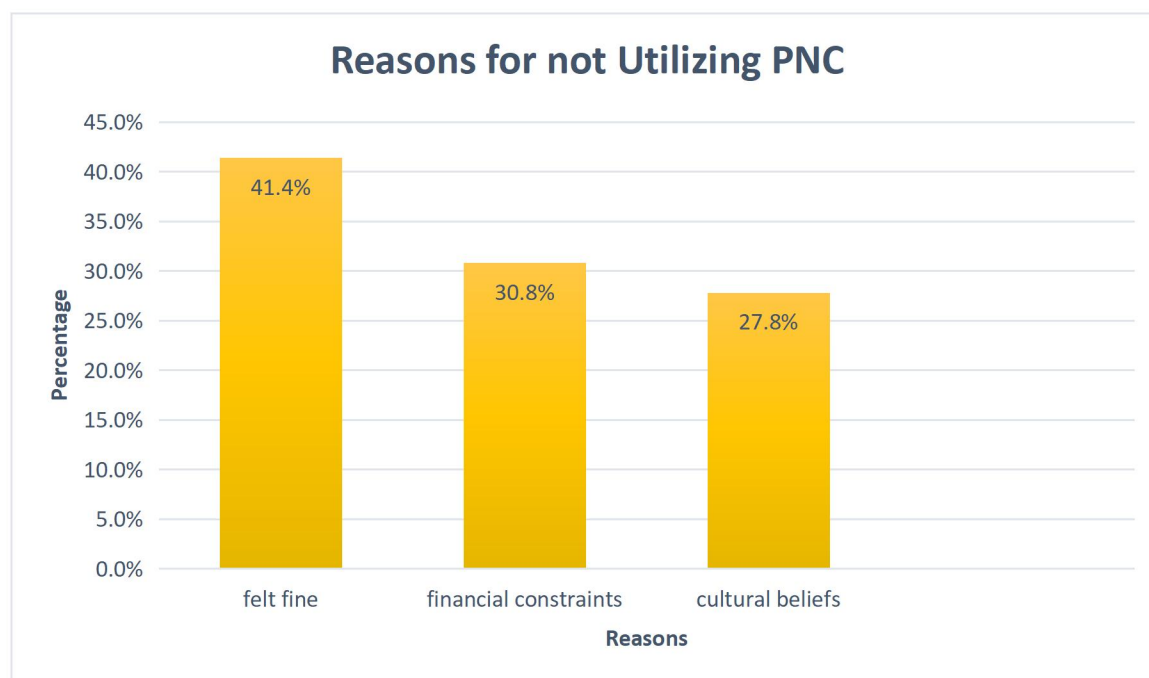


Figure 4: *Reasons for not utilizing PNC services among mothers who gave birth in the last 12 months in East Azernet Berbere district, Central Ethiopia, 2025*

Factors associated with postnatal care utilization

During bivariable logistic regression analysis, those variables that had association were educational status of the mother, marital status, educational status of the husband, occupation of the mother, mode of delivery, complications during pregnancy and delivery, distance from health facility, PNC counseling during ANC, monthly income, and maternity waiting home admission.

In multiple logistic regression analysis, all variables with p values less than 0.2 were entered. Only educational status of the respondents, having pregnancy complications, mode of delivery, distance from the nearest health facility, monthly income, and maternity waiting home use were found to have a significant association with postnatal care service utilization.

Accordingly, those women with educational status of diploma and above were 3.8 times (AOR = 3.8, 95% CI: 1.4-10) more likely to utilize PNC service than those women who could not read and write. Those mothers who had experienced pregnancy complications were 3.9 times more likely to utilize PNC service than those women who have not experienced complications (AOR = 3.9, 95% CI: 2.1-7.4). Mothers who gave birth through C/S were 4.4 times more likely to utilize PNC services than those mothers who gave birth through

spontaneous vaginal delivery (AOR= 4.4, 95% CI: 2.2-8.6). Those mothers who reside less than 5 KM (30 min walk) away from the health facility were 3.3 times more likely to utilize PNC services than those who reside >5km away from the health facility (AOR = 3.3, 95% CI: 1.8-5.9). Moreover, Mothers who have been admitted to maternity waiting homes during last pregnancy were 1.7 times more likely to utilize PNC than those who were not admitted (AOR = 1.7, 95% CI: 1.0-3.3) (**Table 4**)

Table 4: Factors associated with PNC utilization among mothers who gave birth in the last 12 months in East Azernet Berbere district, Central Ethiopia, 2025

Variables	Categories	PNC		COR (95% CI)	AOR (95%CI)
		No	Yes		
Educational status of mothers	Cannot read and write	40	16	1	1
	Can read and write only	64	9	0.4 (0.14, 0.87)	0.454 (0.1, 1.2)
	Elementary school	75	35	1.2 (0.6, 2.4)	2.3 (0.9, 5.8)
	Secondary school	55	52	2.4 (1.2, 4.7)	2.6 * (1.0, 6.5)
	Diploma /degree	32	55	4.3 (2.1, 8.9)	3.8 * (1.4, 10)
Educational status of husband	Cannot read and write	40	7	1	1
	Can read and write only	68	28	2.4 (0.9, 5.8)	1.9 (0.6, 6.1)
	Elementary school	66	51	4.4 (1.8, 10.7)	2.6 (0.8, 7.7)
	Secondary school	53	38	4.1 (1.7, 10)	1.9 (0.6, 6.2)
	Diploma /degree	32	43	7.7 (3.1, 19)	2.7 (0.8, 9.3)
Occupation	House wife	156	84	1	1
	Farmer	15	12	1.5 (0.7, 3.3)	3.3 (1.1, 9.9)*
	Merchant	73	33	0.8 (0.5, 1.4)	0.9 (0.5, 1.8)
	Government employee	22	38	3.2 (1.9, 5.8)	0.8 (0.4, 2.1)
Monthly	<2000	48	9	1	1

income	2000-4000	69	30	2.3 (1.0, 5.3)	0.9 (0.297, 2.6)
	4001-6000	132	10 6	4.3 (2.0, 9.1)	2.9 (1.1, 8.1) *
	> 6000	17	22	6.9 (2.7, 17.9)	4.69 (1.38, 15.9) *
ANC Status	incomplete	188	13 4	1	1
	Complete	78	33	0.6 (0.4, 0.9)	1.3 (0.7, 2.4)
PNC Counseling during ANC	Yes	194	14 8	2.9 (1.7, 5.0)	1.4 (0.6, 3.1)
	No	72	19	1	1
Complication during Pregnancy	Yes	33	59	3.8 (2.4, 6.3)	3.9 * (2.1, 7.4)
	No	233	10 8	1	1
Mode of delivery	Spontaneous vaginal delivery	200	10 6	1	1
	Instrumental delivery	32	14	0.8 (0.4, 1.6)	1.8 (0.7, 4.8)
	Cesarean section	34	47	2.6 (1.6, 4.3)	4.4 * (2.2, 8.6)
PNC Appointment	Yes	148	11 0	1.5 (1.0, 2.3)	0.9 (0.5, 1.8)
	No	118	57	1	1
Distance from nearest Health facility	30minutes	119	12 5	3.6 (2.4, 5.6)	3.3 (1.8, 5.9) *
	> 30 minutes	147	42	1	1
Counseled on PN maternal Danger signs	Yes	94	91	2.2 (1.5, 3.3)	3.9 (2.2, 7.0) *
	No	172	76	1	1

Maternity waiting home use	Yes	99	79	1.5 (1.0, 2.2)	1.7 (1, 3.3) *
	No	167	88	1	1

PN: Post natal

*: Significant at p-value < 0.05

5.2. Qualitative part:

23 participants took part in the qualitative interview. Among them twelve participants were postpartum women, and the remaining 11 were health professionals. The data was analyzed to identify the facilitators and barriers to PNC service utilization. The analysis have produced two main themes; and five sub-themes.

THEME 1: Barriers to PNC Utilization

Sub-theme 1: Financial Problems

Economic constraints were commonly reported barriers to PNC uptake. A 32 years old para 2 mother said: “..... *I live around 8 km away from the health center, which is too far to walk. I need money for transportation, but our farm income is too low, it doesn't even cover basic household expenses. So, getting money for PNC visits is difficult. That's why I often stay at home and skip these services...*” (PM-IDI 01). Another 31 years old para 3 mother also have stated: “...*The road to the health center is rough—mountains, ups and downs. Drivers ask for 80 ETB, which I can't afford. Because of that, I usually skip PNC visits.*” (PM-IDI 04).

One health Extension worker also supported this idea and said that; “... *Poverty and distance are the most common barriers. Many families can't afford transport. Even if the health post is nearby, some services are only available at the health center, which may be 10–15 km and costs them around 90-100 ETB...*” (HEW-IDI 2). These accounts are consistent with the quantitative finding that 30.8% of women cited lack of money for transportation as a reason for not utilizing PNC services.

Sub-theme 2: Shame:

Social stigma and fear of judgment also emerged as significant factor that hinder PNC utilization. One participant, aged 37 and para 4, shared that: “... *In our community, no one goes to the health center just for PNC. One day, I was asked by my neighbors where I was going, and when I told them, they laughed and said, ‘Don’t you have work to do? Look after your children and husband.’ After that, I stopped going, fearing their judgment.*” (PM-IDI 05). Another 25 years old para 1 mother said: “...*We currently live with my husband’s mother. I feel ashamed to talk about PNC services like family planning with her.*” (PM-IDI 02). These narratives illustrate how cultural expectations and family dynamics can lead to embarrassment and prevent women from seeking essential postpartum care.

Sub-theme 3: Lack of Awareness

Low awareness and misconceptions about the importance of PNC also hinders PNC utilization. A woman aged 39, para 4, said that: “...*I don’t know what PNC is. I hadn’t even heard about it at all. I don’t think it’s necessary to go to the health center unless something is seriously wrong.....*” (PM-IDI 06). A midwife working in a local health center also supported this idea saying that; “... *There are many reasons why women don’t use PNC. First, there is low awareness, they don’t know the importance of follow-up after delivery. Most believe care is only needed if the mother or child becomes sick. otherwise they don’t come at all...*” (MW-IDI 02). This reflects a gap in community level health education. The quantitative findings support this, showing that a large proportion of women (41.4%) who did not seek PNC services reported feeling healthy, and they don’t think it is necessary.

THEME 2: Facilitators to PNC Utilization

Sub-theme 1: Creating a Supportive Environment

A conducive environment was identified as one of the main enablers of the use of PNC services. The need for building a good relationship and gaining trust of mothers was a factor highlighted by health care providers. A midwife respondent was quoted: “*If can build a good relationship with the mother, gain their trust, and receive them with a respect and good face, surely they will be back without any type of fear and hesitation. I think this type of approach gives them the*

freedom to access our services whenever they need them. Trust creates a positive attitude towards healthcare facilities and health providers.” (MW-IDI 01). This shows that both good relationship and the way health care providers interact with mothers have an impact on mothers returning for PNC services.

Support from the family was another mentioned key factor that enabled the respondents. For instance, a 30-year-old Para-1 mother shared her experience and said, “... *Due to my husbands support and appreciation i usually goes to health facilities to get necessary check ups during my postpartum periods. If he wouldn't support me, I won't be able to utilize these services. He also assists me with house works, taking care of the children and the livestock, especially when I am pregnant and after giving birth. That is why I always access the necessary health care services on time....*” (PM-IDI 03). This implies that support from the family, particularly the husband, is vital and enables the postpartum mothers to get the necessary care on time.

Sub-theme 2: Collaborative Work

Collaboration also promotes better utilization. If the health care providers work in collaboration with the community members, there would be a good improvement in PNC use. For instance, one participant women identified the shared efforts on health education and said: “...*Most of time we became happy when the youth of the community, elders and local respected people collaborate with health extension workers and teach us about essential maternal health topics. We understand better when local figures are involved, we became comfortable to ask questions and clarifying our doubts...*” (PM-IDI 04). This is indicative of making use of trusted figures within the community in health promotion in order to enhance understanding and utilization of PNC services.

Health professionals highlighted the importance of partnering with local youth. As one HEW working at wero kebele health post explained: “*We often work with youth volunteers in this kebele, and our efforts go better during such collaborations. The youth motivate community members to attend sessions and even organize social gatherings like coffee ceremonies. This helps us reach and educate more people...*” (HE-IDI 01). These narratives underline that

community-level collaborations, between HEWs, youth, and respected local figures enhance the reach and effectiveness of maternal health interventions, and helps to increase PNC uptake.

5.3. Points of convergence

The findings from the qualitative and quantitative components both agreed on the fact that the utilization rate of PNC in the study area is very low. Quantitatively, only 38.6% of the women took advantage of the PNC within 42 days of giving birth. This low coverage was also supported by qualitative findings, where most women reported that they did not seek PNC service unless they became sick. Some women said they did not utilize PNC since they felt healthy after childbirth, showing that the preventive PNC services are not valued and underutilized in the community.

We found converging results regarding financial constraints. For instance, HH income was significantly associated with PNC utilization, in the quantitative arm of our study. Women from the HH with higher income were more likely to utilize PNC service. This converges with the qualitative part that mentioned financial constraints like inability to afford transportation payments as the most frequent barriers.

This study also founds converging results regarding maternal educational status. Mothers with educational status of diploma and above were 3.8 times more likely to attend PNC services compared to those who can't read and write. Whereas, the qualitative results showed that limited understanding about the significance of PNC as a barrier to utilizing the service.

Moreover, the quantitative and qualitative findings show converging result regarding obstetric factors. Those mothers who had encountered pregnancy and related complications were around four times more likely to utilize PNC service than those who have not experienced. The qualitative findings also showed as mothers tend to use PNC services only when they felt unwell.

6. Discussion

This study examined PNC use and associated factors among mothers who have given birth in E.azernet Berbere woreda, Central Ethiopia. We employed mixed-methods study design. We found that PNC utilization rate in E.azernet Berbere district to less than 50%. This finding is below the WHO's goal of ensuring PNC for all postpartum women (1). This indicates a gap in Postpartum care in rural part of our country.

This low utilization rate is consistent with the findings in other regions, such as East Gojjam and Aysaeta. in East Gojjam the utilization rate was 34%, and in Aysaeta it was 45% (35,24). In contrast, however, the rate found in this study is much lower than the finding reported from urban cities such as Addis Ababa, where PNC utilization can be above 90% (58). This difference is likely to come from contextual differences: for instance, Addis Ababa's urban environment has better healthcare access, and the population also tends to have higher educational attainment and health literacy compared to the rather rural region we studied. Our study findings also falls short compared to the reports from other countries like Bangladesh, Sierraleon, and Malawi, where PNC utilization rates are higher. Furthermore, the finding of our study falls short compared to the reports from other countries like Bangladesh, Sierraleon, and Malawi, where rates are noticeably higher (40-41, 43). These variations may have happened due to differences in healthcare system of other countries, differences in investment in maternal health programs including PNC, and cultural differences towards postpartum care.

We found maternal education as a significant predictor of PNC utilization. Our findings show, compared to illiterate women, women with diploma or higher education were almost four times more likely to use PNC services. This which is consistent with previous systematic review conducted by Yimer TS., et al, 2023 (44). Mothers who experienced complications during pregnancy or had a C-section were also around four times more likely to utilize PNC service than those who have not experienced. This consistent with the research report from Debre Markos town, which found perceived risk or illness as a powerful motivator (49).

Distance was another factor that influence PNC utilization. Mothers who live within a 5KM or 30minute walk of a health facility were three times more likely to attend a postnatal visit than those who reside farther. Maternity waiting homes on the other hand, found to influence PNC

use positively, with mothers who used these waiting homes 1.7 times more likely to attend postnatal care services than those who were not admitted.

7. Strength & limitations

Strengths

We have employed a mixed-methods approach, and obtained both quantitative informations and explained the barriers qualitatively.

Limitation of our study

- ✓ There may be recall bias, since mothers were asked to recall the event that happened a year ago.
- ✓ There may be social desirability bias
- ✓ There was risk of selection bias
- ✓ Limitations to causal inference

8. Conclusion & ecommendation

Conclusion:

PNC utilization in East Azernet Berbere district remains low as compared to the WHO's recommendation for post natal care coverage, with only 38.6% of mothers accessing PNC services within 42 days postpartum. Socio demographic, and structural factors were associated with PNC uptake. Mothers with higher educational, those gave birth by CS, lived closer to health facilities, or used maternity waiting homes were more likely to utilize PNC services.

The qualitative findings also highlighted barriers, like financial constraints, lack of awareness, transportation issues, social stigma, and cultural norms that undervalue preventive maternal

health care. On the other hand, supportive family environments, positive health worker attitudes, and community collaboration were identified as key facilitators for service utilization.

These findings indicate the need for targeted interventions to improve PNC service use and maternal health outcomes in rural Ethiopia.

Recommendation:

For Health Policy Makers and Program Planners:

- Strengthen health education campaigns to raise awareness
- Expand and equip health posts and train prepare trainings for HEW
- Encourage health professionals to consistent counseling on PNC

For East Azernet Berbere district health Office:

- Promote the use of maternity waiting homes and provide structured education sessions on for the admitted mothers.
- Improve the interpersonal communication skills of health workers.
- Strengthen Community Engagement and collaborative work between HEW, Elders, and local youth.

For Future Researchers:

Since the causal relationships are not assessed by our study, Consider longitudinal designs, and asses causal relationships between socio-demographic, clinical, and health system-related factors and PNC utilization.

Implication to Nursing/Midwifery Practice

Midwives and other health professionals should Strengthen health education and counseling by explicitly teaching about postpartum and newborn danger signs using plain, actionable language. Further more, they should have to improve continuity of care by establishing formal linkages between maternity waiting homes and PNC follow-up services. Additionally, they should have to

build trust by using empathy, active listening, and non-judgmental communication in all interactions.

References;

1. WHO Recommendations on Maternal and Newborn Care for a Positive Postnatal Experience. 1st ed. Geneva: World Health Organization; 2022. 1 p. Available from: <https://www.who.int/publications/i/item/9789240045989>
2. Lopez-Gonzalez DM, Kopparapu AK. Postpartum Care of the New Mother. In StatPearls Publishing; 2024. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK565875/>
3. McCauley H, Lowe K, Furtado N, Mangiaterra V, van den Broek N. Essential components of postnatal care – a systematic literature review and development of signal functions to guide monitoring and evaluation. BMC Pregnancy Childbirth. 2022 ;22(1):448.
4. Clarke-Deelder E, Opondo K, Oguttu M, Burke T, Cohen JL, McConnell M. Immediate postpartum care in low- and middle-income countries: A gap in healthcare quality research and practice. Am J Obstet Gynecol MFM. 2023 ;5(2, Supplement):100764.
5. POSTNATAL CARE OF THE MOTHER AND NEWBORN. In: Counselling for Maternal and Newborn Health Care: A Handbook for Building Skills. World Health Organization; 2013. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK304191/>
6. World Health Organization. Strategies towards ending preventable maternal mortality (EPMM). Geneva: World Health Organization; 2015. 44 p. Available from: <https://iris.who.int/handle/10665/153544>
7. WHO Factsheet On Maternal mortality; 2024. Available from: <https://www.who.int/news-room/factsheets/detail/maternal-mortality>
8. Flake S. Lack of Access to Maternal Healthcare in Sub-Saharan Africa. Ballard Brief; 2022 Available from: <https://ballardbrief.byu.edu/issue-briefs/lack-of-access-to-maternal-healthcare-in-sub-saharan-africa>
9. Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. Available from: <https://www.who.int/publications/i/item/9789240068759>
10. Tesfay N, Tariku R, Zenebe A, Woldeyohannes F. Critical factors associated with postpartum maternal death in Ethiopia. PLoS ONE. 2022 ;17(6):e0270495.

11. Mekonnen T, Dune T, Perz J. Maternal health service utilisation of adolescent women in sub-Saharan Africa: a systematic scoping review. *BMC Pregnancy Childbirth*. 2019;19(1):366.
12. Souza JP, Day LT, Rezende-Gomes AC, Zhang J, Mori R, Baguiya A, et al. A global analysis of the determinants of maternal health and transitions in maternal mortality. *Lancet Glob Health*. 2024;12(2):e306–16.
13. Konje ET, Hatfield J, Sauve R, Kuhn S, Magoma M, Dewey D. Late initiation and low utilization of postnatal care services among women in the rural setting in Northwest Tanzania: a community-based study using a mixed method approach. *BMC Health Serv Res*. 2021;21:635.
14. F Burke T. Access and Quality of Postnatal Care in Low- and Middle - Income Countries: A Pragmatic Review. *Glob J Reprod Med [Internet]*. 2020 ;8(3). Available from: <https://juniperpublishers.com/gjorm/GJORM.MS.ID.555740.php>
15. Tessema ZT, Yazachew L, Tesema GA, Teshale AB. Determinants of postnatal care utilization in sub-Saharan Africa: a meta and multilevel analysis of data from 36 sub-Saharan countries. *Ital J Pediatr*. 2020;46:175.
16. Tiruneh GT, Worku A, Berhane Y, Betemariam W, Demissie M. Determinants of postnatal care utilization in Ethiopia: a multilevel analysis. *BMC Pregnancy Childbirth*. 2020 ;20:549.
17. Patel AA. Study of utilization of postnatal care services and factors affecting it among women attending a tertiary hospital. *J Acad Med Pharm* 2022; 4 (4); 657-661. Available from: https://academicmed.org/Uploads/Volume4Issue4/129.-138.-JAMP_MEDP-657-661.pdf
18. Alamneh YM. Postnatal care utilization and associated factors among rural women in Northwest Ethiopia: Cross-sectional study. *Curr Pediatr Res [Internet]*. 2024 ; Available from: <https://www.currentpediatrics.com/articles/abstract/postnatal-care-utilization-and-associated-factors-among-rural-women-in-northwest-ethiopia-crosssectional-study-18599.html>
19. Igboanusi CJC, Sabitu K, Gobir AA, Nmadu AG, Joshua IA. Factors Affecting the Utilization of Postnatal Care Services in Primary Health Care Facilities in Urban and Rural Settlements in Kaduna State, North-western Nigeria. *ajphr* 2019. Available from: <https://www.researchgate.net/publication/334279489>

20. Dickson KS, Ayebeng C, Adu-Gyamfi AB, Okyere J. Postnatal care service utilisation for babies within the first two months after childbirth: an analysis of rural-urban differences in eleven Sub-Saharan African countries. *BMC Pregnancy Childbirth*. 2023;23(1):423.
21. Asresie MB, Arora A. Urban-rural disparities and change in postnatal care use from 2016 to 2019 in Ethiopia: Multivariate decomposition analysis. *PLOS ONE*. 2024;19(9):e0299704.
22. Samuel O, Zewotir T, North D. Decomposing the urban–rural inequalities in the utilisation of maternal health care services: evidence from 27 selected countries in Sub-Saharan Africa. *Reprod Health*. 2021;18(1):216.
23. Adane B, Fisseha G, Walle G, Yalew M. Factors associated with postnatal care utilization among postpartum women in Ethiopia: a multi-level analysis of the 2016 Ethiopia demographic and health survey. *Arch Public Health*. 2020 Apr 15;78(1):34.
24. Ibrahim MA, Mare KU, Nur M. Postnatal Care Utilization and Associated Factors among Mothers who gave Birth in the Aysaeta District, Northeast Ethiopia: A Community Based Cross-sectional Study. *Ethiop J Health Sci*. 2022 ;32(6):1123–32.
25. FMOH Implementation Guide for 24hours postnatal care and stay. FMOH;2018. Available from: [https://www.moh.gov.et/sites/default/files/2024-07/Implementation Guide for 24 hours postnatal care and stay_2018.pdf](https://www.moh.gov.et/sites/default/files/2024-07/Implementation%20Guide%20for%2024%20hours%20postnatal%20care%20and%20stay_2018.pdf)
26. An Action Plan to Improve Postnatal Care in Ethiopia: A Mixed Methods Research - Elias Teferi Bala, Lizeth Roets, 2024 [Internet]. Available from: <https://journals.sagepub.com/doi/10.1177/21582440241239830?icid=int.sj-full-text.citing-articles.5>
27. UNICEF DATA on Newborn care. 2024. Available from: <https://data.unicef.org/topic/maternal-health/newborn-care/>
28. Langlois ÉV, Miskurka M, Zunzunegui MV, Ghaffar A, Ziegler D, Karp I. Inequities in postnatal care in low- and middle-income countries: a systematic review and meta-analysis. *Bull World Health Organ*. 2015 ;93:259-270G. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC4431556/>
29. Adhikari C, Yadav RK, Timilshina P, Ojha R, Gaire D, Ghimire A. Proportion and factors affecting for post-natal care utilization in developing countries: A systematic review. *J Manmohan*

Meml Inst Health Sci. 2016 ;2:14–9. Available from:
<https://www.researchgate.net/publication/308675627>

30. Limbu C, Kuwar C, Shrestha S, Shrestha N, Fyak S. Utilization of Postnatal Care Services among Mothers Residing in Morang District, Nepal. *J Coll Med Sci-Nepal*. 2023 ;19:201–9.
31. Serbanescu F, Abeysekara P, Ruiz A, Schmitz M, Dominico S, Hsia J, et al. Individual, Community, and Health Facility Predictors of Postnatal Care Utilization in Rural Tanzania: A Multilevel Analysis. *Glob Health Sci Pract*. 2023;11(4):e2200502.
32. Kawuki J, Gatasi G, Sserwanja Q. Prevalence of adequate postnatal care and associated factors in Rwanda: evidence from the Rwanda demographic health survey 2020. *Arch Public Health*. 2022;80(1):208.
33. Yaya S, Uthman OA, Amouzou A, Ekholuenetale M, Bishwajit G. Inequalities in maternal health care utilization in Benin: a population based cross-sectional study. *BMC Pregnancy Childbirth*. 2018;18(1):194.
34. Olajubu A. Non-utilization of Postnatal Care Services and Related Factors among Women in Osun State, Nigeria. *J Midwifery Reprod Health* [Internet]. 2021;(Online First). Available from: <https://doi.org/10.22038/jmrh.2021.52564.1649>
35. Zeleke LB, Wondie AT, Tibebu MA, Alemu AA, Tessema MT, Shita NG, et al. Postnatal care service utilization and its determinants in East Gojjam Zone, Northwest Ethiopia: A mixed-method study. *PLoS ONE*. 2021 ;16(8):e0256176. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8370609/>
36. Asumah MN, Abubakari A, Abdulai AM, Nukpezah RN, Adomako-Boateng F, Faridu AW, et al. Sociodemographic and Maternal Determinants of Postnatal Care Utilization: A Cross-Sectional Study. *SAGE Open Nurs*. 2023 ;9:23779608231206759. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10566267/>
37. Rahmati A. Factors associated with postnatal care utilization in Afghanistan. *BMC Womens Health*. 2024 ;24(1):463. Available from: <https://doi.org/10.1186/s12905-024-03318-2>
38. Yoseph S, Dache A, Dona A. Prevalence of Early Postnatal-Care Service Utilization and Its Associated Factors among Mothers in Hawassa Zuria District, Sidama Regional State, Ethiopia: A

Cross-Sectional Study. *Obstet Gynecol Int.* 2021 ;2021:5596110. Available from:
<https://pmc.ncbi.nlm.nih.gov/articles/PMC8140851/>

39. Mamuye SA. Magnitude and Determinants of Postnatal Care Service Utilization Among Women Who Gave Birth in the Last 12 Months in Northern Ethiopia: A Cross-Sectional Study. *Int J Womens Health.* 2020 ;12:1057. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC7671477/>
40. Sheba IT, Sarker AR, Tasnim A. Factors Associated with Post-Natal Care Utilization among the Women of Reproductive age Group: Evidence from Bangladesh Demographic and Health Survey 2017–18. *Health Serv Res Manag Epidemiol.* 2022 ;9:23333928221136393. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC9643753/>
41. Sserwanja Q, Nuwabaine L, Kamara K, Musaba MW. Prevalence and factors associated with utilisation of postnatal care in Sierra Leone: a 2019 national survey. *BMC Public Health.* 2022;22(1):102. Available from: <https://doi.org/10.1186/s12889-022-12494-5>
42. Utilization Postnatal Care Services in Hyolmo Community [Internet]. *nepal journals online.* 2024. Available from: <https://www.nepjol.info/index.php/KV/article/view/70979>
43. Khaki JJ, Sithole L. Factors associated with the utilization of postnatal care services among Malawian women. *Malawi Med J.* 2019;31(1):2. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC6526341/>
44. Yimer TS, Ferede WY, Sisay FA. Utilization of early postnatal care services and associated factors among mothers who gave birth in the last 12 months in South Gondar Zone District, Amhara Regional State, Ethiopia. *J Health Popul Nutr.* 2024 ;43(1):26. Available from: <https://doi.org/10.1186/s41043-024-00524-4>
45. Mon AS, Phyu MK, Thinkhamrop W, Thinkhamrop B. Utilization of full postnatal care services among rural Myanmar women and its determinants: a cross-sectional study. *F1000Research.* 2018;7:1167. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC6085599/>
46. Abie A, Belay G, Asmare E, Ayalew N, Feyisa W, Kassie N. Male partner involvement in postnatal care service utilization and associated factors: A community-based cross-sectional study in Motta district, Northwest Ethiopia. *PLOS ONE.* 2023;18(1):e0276477. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9858086/>

47. Gebreslassie Gebrehiwot T, Mekonen HH, Hailu Gebru T, Kiros KG, Gebresilassie B, Teklu G, et al. Prevalence and Associated Factors of Early Postnatal Care Service Use Among Mothers Who Had Given Birth Within the Last 12 Months in Adigrat Town, Tigray, Northern Ethiopia, 2018. *Int J Womens Health*. 2020;12:869–79. Available from: <https://www.tandfonline.com/doi/abs/10.2147/IJWH.S266248>
48. Christine K. Allen, Kizito O. Factors influencing utilization of postnatal care services among postnatal mothers who delivered from china-uganda friendship hospital, kampala district. 2021. [Internet]. [cited 2024 Nov 17]. Available from: <https://www.researchgate.net/publication/352647710>
49. Limenih MA, Endale ZM, Dachew BA. Postnatal Care Service Utilization and Associated Factors among Women Who Gave Birth in the Last 12 Months prior to the Study in Debre Markos Town, Northwestern Ethiopia: A Community-Based Cross-Sectional Study. *Int J Reprod Med*. 2016;2016(1):7095352. Available from: <https://doi.org/10.1155/2016/7095352>
50. Worku S, Dheresa M, Ali T, Lodebo M. Early Postnatal Care Utilization and Associated Factors Among Women Who Give Birth in the Last Six Weeks in Hosanna Town, Southern Ethiopia, 2022. *J Pregnancy*. 2024 ;2024:1474213. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC11081751/>
51. Geremew AB, Boke MM, Yismaw AE. The Effect of Antenatal Care Service Utilization on Postnatal Care Service Utilization: A Systematic Review and Meta-analysis Study. *J Pregnancy*. 2020 ;2020:7363242. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC7528140/>
52. ETH_Ethiopia_Health-Sector-Transformation-Plan-II_2021-2026.x23411.pdf [Internet]. Available from: https://p4h.world/app/uploads/2021/07/ETH_Ethiopia_Health-Sector-Transformation-Plan-II_2021-2026.x23411.pdf.
53. Population Projection [Internet]. [cited 2024 Nov 20]. Available from: <https://www.statsethiopia.gov.et/population-projection/>
54. East AZERNET Berbere Woreda Health Office. Health facilities in East Azernet Berbere woreda.2016 F.Y
55. Habte, A., Gebiremeskel, F., Shewangizaw, M., Dessu, S., & Glagn, M. (2021). Uptake of complete postnatal care services and its determinants among rural women in Southern Ethiopia:

Community-based cross-sectional study based on the current WHO recommendation. *PloS one*, 16(2), e0246243. <https://doi.org/10.1371/journal.pone.0246243>

56. New definition of skilled health personnel | Figo [Internet]. 2018. Available from: <https://www.figo.org/news/new-definition-skilled-health-personnel>
57. Amsalu G, Talie A, Gezimu W, Duguma A. Non-utilization of postnatal care and its associated factors among women who gave birth in rural districts of Northern Ethiopia: A community-based mixed-method study. *Womens Health*. 2022 ;18:17455057221125091. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC9478744/>
58. Henok k,kidanemaria G/M, Yonas H. Use of Postnatal Care Service and Determinant Factors among Women Who Gave Birth in Addis Ababa. *MJH*, 2023, volume 3 (I): eISSN: 2790-1378. Available from: [https://mjh.sphmmc.edu.et/MJH_VOLUME_3_1_2024/MJH-2023-0020-vol%203\(1\).pdf](https://mjh.sphmmc.edu.et/MJH_VOLUME_3_1_2024/MJH-2023-0020-vol%203(1).pdf)

ANNEXES

Annex I: English version Information Sheet

Good morning/good afternoon! My name is _____. I am here today to collect data for a study to be conducted by **Fedlu Jemal** from Addis Ababa University, Department of Maternal and reproductive health nursing post graduate program. The objective of this study **is to assess postnatal care utilization and associated factors among women who have given birth in the last 12 months in** East Azernet Berbere district, **Silite zone, Central Ethiopia**. You are asked to take part in this study and to respond genuinely and your cooperation is greatly helpful.

Your participation is voluntary and your name will not be written in this form and will never be used in connection with any information you tell us. There is no risk in participating in this research project and there may not be direct benefit to you but your participation may have direct or indirect contribution to increase PNC utilization and reduce complications that would occur due to not Using PNC services. If you have questions regarding this study or would like to be informed of the results after its completion, please feel free to contact the principal investigator by using the following address:

Fedlu Jemal (BSc)

Mobile = +251954773550

E-mail: fedlujemal2015@gmail.com

Annex II: English version Informed Consent

In signing this document, I am giving my consent to participate in the study entitled “postnatal care utilization and associated factors among women who have given birth in the last 12 months in East Azernet Berbere district, Silite zone, Central Ethiopia”. I have understood that participation in this study is entirely voluntarily and participation or refusal to answer the questions will have no effect on me. I have been told that answers to the questions or reports of this study will never identify me in any way. I understood that, Fedlu Jemal is the contact person if I have questions about the study or about my rights as a study participant. I also know that the address of the principal investigator is:

Fedlu Jemal, (BSc);

Mobile = +251954773550

E-mail: fedlujemal2015@gmail.com

I hereby freely consent to take part in this study

I here approve my consent to take part in the study with my signature.

Signature _____

Date _____

Annex III: English version questionnaire

Identification Information:

1. Identification number. _____

2. Health post (Kebele)_____

S.No	Questions	Answers	Skip
	Section 1- Socio-demographic Characteristics		
101	Would you tell me your age?	_____ years	
102	Would you tell me your Marital status?	1. Married 2. Single 3.Divorced 4.Widowed	
103	Would you tell me your educational status?	1, Cannot read and write 2. Can read and write only 3. Elementary school 4. Secondary school 5. Diploma /degree	
104	Would you tell me your husband educational status?	1. Cannot read and write 2. Can read and write only 3.Elementary school 4.Secondary school 5. Diploma /degree and above	
105	Would you tell me your religion?	1, Orthodox 2. Muslim 3. Protestant 4. Others (specify) _____	
106	Would you tell me your current occupation?	1. Housewife 2. Farmer 3. Merchant 4. Government employee 5. Daily laborer 6. Other, Specify _____	
107	What is your husband's occupation?	1. Farmer 2. Merchant 3.Government employee 4. Daily laborer 5. Other, Specify _____	

108	What is your family's average monthly income?	_____ (in Ethiopian Birr)	
Section 2: Obstetric characteristics			
201	How many pregnancies have you had in total?	Number _____	
202	How many /number of surviving children have you had all together?	(_____) in Number	
203	What was status of your last pregnancy?	1, Planned 2. Unplanned unwanted 3. Unplanned wanted 4. Other	
204	Did you have Antenatal Care visit for your last child?	1. Yes 2. No (If no, skip to question 208)	
205	Where did you get ANC checkup?	1, Health post 2. Health center 3. Hospital	
206	How many times you received Antenatal care service from health care provider for your last child?	(_____) in number	
207	Have you been advised about postnatal care service utilization during antenatal care visit for your last child?	1. Yes 2. No	
208	Did you experience any complications during your last pregnancy?	1. Yes 2. No (If no, skip to question 210)	

209	what type of complications did you experienced during your last pregnancy? (Multiple choices are possible)	1. vaginal bleeding 2. PROM 3. Headache 4. Fever 5. Hypertension 6. Decrease fetal movement 7. Nausea and vomiting 8. Other (specify) _____	
-----	---	--	--

210	Where did you give birth for your last child?	1. Health institution 2. Home	
211	What was the mode of delivery for your last child?	1, Spontaneous vaginal delivery 2. Instrumental 3. Cesarean section	
212	How long after delivery were you discharged from the health facility?	1. Less than 6hrs after birth 2. 6-24 hours after birth 3. One day after birth 4. Two days after birth	
213	What was the outcome of your last delivery?	1. Live birth 2. Still birth	
214	Were you given an appointment for postnatal care after delivery?	1.Yes 2.No	
215	Did you have any PNC visits after the birth of your last child?	1.Yes 2. No (If no, skip to question 222)	
216	How many times was it?	times (in number)	
217	When was your Postnatal care visit? (The choices shall not be read)	1. Within 6-24 hours. 2. At the 3 rd day 3. At the 7 th day 4. Within 42 days	
218	What was the primary reason for your PNC visit?	1. Infant vaccination 2. Family planning 3. Scheduled appointment 4. Medical checkup 5. Health problems after delivery 6. Others(specify) _____	
219	What types of postnatal care did you receive during your visit(s)? (The choices shall not be read)	1. Physical examination 2. Counseling on postpartum danger signs 3. Counseling about baby care 4. Family planning services 5. Breastfeeding education 6. Other(specify) _____	
220	Do you decide yourself to attend PNC in health care facility?	1. Yes 2. No	
221	If yes, have you a chance to get money at any time you want to follow PNC?	1. Yes 2. No	

222	Who primarily made the decision for you to seek PNC?	1. Husband 2. Other families 3. TBA 4. Other(specify)_____	
223	If you did not receive PNC services, what were the main reasons?	1. I felt fine 2. I didn't think it was necessary 3. Lack of money for transportation 4. Waiting time was too long 5. Cultural belief reasons 6. Other (specify)_____	
224	Have you been utilizing maternity waiting homes during your last pregnancy?	1. Yes 2. No	
Section 3: Health Facility Characteristics			
301	What is the nearest health facility in your area?	1. Hospital 2. Health center 3. Health Post	
302	Approximately How much is distance of the nearest health institution from your home on foot?	1. Less than 30 minutes/5 km 2. 30min-1hrs /5-15 km 3. Greater than 1 hr./15 km	
303	Is transportation available to go to the health facility?	1. Yes 2. No (If no, skip to section 4)	
304	What type of transportation is usually available?	1. Traditional carrier (stretcher) 2. Ambulance 3. Public transport (Bus, taxi) 4. Motorcycle 4. Others	
Section 4: PNC Knowledge-Related Characteristics			
401	Have you ever heard about postnatal care (PNC) services in general?	1. Yes 2. No (If no, skip to question 404)	
402	From which sources did you hear about PNC services?	1. Health professionals 2. Neighbors 3. Friends 4. Media 5. Other (specify)	
403	Do you know availability of PNC service?	1. Yes 2. No	
404	Do you know that postnatal care visits are necessary for postpartum mothers?	1. Yes 2. No	
405	Do you know if there is a cost associated with PNC services?	1. Yes 2. No (skip to question 407)	
406	If your answer is yes, how is the payment?	1. Free service	

		2. With a fee 3. Other (specify)_____	
407	Do you think the postnatal period is more dangerous for mothers?	1. Yes 2. No	
408	Do you know the recommended period to start PNC?	1. Yes 2. No (skip to question 410)	
409	If yes, when is the correct time to have a PNC visit? (The lists shall not be read)	1. Within 6- 24 hrs. 2. At the 3 rd day 3. At the 7 th day 4. within 42 days 5. Other (specify)_____	
410	Do you know the maternal danger signs and symptoms that may occur after giving birth?	1. Yes 2. No (skip to question 412)	
411	If yes, what are they? (The lists shall not be read)	1. Sever head ache 2. Blurred vision 3. Excess vaginal bleeding 4. Offensive uterine discharge 5. Convulsion 6. Edema on face and hands 7. Others_____	
412	Do you know what to do when you experience a postnatal danger signs?	1. Yes 2. No (skip to question 414)	
413	If yes, what would you do?	1. visit health facility 2. Call a traditional birth attendant 3. Consult traditional healers 4. Religious practices 5. Wait at home	
414	For what purpose should a mother go to health institution after giving birth? (The lists shall not be read)	1. For her health check up 2. For child health check up 3. Others(specify)_____	
	Thank You for your participation!		

In-depth interview questionnaires for key informants (Qualitative part)

For Women

1. Background Information

- Can you tell me about yourself? (age, number of births, distance to health facility)

2. Perceptions of Postnatal Care Services

- What do you think about postnatal care services? (benefits, cost, time)
- How do you perceive the quality of care for you and your child?

3. Cultural and Traditional Practices

- What traditional practices are observed after childbirth?
- In your opinion do these practices impact PNC service use? How?

4. Barriers to PNC Service Utilization

- What challenges do mothers face in accessing PNC services? (financial, logistical, societal norms)
- How do family members, elders, or community leaders influence the decision to use PNC services? Please share with us your views and experiences

5. Facilitators and Enablers

- What encourages mothers to use PNC services in your community?
- In your opinion what influences PNC utilization? (probe education, awareness)
- What can be done to improve access and acceptance of PNC services?
- What role can community leaders or traditional birth attendants play in encouraging PNC service utilization?

For Health Care Workers

1. Background Information

- Can you tell me about yourself? (sex, age, profession)

2. Perceptions of Postnatal Care Services

- What do you think about postnatal care services? (benefits, access, utilization)
- How important are PNC services for mothers and newborns?

3. Barriers to PNC Service Utilization

- Why do women not use PNC services? (community acceptance, cultural factors)
- How do family members, elders, or community leaders influence the decision to use PNC services? Please share with us your views and experiences

4. Facilitators and Enablers

- What encourages mothers to use PNC services in your community?
- How do you think awareness and education influence PNC utilization?
- What can be done to improve access and acceptance of PNC services?
- What role can community leaders or traditional birth attendants play in encouraging PNC service utilization?

Annex IV: Amharic version Information Sheet

የመረጃ ቅጽ

እንደምን አደሩ / ዋሉ! የኔ ስም _____ ። በአዲስ አበባ ዩኒቨርሲቲ የእናቶችና ስነ ተዋልዶ ጤና ፣ የድህረ ምረቃ ትምህርት ክፍል ተማሪ በሆነው **ፌዴላዊ ጀማል** ለሚካሄደው ጥናት መረጃ ለመስጠት ነው የመጣሁት ። የዚህ ጥናት ዓላማ በምስራቅ አዘርነት በርበሬ ወረዳ ባለፉት 12 ወራት ውስጥ የወለዱ እናቶች የድህረ ወሊድ ክትትል አጠቃቀምን እና ተያያዥ ምክንያቶችን መገምገም ነው። እርስዎ በዚህ ጥናት ውስጥ እንድትሳተፉ እና እውነተኛ ምላሽ እንዲሰጡ እየጠየቅንዎት ነው። ትብብርዎ ለሚሰበሰበው መረጃ በጣም ወሳኝ መሆኑን ልንልጽልዎ እወዳለሁ።

የእርስዎ ተሳትፎ በፈቃደኝነት ላይ የተመሰረተ ነው፤ እንዲሁም ስምዎ በዚህ ቅጽ ውስጥ አይገለጽም። እርስዎ የሚነግሩኝ ማንኛውም መረጃ የእርስዎ ፍቃድ ለሌላ ጥቅም አይውልም። በዚህ የምርምር ፕሮጀክት ውስጥ መሳተፍ ምንም ዓይነት ጉዳት አያደርስበትም፤ እና እርስዎ ቀጥተኛ ጥቅም ላይኖረው ይችላል ነገር ግን የእርስዎ ተሳትፎ የድህረ ወሊድ ክትትል አጠቃቀምን ለመጨመር እና የድህረ ወሊድ ክትትል አገልግሎቶችን ባለመጠቀም ምክንያት ሊከሰቱ የሚችሉ ችግሮችን ለመቀነስ ቀጥተኛ ወይም ቀጥተኛ ያልሆነ አስተዋፅኦ ይኖረዋል። ይህንን ጥናት በተመለከተ ጥያቄዎች ካሉዎት ወይም ከተጠናቀቀ በኋላ ውጤቱን እንዲያውቁት ከፈለጉ፣ በሚከተለው አድራሻ ዋና መርማሪውን ማነጋገር ይችላሉ።

ፌዴላዊ ጀማል (BSC)

ሞባይል ፡ +251954773550

ኢ-ሜል፡- Fedlujemal2015@gmail.com

Annex V: Amhari version informed consent:

በመረጃ የተደገፈ ስምምነት

በምስራቅ አዘርነት በርበሬ ወረዳ ውስጥ፣ ባለፉት 12 ወራት ውስጥ የወለዱ እናቶች የድህረ ወሊድ ክትትል እና ተያያዥ ምክንያቶች ዙሪያ በሚሰራው ጥናት ላይ ለመሳተፍ ፈቃዴን እየሰጠሁ ነው። በዚህ ጥናት ውስጥ መሳተፍ ሙሉ በሙሉ በፈቃደኝነት ላይ የተመሰረተ መሆኑን ተረድቻለሁ፤ እናም አለመሳተፍ ወይም ጥያቄዎቼን ለመመለስ ፈቃደኛ አለመሆን በእኔ ላይ ምንም ተጽእኖ እንደሌለው ተረድቻለሁ። የዚህ ጥናት ጥያቄዎች ወይም ዘገባዎች መልሶች በምንም መልኩ እኔን እንደማይለዩ ተነግሮኛል። ስለ ጥናቱ፣ የጥናት ተሳታፊ ስለመሆኔ ወይም ስለመብቴ ጥያቄዎች ካሉኝ ፌዴላዊ ጀማልን ማነጋገር እንደምችል ተረድቻለሁ። የዋናው መርማሪ አድራሻ የሚከተለው መሆኑንም አውቃለሁ፡-

ፌዴላዊ ጀማል (BSc)

ሞባይል = +251954773550

ኢ-ሜል:- fedlujemal2015@gmail.com

በዚህ ጥናት ለመሳተፍ በነጻነት ፈቅጃለሁ።

በጥናቱ ላይ ለመሳተፍ ፍቃደኛ መሆኔን በፊርማዬ አጽድቄአለሁ።

ፊርማ _____

ቀን _____

Annex VI: Amhari version questionnaire:

ተ/ቁ	ጥያቄዎች	ምላሾች	ይዝላሉ
ክፍል አንድ: ግለሰባዊ መረጃዎች			
101	እድሜሽን ትነግሪኛለሽ?	_____ ዓመታት	
102	የጋብቻ ሁኔታሽን ልትነግሪኛ ትችያለሽ?	1.ያገባች 2. ያላገባች 3.የተፋታች 4.ባልዋ የሞተባት	
103	የትምህርት ደረጃሽን ትነግሪኛለሽ?	1 . ማንበብ እና መጻፍ አልችልም 2 . ማንበብ እና መጻፍ ብቻ እችላለሁ 3 የመጀመሪያ ደረጃ ትምህርት ቤት 4 . ሁለተኛ ደረጃ ትምህርት ቤት 5 . ዲፕሎማ / ዲግሪ እና ከዚያ በላይ	
104	የባልሽን የትምህርት ደረጃ ንገረኝ?	1 . ማንበብ እና መጻፍ አይችልም 2 . ማንበብ እና መጻፍ ብቻ ይችላል 3 የመጀመሪያ ደረጃ ትምህርት ቤት 4 .ሁለተኛ ደረጃ ትምህርት ቤት 5 . ዲፕሎማ/ዲግሪ እና ከዚያ በላይ	
105	ሃይማኖትሽን ንገረኝ?	1 . ሙስሊም 2 , ኦርቶዶክስ 3 . ፕሮቴስታንት 4. ሌሎች (ይግለጹ) _____	
106	የአሁኑ ስራሽ ምንድነው?	1 . የቤት እመቤት 2. ገበሬ 3 . ነጋዴ 4. የመንግስት ሰራተኛ 5. የቀን ሰራተኛ 6. ሌላ፣ ይግለጹ _____	
107	የባልሽ ስራ ምንድነው?	1 . ገበሬ 2 . ነጋዴ 3 .የመንግስት ሰራተኛ 4 . የቀን ሰራተኛ 5 . ሌላ፣ ይግለጹ _____	

108	የቤተሰብዎ አማካይ ወርሃዊ ገቢ ስንት ነው?	_____ (በኢትዮጵያ ብር)	
ክፍል ሁለት፡ ከ እርግዝናና ወሊድ ጋር የተያያዙ ጥያቄዎች			
201	በጠቅላላው ስንቴ እርግዝናና ተከስቶብሽ ያውቃል?	ቁጥር _____	
202	አጠቃላይ የወለድሻቸውን ልጆች ብዛት ትነግሯልሽ?	() በቁጥር	
203	ከወለድሻቸው ልጆቻቸው ስጥ ስንቶቹ በሂዎት አሉ?	() በቁጥር	
204	የመጨረሻው እርግዝናዎ ምን አይነት ነበር?	1. የታቀደ 2. ያልታቀደ የማይፈለግ 3. ያልታቀደ ግን ተፈላጊ 4. ሌላ	
205	ለመጨረሻው ልጅዎ የቅድመ ወሊድ ክትትል አድርገዋል?	1. አዎ 2. አይ (አይደለም ከሆነ ወደ ጥያቄ 209 ይዝለሉ)	
206	የቅድመ ወሊድ ክትትል የት ነው ያደረጉት?	1. ጤና ኬላ 2. ጤና ጣቢያ 3. ሆስፒታል	
207	ለመጨረሻው ልጅዎ ስንት ጊዜ የቅድመ ወሊድ ክትትል አድርገዋል?	() በቁጥር	
208	ለመጨረሻው ልጅዎ የቅድመ ወሊድ ክትትል ባደረጉበት ወቅት ስለ ድህረ ወሊድ ክትትል ምክር ተሰጥቶዎታል?	1. አዎ 2. አይ	
209	በመጨረሻው እርግዝናዎ ወቅት ችግር አጋጥሞዎት ነበር?	1. አዎ 2. አይ (አይደለም ከሆነ ወደ ጥያቄ 211 ይዝለሉ)	
210	ምን አይነት ችግሮች አጋጥመውዎታል? (ከ አንድ በላይ መምረጥ ይቻላል)	1. ከብልት ደም መፍሰስ 2. ግዜውን ያልጠበቀ የእንሽርት ውሃ መፍሰስ 3. ራስ ምታት 4. ትኩሳት 5. የደም ግፊት 6. የፅንስ እንቅስቃሴ መቀነስ 7. ማቅለሽለሽ እና ማስታወክ 8. ሌላ (ይግለጹ) _____	
211	የመጨረሻ ልጅሽን የት ነው የወለድሽው?	በጤና ተቋም ቤት ውስጥ	
212	የመጨረሻውን ልጅሽን እንደት ነበር የወለድሽው?	1. በምጥ 2. በመሳሪያ በታገዘ ምጥ 3. በ ኦፕራሲዮን	
213	ከወለድሽ በኋላ ለምን ያህል ጊዜ ጤና ተቋሙ ውስጥ ቆይተዋል?	ከ 6 ሰዓት በታች ከ6-24 ሰዓታት አንድ ቀን ከተወለሁለት ቀናት	

214	የወሊድ ሂደቱ የመጨረሻ ውጤት ምን ነበር?	1. በህይወት ያለ ልጅ 2. በህይወት ያልሌለ ልጅ	
215	ከወሊድ በኋላ ለድህረ ወሊድ ከትትል ቀጠሮ ተሰጥቶታል?	1. አዎ 2. አይ	
216	የመጨረሻውን ልጅ ከወለዱ በኋላ የድህረ ወሊድ ከትትል አድርገው ያውቃሉ?	1. አዎ 2. አይ (አይደለም ከሆነ ወደ ጥያቄ 224 ይዝለሉ)	
217	ስንት ጊዜ ነበር?	_____ ጊዜ (በቁጥር)	
218	የድህረ ወሊድ ጉብኝትዎ መቼ ነበር? (ምርጫዎቹ መነበብ የለባቸውም)	ከ6-24 ሰዓታት ውስጥ. በ 3 ኛው ቀን በ 7 ኛው ቀን በ 42 ቀናት ውስጥ	
219	የድህረ ወሊድ ከትትል ጉብኝትዎ ዋና ምክንያት ምን ነበር?	1. የህፃናት ክትባት 2. ሕፃን ታምሞ ነበር 3. የቤተሰብ እቅድ 4. የታቀደ ቀጠሮ 5. በሽታን መፍራት 6. ከወሊድ በኋላ የሕክምና ምርመራ 7. የጤና ችግሮች 8. ሌላ ሰው ሂጂ ብሎኝ 9. ሌሎች (ይጥቀሱ) _____	
220	በጉብኝትዎ ወቅት ምን አይነት የድህረ ወሊድ አገልግሎት አግኝተዋል? (ምርጫዎቹ መነበብ የለባቸውም)	1. አካላዊ ሙሉ ምርመራ 2. በድህረ ወሊድ አደገኛ ምልክቶች ላይ ማማከር 3. ስለ ሕፃን እንክብካቤ ምክር 4. የቤተሰብ እቅድ አገልግሎት 5. የጡት ማጥባት ትምህርት 6. ሌላ (ይግለጹ) _____	
221	ድህረ ወሊድ ከትትል እድድታደርጊ እራስሽ መወሰን ትችያለሽ?	1 አዎ 2 አይ(ወደ ጥያቄ 223 ይዝለሉ)	
222	ድህረ ወሊድ ከትትል እድድታደርጊ እራስሽ ከወሰንሽ የምያስፈልግሽን ገንዘብ ማግኘት ትችያለሽ?	1 አዎ 2 አይ	
223	ድህረ ወሊድ ከትትል እድድታደርጊ በዋናነት የሚወስነው ማን ነው?	1. የባለቤቱ እናት 2. ባለቤቱ 3. ባህላዊ አዋላጆች 4. ሌላ (ይግለጹ) _____	
224	ድህረ ወሊድ ከትትል ያላደረግሽ ከሆነ፣ ዋና ዋና ምክንያቶቻችሁ ምን ነበሩ?	1. ጥሩ ስሜት ተሰማኝ 2. አስፈላጊ ነው ብዬ አላሰብኩም ነበር 3. ለመጓጓዣ የሚሆን ገንዘብ እጥረት 4. ወረፋው በጣም ብዙ ነበር 5. ባህላችን ስለማይፈቅድ 6. ሌላ (ይግለጹ) _____	
225	በመጨረሻው እርግዝናሽ ጊዜ የ እናቶች ማቆያ ቤት	1 አዎ	

	ገብተሽ ነበር	2 አይ	
ክፍል ሦስት፡ የጤና ተቋማትን በተመለከተ			
301	በአካባቢያ ያለው የጤና ተቋም የትኛው ነው?	1. ሆስፒታል 2. ጤና ጣቢያ 3. ጤና ኬላ	
302	በአቅራቢያዎ ያለው የጤና ተቋም ከቤትዎ በእግር ያለው ርቀት ምን ያህል ነው?	ከ 30 ደቂቃ / 5 ኪ.ሜ ያነሰ 30 ደቂቃ - 1 ሰዓት / 5-15 ኪ.ሜ ከ 1 ሰዓት በላይ / 15 ኪ.ሜ	
303	ወደ ጤና ተቋም ለመሄድ መጓጓዣ አለ?	1. አዎ 2. አይ (አይ ከሆነ ወደ ክፍል 4 ይዘለሉ)	
304	ብዙውን ጊዜ ምን ዓይነት መጓጓዣ አለ?	1. ባህላዊ መሽከሚያ(ቃሬዛ) 2. አምቡላንስ 3. የህዝብ መጓጓዣ(አውቶቡስ፣ታክሲ) 4. ሞተር ሳይክል 4. ሌሎች	
ክፍል አራት፡ ስለ ድኅረ ወሊድ ክትትል መረጃና ግንዛቤን በተመለከተ			
401	ስለ ድኅረ ወሊድ ክትትል አገልግሎቶች በአጠቃላይ ስምተሽ ታውቁዎታለሽ?	1. አዎ 2. አይ (አይደለም ከሆነ ወደ ጥያቄ 403 ይዘለሉ)	
402	ስለ ድኅረ ወሊድ ክትትል አገልግሎቶች መረጃ ከማን ስምተሻል?	1. ከጤና ባለሙያዎች 2. ከጎረቤቶች 3. ከጓደኞች 4. ከሚዲያ 5. ሌላ (ይግለጹ)	
403	የድኅረ ወሊድ ክትትል አገልግሎት መኖሩን ያውቃሉ?	1. አዎ 2. አይ	
404	ከወሊድ በኋላ እናቶች የድህረ ወሊድ ክትትል ማድረጋቸው አስፈላጊ መሆኑን ያውቃሉ?	1. አዎ 2. አይ	
405	ከየድኅረ ወሊድ ክትትል አገልግሎቶች ጋር የተያያዘ ወጪ ሊኖር እንደሚችል ያውቃሉ?	1. አዎ 2. አይ (አይደለም ከሆነ ወደ ጥያቄ 407 ይዘለሉ)	
406	መልስዎ አዎ ከሆነ ክፍያው እንዴት ነው?	1. ነፃ አገልግሎት ነው 2. በክፍያ ነው 3. ሌላ (ይግለጹ) _____	
407	የድህረ ወሊድ ጊዜ ለእናቶች የበለጠ አደገኛ ነው ብለው ያስባሉ?	1. አዎ 2. አይ	
408	የድኅረ ወሊድ ክትትል ለመጀመር ይበልጥ	1. አዎ	

	የምመከረውን ጊዜ ያውቃሉ?	2.አይ (አይደለም ከሆነ ወደ ጥያቄ 410 ይዝለሉ)	
409	አዎ ከሆነ፣ የድኅረ ወሊድ ክትትል ለመጀመር ትክክለኛው ጊዜ መቼ ነው? (ዝርዝሮቹ መነበብ የለባቸውም)	ከ6-24 ሰአታት ውስጥ. በ 3 ኛው ቀን በ 7 ኛው ቀን በ 42 ቀናት ውስጥ	
410	ከወለዱ በኋላ ሊከሰቱ የሚችሉትን የድህረ ወሊድ አደገኛ ምልክቶችን ያውቃሉ?	1. አዎ 2.አይ (አይደለም ከሆነ ወደ ጥያቄ 412 ይዝለሉ)	
411	መልስዎ አዎ ከሆነ፣ ሊከሰቱ የሚችሉትን አደገኛ ምልክቶችን ይጥቀሱ? (ዝርዝሮቹ መነበብ የለባቸውም)	1. ከባድ ራስ ምታት 2. የደበዘዘ እይታ 3. ከመጠን በላይ የሆነ ደም ከማህፀን መፍሰስ 4. ሽታ ያለው የማህፀን ፍሳሽ 5. መንቀጥቀጥ 6. ፊት እና እጆች ላይ እብጠት 7. ሌሎች _____	
412	የድህረ ወሊድ አደገኛ ምልክቶች ሲያጋጥምዎ ምን ማድረግ እንዳለቦት ያውቃሉ?	1. አዎ 2.አይ (አይደለም ከሆነ ወደ ጥያቄ 414 ይዝለሉ)	
413	መልስዎ አዎ ከሆነ፣ምን ያድእርጋሉ?	1. የጤና ተቋምን እሄዳለሁ 2. ለባህላዊ አዋላጅ ጋር እሄዳለሁ 3. የባህል ህክምና ባለሙያዎችን እማክራለሁ 4. ሃይማኖታዊ ተግባራት አደርጋለሁ 5. ቤት ውስጥ እቆያለሁ 6. ሌሎች _____	
414	እናት ከወለደች በኋላ ለምን ዓላማ ወደ ጤና ተቋም መሄድ አለባት ብለሽ ታስቢያለሽ? (ዝርዝሮቹ መነበብ የለባቸውም)	1. ለራስዋ ምርመራ 2. ለህጻናት ጤና ምርመራ 2. ሌላ (ይግለጹ) _____	

ለተሳትፎዎ እናመሰግናለን!

ጥልቅ ቃለ መጠይቆች ለዋናዋና መረጃ ሰጭዎች

ለእናቶች

1. አጠቃላይ መረጃ

- ስለራስሽ ልትነግረኝ ትችላለህ? (ፍንጭ፡ ዕድሜ፣ የልጆች ብዛት፣ የጤና ተቋም ርቀት-ብዛት፣ የትዳር ሁኔታ)

2. የድህረ ወሊድ እንክብካቤ አገልግሎቶች ግንዛቤን በተመለከተ

- ስለ ድህረ ወሊድ አገልግሎት ምን ያስባሉ? (ፍንጭ፡ ጥቅሞቹ ፣ ጊዜው ፣ ወጪዎች)
- ለእርስዎ እና ለልጅዎ የሚሰጠውን የድህረ ወሊድ ክትትል አገልግሎት ጥራት እንዴት ያዩታል?

3. ባህላዊ ልምዶችን በተመለከተ

- ከወሊድ በኋላ ምን ዓይነት ባሕላዊ ድርጊቶች ይፈጸማሉ?
- በእርስዎ አስተያየት እነዚህ ልምዶች በድህረ ወሊድ አገልግሎት አጠቃቀም ላይ ተጽእኖ ያሳድራሉ? እንዴት?

4. የድህረ ወሊድ ክትትል እንቅፋቶች በተመለከተ

- እናቶች የድህረ ወሊድ አገልግሎትን ለማግኘት ምን ችግሮች ያጋጥሟቸዋል? (ፍንጭ፡ የገንዘብ፣ የትራንስፖርት፣ የማህበረሰብ ደንቦች)
- የቤተሰብ አባላት፣ ሽማግሌዎች ወይም የማህበረሰብ መሪዎች ፣ እርሶ የድህረ ወሊድ አገልግሎቶችን ለመጠቀም በሚወስኑት ውሳኔ ላይ እንዴት ተጽዕኖ ሊያሳድሩ ይችላሉ? አባኮትን አስተያየትዎን እና ገጠመኝዎን ያካፍሉ?

5. የድህረ ወሊድ ክትትል አጠቃቀምን የሚያበረታቱ እና የሚያነቀቃቁ ሁኔታዎችን በተመለከተ

- በእርስዎ አስተያየት እናቶች በማህበረሰብ ውስጥ የድህረ ወሊድ አገልግሎትን እንዲጠቀሙ የሚያበረታቱ ነገራት ምንምን ናቸው?
- በአጠቃላይ የድህረ ወሊድ አገልግሎት አጠቃቀም ላይ ይበልጥ አዎንታዊ ተጽዕኖ ያሳድራሉ ብለው የሚያስብዋቸው ነገራት ምንምን ናቸው? (ፍንጭ፡ የጤና ትምህርት ፣ የቤተሰብ ድጋፍ፣ ግንዛቤ)
- የድህረ ወሊድ አገልግሎቶችን ተደራሽነት እና ተቀባይነት ለማሻሻል ምን መደረግ አለበት ብለው ይመክራሉ?
- የማህበረሰብ መሪዎች፣ የጤና ባለሙያዎች፣ ባህላዊ ወሊድ አገልጋዮች ወይም ሌሎች የሚመለከታቸው አካላት የድህረ ወሊድ ክትትልን ለማበረታታት ምን ማድረግ አለባቸው ብለው ያስባሉ?

ለጤና ባለሙያዎች

1. አጠቃላይ መረጃ

- ስለራስህ ልትነግረኝ ትችላለህ? (ጾታ፣ እድሜ፣ ሙያ)

2. የድህረ ወሊድ እንክብካቤ አገልግሎቶች ግንዛቤ

- ስለ ድህረ ወሊድ እንክብካቤ አገልግሎት ምን ያስባሉ? (ጥቅሞች፣ ተደራሽነት፣ አጠቃቀም ፣ ጥራት)
- ለእናቶች የድህረ ወሊድ ክትትል ምን ያህል አስፈላጊ ነው?

3. የድህረ ወሊድ አገልግሎት አጠቃቀም እንቅፋቶች

- እናቶች በምን ምክንያት ድህረ ወሊድ ክትትል ላይ ያሉ ብለው ያስባሉ? (የማህበረሰብ ተቀባይነት ፣ ባህላዊ ሁኔታዎች)
- የቤተሰብ አባላት፣ ሽማግሌዎች ወይም የማህበረሰብ መሪዎች እናቶች የድህረ ወሊድ አገልግሎቶችን ለመጠቀም በሚወስኑት ውሳኔ ላይ እንዴት ተጽዕኖ ሊያሳድሩ ይችላሉ? እባኮትን አስተያየትዎን እና ገጠመኝዎን ያካፍሉን?

4. የድህረ ወሊድ ክትትል አጠቃቀምን የሚያበረታቱ እና የሚያነቀቃቁ ሁኔታዎችን በተመለከተ

- በእርስዎ አስተያየት እናቶች በማህበረሰብ ውስጥ የድህረ ወሊድ አገልግሎትን እንዲጠቀሙ የሚያበረታቱ ነገራት ምንምን ናቸው?
- አጠቃላይ የድህረ ወሊድ አገልግሎት አጠቃቀም ላይ ይበልጥ አዎንታዊ ተጽዕኖ ያሳድራል ብለው የሚያስብዋቸው ነገራት ምንምን ናቸው? (ፍንጭ፡ የጤና ትምህርት ፣ የቤተሰብ ድጋፍ፣ ግንዛቤ)
- የድህረ ወሊድ አገልግሎቶችን ተደራሽነት እና ተቀባይነት ለማሻሻል ምን መደረግ አለበት?
- የማህበረሰብ መሪዎች፣ የጤና ባለሙያዎች፣ ባህላዊ ወሊድ አገልጋዮች ወይም ሌሎች የሚመለከታቸው አካላት የድህረ ወሊድ ክትትልን ለማበረታታት ምን ማድረግ አለባቸው ብለው ያስባሉ?

ለተሳትፎዎ እናመሰግናለን!

Annex V: Siltigna version Information Sheet

የመረጃ ኡፍት (ቅጽ)

ፈየ አንደሬን (ፈየ ዋሌን ወይ)! ሱሜ _____ አሉኝን። በአዲስ አበባ ዩኒቨርሲቲ የአንደትቸ ዋ የ ስነ-
ተዋልዶ አፊየ የ ሆሽትለኛ ድግሪ (ማስተር) ደረሰ በሆነይ የ ጀማሊ ፊድሉ ሊትረሻነይ ሙጣሎ (ተምራመራት) የኖን መረጃ
(ፊሬሳ) ለስብስቦትን የመጣሁይ። የሙጣሎይ አላመከ በም/አ/በ/ወ ባለፈይ አድ አይዶ ውስጥ የ ጩኑ እንደትቸ በጩኑ ዞፍ
ያትኬሻነይ ክትትል ዋ ቱሀ የትንዛዙይ ምካትቸ ለትጀረቦትን። አቱሙም ቢታይ ሙጣሎ (ተምራመራት) ሊቲትሳተፉ ዋ ሱተይ
ጀዋብ ሊቶቡኅ ይከሸናን።

በሙጣሎይ (ተምራመራት) ተሳተፎታሙይ ባቱም ፍቃድ የትሚሬከዘን፤ ሂንኩምንገ በሙጣሎይ ውስጥ ሱማሙ
ይሸሙያንን። ቢታይ ሙጣሎ ውስጥ ተሳተፎታሙይ አደም ደውስ እላጄጅቢሙ። ሂንኩምንገ ላቱም ቀጥተኛ ጥቅም
ለይነበረይ ያቀትላን ሆነምታሌ ያቱሚ ተሳተፎት በጩኑ ዞፍ ያትኬሻነይ ክትትል አጠቃቀሙካይ ላጥቃቅሎትዋ በጩኑ ዞፍ
ያትኬሻነይ ክትትል በላሶት የነቀ እመጦነይ ደውስቸዋ ሚካትቸ ለቀኒሶት ያግዛን። ሙጣሎይ በትሚሌክተ ሱል ባለሙ አነግን ሙጣሎይ
በፈዲ ዞፍ ወጣተክ ቻሎት በከሼሙ ለኮሎ ባለይ ስልክ ሊታትዋልኩኑ ታቀትሎሙ።

ፊድሉ ጀማል (BSC)

ሞባይል : +251954773550

ኢ-ሜል:- Fedlujemal2015@gmail.com

Annex VI: Siltigna version informed consent:

በፊሬሳ የታገዛ ተስማሞት

		3. ነጋዴ 4. የመንግስት ቢለተኝ 5. የቀን ብል 6. ገነ (ይውዱኝ) _____	
107	የሚሻሽ ብልክ ምንግዝን?	1. አራሽ 2. ነጋዴ 3. የመንግስት ቢለተኝ 4. ገነ (ይውዱኝ) _____	
108	ያበረሲ የወሪ ገቢክ ምስተ ዮናን?	_____ (በቶጵያ ብር)	
ፈሰል ሆሽት፡ ተሃሚልነትዎ ተጨኖት የቲንዛዙ ሱልፕ			
201	በሁንዱሉሌክ አኩ ጃንጎ ምስት ግን ሃሚል ሆንሼሽ?	በእልቅ (_____)	
202	በሁንዱሉሌክ አኩ ጃንጎ ምስት ግን ጩኔሼሽ?	በእልቅ (_____)	
203	ተጨኔሼሙ ሱር ምስትኒሙ በሂይዎት አሉ?	በእልቅ (_____)	
204	የመጨረሻይ(ሂታይ ዙር) ሃሚልነታሽ አይነካሌን ነር?	1. የታቀደ 2. ያልታቀደ አይቲከሻን 3. ያልታቀደ ግንመ ሂትከሻን 4. ገነ (ይውዱኝ) _____	
205	የመጨረሻይ ጩላሽ ተጨኖት ቀደ (በሃሚልነታሽ ወክት) ክትትል አሼሽ ናር?	1. አዎ 2. አሎን (አሎን በሆነ የሱል 209 ኤት ሂዱ)	
206	ተጨኖት ቀደ (በሃሚልነታሽ ወክት) ክትትል ባዩትን አሼሽ ናር?	1. ጤና ኬላ 2. ጤነ ጣበ 3. ሆስፒታል	
207	ለመጨረሻይ ጩላሽ ተጨኖት ቀደ (በሃሚልነታሽ ወክት) ምስተ ግን ክትትል አሼሽ ናር?	በእልቅ (_____)	
208	ለመጨረሻይ ጩላሽ ተጨኖት ቀደ (በሃሚልነታሽ ወክት) ክትትል ቲታሺ፣ በሀራሰነት ወክት (በጩኔ ዞፍ) ያሱያነይ ክትትል በትሚሌከተ መከሩሻ ናር ወይ?	1. አዎ 2. አሎን	
209	በመጨረሻይ ሃሚልነታሽ ወክት ምካት ገጠመሽ ናር?	1. አዎ 2. አሎን (አሎን በሆነ የሱል 211 ኤት ሂዱ)	
210	አይነካሌ ምካት ገጠመሽ ናር? (ታድ የበዘ ምጥሮት ያቀትሌን)	1. ተማጠን ደም ፍሰሶት 2. ወክተክ የልቁረ የእንሽርት መይ ፍሰሶት 3. የደም ግፊት 4. የጨለሞ ተቅላቀሎት ቀኒሶት(በደል ወስጥ) 5. ሎቅሎቅ አሶትዎ አቱፎት	
211	የመጨረሻይ ጩላሽ ባየትን ጩኔሼሽ?	1. በአፊያ ጋር 2. በጋር ኡስጥ	

212	የመጨረሻይ ጨላሽ አይነትን ጨኛኛ ናር?	1. በዋከ 2. በመሳሪያ በታዝ ዋከ 3. በ አቦሬሽን	
213	በጨኛኛ ዞፍ ለምን ያህላን ሰዓት በአፊያ ጋር ውስጥ ደለስሼሽ?	1. ተ 6 ሰዓት ያነሰ 2. ተ 6-24 ሰዓት ጃንጎ 3. ሀድ አያም 4. ሆሽት አያም ጃንጎ	
214	የዋከይ ሃለት የመጨረሻ ውጣትክ ምንግዝን ናር?	1. በህይወት ያለ ጨሎ 2. በህይወት ያሌለ ጨሎ	
215	በጨኛኛ ዞፍ፣ በጨኛ ዞፍ ሊያትኬሻነይ ክትትል ቀጠሮ አሉንሽ ናር?	1. አዎ 2. አሎን	
216	የመጨረሻይ ጨላሽ በጨኛኛ ዞፍ፣ በጨኛ ዞፍ ያትኬሻነይ ክትትል አሼሽ ትሽሌሽ?	1. አዎ 2. አሎን (አሎን በሆነ የሱል 224 ኤት ሂዱ)	
217	ምስተ ጊን አሼሽ ነር?	_____ (በእልቅ)	
218	በጨኛ ዞፍ ያትኬሻነይ ክትትል ባይታኒ ወክት አሼሽ ነር? (ፈሰሻሽይ ተቀሮት ኤለቢይሙ)	1. ተ 6-24 ሰዓት ባለይ ውስጥ. 2. በ 3 ጃይ አያም 3. በ 7 ጃይ አያም 4. በ 42 አያምቸ ውስጥ	
219	በጨኛ ዞፍ ያትኬሻነይ ክትትል ያሼሽቢይ ቡሪ ሰብብክ ምንግዝን ነር?	1. የሰብዬ ክትባት 2. ሰብዬ ታንጨብኝ ነር 3. ቀጠሮ ናረኝ 4. ገ ነ (ይውዱኝ)_____	
220	በሄድሺቢ ናረይ ወክት አይነካሌ በጨኛ ዞፍ ያትኬሻነይ ክትትል አገልግሎት ረከብሺ? (ፈሰሻሽይ ተቀሮት ኤለቢይሙ)	1. ሁንዱሉሌ መርመራ 2. በጨኛ ዞፍ ሊያጋጥሙ ያቀትሎን አደገኛ መልከትቸ በትሚሌክተ ሸዝ 3. አራሪቆ ጨኛት አገልግሎት 4. ገ ነ (ይውዱኝ)_____	
221	በጨኛ ዞፍ ያትኬሻነይ ክትትል ላሶት ገጋሽ ወስኖት ታቀትዬሽ?	1. አዎ 2. አሎን (አሎን በሆነ የሱል 224 ኤት ሂዱ)	
222	በጨኛ ዞፍ ያትኬሻነይ ክትትል ላሶት ገጋሽ በወሰንሽ ያትኬሺሻነይ ሰንቲብ ሪከቦት ታቀትዮሽ?	1. አዎ 2. አሎን	
223	በጨኛ ዞፍ ያትኬሻነይ ክትትል ታሼሽኮ በቡርነት ወስናነይ ማኒ?	1. ያበሮሴየ እንደት 2. አበሮሴየ 3. በቡርደ ያትጨኛነይ እንዳቸቸ 4. ገ ነ (ይውዱኝ)_____	
224	በጨኛ ዞፍ ያትኬሻነይ ክትትል የላሼሽ በሆነ፣ ቡር ቡር መሳሽ ምን ምንግዝንሙ ናር?	1. ሃለቴ አቆመሰኝ 2. ያትኬሻን አልመሰለኝ ናር 3. ለመትግራገቤ ዮኖን ሰንቲብ አልረሀብኩ 4. አዳይ እለፈቅደይ 5. ገ ነ (ይውዱኝ)_____	

225	በመጨረሻይ ሃሚልነታችን ወክት ይንደትቸ ማቆየ ጋር ገባሽ ናር ወይ?	1. አዎ 2. አሎን	
ፈሰል ሼሽት፡ የአፊየ ጋርቻይ በትሚሌክተ			
301	በቡርዳሙ እቀርበማነይ አፊየ ጋር አይታኒ?	1. ሆስፒታል 2. ጤና ጣቢ 3. ጤና ኬላ	
302	በቡርዳሙ እቀርበማነይ አፊየ ጋር ተጋራሙ ቢንግር ምን ያህላን (የሰዓት) ይሪቃን ?	1. ተ 30 ደቂቃ / 5 ኪ.ሜ ያነሰ 2. ተ 30 ደቂቃ - 1 ሰዓት / 5-15 ኪ 3. ተ 1 ሰዓት የበዘ / 15 ኪ.ሜ	
303	አፊየ ጋር ለሂደት መትግራገቤ አለ?	1. አዎ 2. አሎን (አሎን በሆነ የፈሰል 4 ኤት ሂደት)	
304	በላይ ወክተ አይነካሌ መትግራገቤ አለ?	1. አደኝ ጦርቡያን ግዝ(ዴሰ) 2. አምቡላንስ 3. ሞተር ሳይክል 4. ገነ ግዝ	
ፈሰል አራት፡ በጨኔ ዞፍ ያትኬሻነይ ክትትል በትሚሌክተ ያለይ ተጀራብ			
401	በጨኔ ዞፍ ያትኬሻነይ ክትትል በትሚሌክተ በሁንድሉሌክ ሰማሽ ትሽሌሽ?	1. አዎ 2. አሎን (አሎን በሆነ የሱል 403ኤት)	
402	በጨኔ ዞፍ ያትኬሻነይ ክትትል በትሚሌክተ ያለይ መረጃ ተመ ሰማሽ?	1. ተአፊየ ሉባምቸ 2. ተመራርቼ 3. ተሚዲያ 4. ገ ነ (ይውዱኝ)_____	
403	በጨኔ ዞፍ ሊያትኬሻነይ ክትትል አገልግሎት ኒበሮተክ ትሽሌሽ?	1. አዎ 2. አሎን	
404	እንደትቸ በጨኝኑ ዞፍ ክትትል አሰትኒሙ ያትኬሻን ግዝ ሁኖተክ ትሽሌሽ?	1. አዎ 2. አሎን	
405	በጨኔ ዞፍ ትያሱያነይ ክትትል የትንዛዛ የወጪ መርክ ሊነብር ያቀትላነኮ ትሽሌሽ?	1. አዎ 2. አሎን (አሎን በሆነ የሱል 407ኤት)	
406	ጀዋባሽ አዎ በሆነ፡ ወጪ አይነኮን?	1. በነፃን 2. በክፍያን 3. ገ ነ (ይውዱኝ)_____	
407	በጨኔ ዞፍ (የሀራሰነት) ወክት ለእንደትቸ የበዘ አደገኛን ባሽ ታስቤሽ?	1. አዎ 2. አሎን	
408	በጨኔ ዞፍ ያትኬሻነይ ክትትል ለጀምሮት የጠቀለ እትመክራነይ ወክተ ትሽሊያሽ?	1. አዎ 2. አሎን (አሎን በሆነ የሱል 410ኤት)	
409	አዎ በሆነ፡ በጨኔ ዞፍ ያትኬሻነይ ክትትል ለጀምሮት ትክክለኛይ ወክት መቼን? (ፈሰሻሽይ ተቀሮት ኤላቢይሙ)	1. ተ 6-24 ሰአት ባለይ ውስጥ. 2. በ 3 ጭ አያም 3. በ 7 ጭ አያም 4. በ 42 አያምቸ ውስጥ	
410	በጨኔ ዞፍ ሊተለቁ ያቀትሎን የሀራሰነት ወክት አደገኛ መልክትቸ ትሽሊይማሽ?	1. አዎ 2. አሎን (አሎን በሆነ የሱል 412ኤት)	

411	አዎ በሆነ፣ ሊተለቁ ያቀትሎን የሀራሽነት ወክት አደገኛ መልክትቶች እውጂኝ? (ፈሰሻሽይ ተቀሮት ኤለቢይሙ)	1. የዱም ፈልጥ 2. ተማህፀን በለ ደም ፍሰሶት 3. አቲባብጦት 4. ገነ_____	
412	በጩኔ ዞፍ ሊተለቁ ያቀትሎን የሀራሽነት ወክት አደገኛ መልክትቶች ቢተለቁ ምን አሰት ያለቢሙኮ ትሽሎሙ?	1. አዎ 2. አሎን (አሎን በሆነ የሱል 414ኤት)	
413	ጀዋባሙ አዎ በሆነ፣ ምን ታሱ ናርኩም?	1. አፊያ ጋር ይዳው 2. አደኝ ያጩኖን እንዳቸቸ ኤት 3. ዱአ ያሻው 4. ጋር እድገበላው 5. ገነ_____	
414	አድ እንደት በጩኔት ዞፍ ለሚን ቲትብል አፊያ ጋር ሂዶት እነበሪቢታን ባሺ ታስቤሽ? (ፈሰሻሽይ ተቀሮት ኤለቢይሙ)	1. ለገግሽ መርመራ 2. ለሰብዬይ አፊያ መርመራ 3. ገ ነ (ይውዱኝ)_____	

ጠለቅ የባለ አሳወ ለቡርቡር ሰብቶ

ለእንደትቶ

1. ኡንዱሉሌ ፊፊሰ

- ሰለገጋሽ እውጂኝ? (ፍንጭ፡ አምር፣ ወልድቶ ብዛት፣ የአፊያ ጋር ሪቀት፣ የቢተር ሃለት)

2. በጩኔ ዞፍ ያትኬሻነይ ከትትል ተጅራብ በትሚሌከተ

- በጩኔ ዞፍ ያትኬሻነይ ከትትል በትሚሌከተ ምን ታስቤሽ? (ፍንጭ፡ ጥቅምከ ፣ ወክትከ ፣ ወጪከ)
- ለገጋሽዋ ለጩኔላሽ የቡማነይ በጩኔ ዞፍ ያለ ከትትል ጥራተክ አይነክ ታንገርያሽ?

3. አዳይ በትሚሌከተ

- በጩኔ ዞፍ ምን ያሴን (ዳይነካሌ አደ አለ)?
- እታይ አደ በጩኔ ዞፍ ያትኬሻነይ ከትትል ባሶት ደር ተጽኖ ያሻን ወይ? አይነክ?

4. በጩኔ ዞፍ ያትኬሻነይ ከትትል ቆፈክ በትሚሌከተ

- እንደትቶ በጩኔ ዞፍ ያትኬሻነይ ከትትል ላሶት ቢከሶን ወክት አይነካሌ ቆፈ ያጋጥመይማን? (ፍንጭ፡ የሰንቲብ፣ የትራንስፖርት፣ የአመሰብ ሴረ)
- የጋር ሰብ፣ ባሊቅቶ ወይም የአመሰብ አሚርቶ፣ አሽ በጩኔ ዞፍ ያትኬሻነይ ከትትል ለጠቀሞት ቢትወስኗል ውሳኔ አይነክ ተጽኖ ሊያቴንድሩ ያቀትሎን? አስተያየታሽዋ ገጠመኛሽ እውጂኝ?

5. በጩኔ ዞፍ ያትኬሻነይ ከትትል ተጠቀሞታይ ያንሻሽጦን ሃለትቶ በትሚሌከተ

- እንደትቶ በአመሰብ ውስጥ በጩኔ ዞፍ ያትኬሻነይ ከትትል ተጠቀሞተኒሙ ያንሻሽጦን ግዝቶ ምንምንግዝኒሙ?

- በሁንዲሉሌክ በጨፍኒ ዞፍ ያትኬሻነይ ክትትል በትጠቀሞት ደር የበዘ ፈየ ተጽኖ አለይሙ ባሞ ታሲቡይማሙይ ግዝቸ ምንምንግዝኒሙ? (ፍንጭ፡ የአፊየ አሽር ፣ የጋር ሰብ ኡግዝ፣ ተጅራብ)

6. ሸዡ

- በጨፍኒ ዞፍ ያትኬሻነይ ክትትል ተደራሽነትዋ ተቆባይነት በአመሰቢ ውስጥ ላጥቃቅሎት ምን ተረሶት አለቢ ቲሎሙ?
- የአመሰብ አሚርቸ፣ የአፊየ ሉባምቸ ፣አነግነ ገነ ዩድቢይማን ቃምቸ በጨፍኒ ዞፍ ያትኬሻነይ ክትትል ላንሻሽጦንት ምን አሶት አለቢይሙ?

ለአፊየ ሉባምቸ

1. ኡንዲሉሌ ሬሬሰ

- ሰለገጋሀ እውደኝ? (ልገ፣ አምር፣ ሉብ)

2. በጨፍኒ ዞፍ ያትኬሻነይ ክትትል ተጅራብ በትሚሌከተ

- በጨፍኒ ዞፍ ያትኬሻነይ ክትትል በትሚሌከተ ምን ታሰበሙ? (ጥቅምቸክ፣ ተደራሽነት፣ የጠቀሞት ሃለት ፣ ጥራትከ)
- በጨፍኒ ዞፍ ያትኬሻነይ ክትትል አሶት ምን ያይላን ያትኬሻነን ግዝ?

3. አዳይ በትሚሌከተ

- በጨፍኒ ዞፍ ምን ያሴን (ዳይነካሌ አደ አለ)?
- እታይ አደ በጨፍኒ ዞፍ ያትኬሻነይ ክትትል ባሶት ደር ተጽኖ ያሻን ወይ? አይነኮ?

4. በጨፍኒ ዞፍ ያትኬሻነይ ክትትል ቆፈክ በትሚሊከተ

- እንደትቸ በጨፍኒ ዞፍ ያትኬሻነይ ክትትል ላሶት ቢከሶን ወክት አይነካሌ ቆፈ ያጋጥመይማን? (ፍንጭ፡ የሰንቲብ፣ የትራንስፖርት፣ የአመሰብ ሴረ)

5. በጨፍኒ ዞፍ ያትኬሻነይ ክትትል ተጠቀሞተይ ያንሻሽጦን ሃለትቸ በትሚሊከተ

- በአመሰቢ ውስጥ በጨፍኒ ዞፍ ያትኬሻነይ ክትትል ተጠቀሞተረሙ ያንሻሽጦን ግዝቸ ምንምንግዝኒሙ?
- በጨፍኒ ዞፍ ያትኬሻነይ ክትትል ተደራሽነትዋ ተቆባይነት በአመሰቢ ውስጥ ላጥቃቅሎት ምን ተረሶት አለቢ?

ለተሳተፎታሙ ያሽከርናን!



Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author: Fedlu Jemal
Assignment title: POSTNATAL CARE UTILIZATION AND ASSOCIATED FACTORS A...
Submission title: POSTNATAL CARE UTILIZATION AND ASSOCIATED FACTORS A...
File name: POSTNATAL_CARE_UTILIZATION_AND_ASSOCIATED_FACTORS_...
File size: 319.01K
Page count: 77
Word count: 17,158
Character count: 91,628
Submission date: 02-Jan-2026 10:54AM (UTC+0300)
Submission ID: 2852243180



ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF NURSING AND MIDWIFERY

DEPARTMENT OF PEDIATRICS-CHILD HEALTH NURSING AND
MIDWIFERY

POSTNATAL CARE UTILIZATION AND ASSOCIATED FACTORS AMONG
WOMEN WHO HAVE GIVEN BIRTH IN THE LAST 12 MONTHS IN EAST
AZERNET BERBERE DISTRICT, SILTIE ZONE, CENTRAL ETHIOPIA, 2025 :
A MIXED-METHODS STUDY

BY:

FEDLU JEMAL (BSC)

A THESIS SUBMITTED TO THE PEDIATRICS-CHILD HEALTH NURSING
AND MIDWIFERY DEPARTMENT, SCHOOL OF NURSING AND MIDWIFERY,
COLLEGE OF HEALTH SCIENCES, ADDIS ABABA UNIVERSITY, IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF
SCIENCE IN MATERNITY AND REPRODUCTIVE HEALTH NURSING

DECEMBER, 2025

Fedlu Jemal

POSTNATAL CARE UTILIZATION AND ASSOCIATED FACTORS AMONG WOMEN WHO HAVE GIVEN BIRTH IN THE LAST 12 M...

 POSTNATAL CARE UTILIZATION AND ASSOCIATED FACTORS AMONG WOMEN WHO HAVE GIVEN BIRTH IN THE LAST 12 MONTHS IN EAST...

 MSc Thesis

 Addis Ababa University

Document Details

Submission ID

trn:oid::1:3452133416

Submission Date

Jan 2, 2026, 10:53 AM GMT+3

Download Date

Jan 2, 2026, 11:10 AM GMT+3

File Name

POSTNATAL_CARE_UTILIZATION_AND_ASSOCIATED_FACTORS_AMONG_WOMEN_WHO_HAVE_GIV....docx

File Size

319.0 KB

77 Pages

17,158 Words

91,628 Characters

*% detected as AI

AI detection includes the possibility of false positives. Although some text in this submission is likely AI generated, scores below the 20% threshold are not surfaced because they have a higher likelihood of false positives.

Caution: Review required.

It is essential to understand the limitations of AI detection before making decisions about a student's work. We encourage you to learn more about Turnitin's AI detection capabilities before using the tool.

Disclaimer

Our AI writing assessment is designed to help educators identify text that might be prepared by a generative AI tool. Our AI writing assessment may not always be accurate (i.e., our AI models may produce either false positive results or false negative results), so it should not be used as the sole basis for adverse actions against a student. It takes further scrutiny and human judgment in conjunction with an organization's application of its specific academic policies to determine whether any academic misconduct has occurred.

Frequently Asked Questions

How should I interpret Turnitin's AI writing percentage and false positives?

The percentage shown in the AI writing report is the amount of qualifying text within the submission that Turnitin's AI writing detection model determines was either likely AI-generated text from a large-language model or likely AI-generated text that was likely revised using an AI paraphrase tool or word spinner.

False positives (incorrectly flagging human-written text as AI-generated) are a possibility in AI models.

AI detection scores under 20%, which we do not surface in new reports, have a higher likelihood of false positives. To reduce the likelihood of misinterpretation, no score or highlights are attributed and are indicated with an asterisk in the report (*%).

The AI writing percentage should not be the sole basis to determine whether misconduct has occurred. The reviewer/instructor should use the percentage as a means to start a formative conversation with their student and/or use it to examine the submitted assignment in accordance with their school's policies.

What does 'qualifying text' mean?

Our model only processes qualifying text in the form of long-form writing. Long-form writing means individual sentences contained in paragraphs that make up a longer piece of written work, such as an essay, a dissertation, or an article, etc. Qualifying text that has been determined to be likely AI-generated will be highlighted in cyan in the submission, and likely AI-generated and then likely AI-paraphrased will be highlighted purple.

Non-qualifying text, such as bullet points, annotated bibliographies, etc., will not be processed and can create disparity between the submission highlights and the percentage shown.



POSTNATAL CARE UTILIZATION AND ASSOCIATED FACTORS
AMONG WOMEN WHO HAVE GIVEN BIRTH IN THE LAST 12
MONTHS IN EAST AZERNET BERBERE DISTRICT_ SILTIE ZONE_
CENTRAL ETHIOPIA_ 2025 _ A MIXED-METHODS STUDY.d

ORIGINALITY REPORT

7%	9%	0%	3%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	s3-eu-west-1.amazonaws.com	4%
	Internet Source	
2	etd.aau.edu.et	3%
	Internet Source	

Exclude quotes	Off	Exclude assignment template	Off
Exclude bibliography	Off	Exclude matches	< 2%