



COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

**MOTHERS' READINESS AT HOSPITAL DISCHARGE FOR HOME BASED
PRETERM INFANT CARE AND ITS ASSOCIATION WITH THE QUALITY
OF HOSPITAL DISCHARGE EDUCATION IN SELECTED PUBLIC
HOSPITALS IN OROMIA REGIONAL STATE, ETHIOPIA**

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This is to certify that the thesis prepared by Munira Ebrahim, entitled: *Mothers' readiness at hospital discharge for home based preterm infant care and its association with the quality of hospital discharge education in selected public hospitals in Oromia regional state, Ethiopia* and submitted in fulfilment of the requirements for the Degree of Masters of Public Health in Reproductive, Family and Population Health complies with the regulations of the University and meets the accepted standards concerning originality and quality.

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DECLARATION

I, the undersigned, Public Health student declare that this thesis is my original work, and it has not been presented in other universities, colleges, or institutions for a similar degree or another purpose. All sources of the materials used in this thesis have been duly acknowledged.

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LIST OF ACRONYMS

AAU	Addis Ababa University
CSA	Central Statistical Agency
EC	Ethiopian Calendar
EPHI	Ethiopian Public Health Institution
EDHS	Ethiopian Demographic Health Survey
ETB	Ethiopian Birr
FMOH	Federal Ministry of Health
GC	Gregorian Calendar
NICU	Neonatal Intensive Care Unit
ODK	Open Data Kit
PHQ	Patient Health Questionnaire
QDTS	Quality of Discharge Teaching Scale
RHDS	Readiness for Hospital Discharge Scale
SPSS	Statistical Package for Social Sciences
SSA	Sub-Saharan Africa
USA	United State of America
USAID	United States Agency for International Development
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization

ABSTRACT

Background: Preterm births contribute to 35% of all neonatal deaths. Apart from health facility-based intervention, improving mothers' readiness during their hospital stay to continue preterm infant care at home improves neonatal health outcomes.

Objective: To assess the level of mothers' readiness at hospital discharge for home-based preterm infant care and its association with the quality of hospital discharge education in selected public hospitals in Oromia regional state, Ethiopia.

Methods: An institution-based cross-sectional study was conducted at public hospitals in the Oromia region. A total of 403 women who had preterm births and received neonatal care in selected public hospitals were included in the study. Data was collected by four female and one male BSc degree holders using the ODK platform. A descriptive analysis was conducted by computing frequency and mean. The association between readiness at hospital discharge and the quality of hospital discharge education and other covariates was investigated using logistic regression analysis. The P-value of < 0.05 was considered statistically significant.

Results: The findings of this study showed that 54.48% of the mothers were ready to be discharged from the hospital. Having good quality of discharge education was associated with a 2.43 (adjusted odds ratio [AOR]: 2.43; 95% confidence interval [CI] 1.32,4.48) fold increase in the odds of being ready for discharge. Other variables that were independently associated with readiness include residence (AOR: 4.87; 95%CI: 2.34,10.12), marital status (AOR: 2.34; 95%CI: 1.20,4.59), parity(AOR: 2.82; 95%CI: 1.43,5.54)], mode of delivery (AOR: 6.69; 95%CI: 2.64,16.96), hospital length of stay(AOR: 3.36; 95%CI: 1.79,6.31) and education in mother tongue language (AOR: 5.92; 95%CI: 2.33,15.09).

Conclusion and recommendations: In this study, the level of readiness at hospital discharge among mothers of preterm infants was suboptimal. Good quality of discharge education is significantly associated with higher readiness at hospital discharge. Therefore, providing high quality discharge education to mothers of preterm infants during their hospital stay and educating them in their mother tongue could help increase readiness at hospital discharge.

Keywords: Preterm birth, Discharge readiness, Quality of discharge education.

CHAPTER 1: INTRODUCTION

1.1. Background

A preterm baby is a baby born alive before 37 complete weeks of pregnancy whether it occurs spontaneously or initiated by health care provider intervention. Based on gestational age at the time of birth, preterm birth is sub-categorized as extremely preterm (if a baby is born less than 28 weeks), very preterm (if a baby is born 28 to 32 weeks), and moderate to late preterm (if a baby born 32 to 37 weeks) (1, 2).

Approximately 15 million babies are born preterm each year, resulting in a global preterm birth rate of 11%. Of these births, over 84% occur between 32 to 37 weeks of gestation (moderate to late preterm), 10% happen between 28 to 32 weeks (very preterm), and 5% occur before 28 weeks (extremely preterm). About 80% of global preterm births occur in Sub-Saharan Africa and South Asia. In low-income countries, the average preterm birth rate is close to 12%, although there is significant variation between different countries (3, 4).

Like many countries in SSA, Ethiopia has a high rate of preterm births. According to evidence, approximately 320,000 babies are born preterm in Ethiopia each year (3, 4), with a prevalence rate of about 12% (5). Preterm births account for 34% of neonatal deaths and 11% of deaths among children under five years old, making them the first and fourth leading causes of neonatal and under-five mortality, respectively (6).

Preterm birth has various negative consequences beyond the direct health issues it poses for infants, such as significant neurodevelopmental impairments, physical problems, and behavioral problems. Additionally, it also has significant economic costs for families and communities at large (7). Most of these complications are preventable through simple interventions. To reduce preterm birth and its associated complications, Ethiopia established a national strategy for newborn and child survival in 2015 (8). The strategy introduced high-impact interventions at the hospital and community levels to reduce complications and death among preterm infants. These interventions include expanding a functional hospital Neonatal Intensive Care Unit (NICU), applying chlorohexidine cord care at the facility and home, providing antenatal corticosteroids at the hospital level, and improving providers' skill competency (8).

Although the interventions mentioned above are essential for reducing complications related to preterm birth, involving mothers in preterm care and preparing them to care for their preterm infants also plays a significant role in ensuring continuity of care at home. This transition from hospital to home is crucial for maintaining the health of preterm infants (9).

Readiness for hospital discharge is parental attainment of technical knowledge, skill, confidence, and emotional comfort with infant care to apply at home(10). It is especially important to ensure parents' confidence in home management of non-acute medical problems, correct administration of medications and other care, and seeking medical attention when needed to ensure sound growth and development of preterm infants (11) and further improve mother-infant interaction (12).

Preterm neonates are often discharged from hospitals with the expectation that they will receive care at home. These infants may leave with unresolved medical conditions that require complex discharge education. Providing hospital discharge education is a crucial intervention that prepares parents to care for their infants at home (13). Mothers need to enhance knowledge, develop caregiving skills, boost self-confidence, and improve decision-making abilities related to home care. This preparation helps mothers care for their preterm infants, manage stress (14, 15), and reduce the risk of negative outcomes after discharge (16).

This optimal and good-quality discharge education is primarily expected to be given to mothers by neonatal nursing staff in the NICU (17-19). However, the previous study has indicated many challenges in ensuring quality discharge education. For example; providing education that is not tailored to individual clients' needs and delivering content in a rush are common problems that affect the quality of discharge education (20).

In Ethiopia, although national admission and discharge protocols for Ethiopian hospitals emphasize the importance of preparing parents before discharge (21), there is limited evidence regarding mothers' readiness at discharge specific to preterm infants and its association with the quality of hospital discharge education in the country. For evidence that ensures a smooth and effective discharge process, it is crucial to examine mothers' level of readiness at hospital discharge and its association with the quality of hospital discharge education.

1.2. Statement of the problem

Globally, out of 15 million infants born prematurely, one million dies from complications, making prematurity the leading cause of death among children under five. Survivors of premature birth often face long-lasting complications, including neurological impairment, developmental delays, and physical disabilities (4). In the Sub-Saharan Africa (SSA) region, neonatal mortality is the highest (15), with over half a million cases annually, contributing to 13% of all under-five deaths (4).

According to the WHO report of 2019, Ethiopia is among the top ten countries with a high rate of newborn deaths (22). In Ethiopia, approximately 24,400 under-five children die yearly due to the consequence of preterm birth complications (23). To prevent these complications, mothers should have adequate knowledge about their infants during their hospital stay (24). Although Ethiopia brought a remarkable improvement in the reduction of under-five mortality, its progress in reducing the neonatal mortality rate has not been as impressive. It even increased between 2016 and 2019 from 29 to 30 per 1000 live births (25, 26). Preterm birth contributes to 34 % of neonatal deaths and 11% of under-five deaths, making it the first leading cause of neonatal deaths and the fourth leading cause of under-five deaths in Ethiopia (6).

Most preterm infants are admitted to the NICU for the treatment of acute health problems and discharged to have continued care at home to avoid a prolonged hospital stay, which is associated with poor parental bonding, iatrogenic infection, maternal anxiety, and failure to thrive (27). Previous studies recommend discharge with a minimum length of stay because home care by a competent mother strengthens bonding, increases maternal satisfaction, decreases health care costs, avails NICU beds, and improves infant growth and development (27, 28).

During home care, many things go wrong due to mothers lacking the necessary knowledge and skills to care for their preterm infants. This deficiency increases the risk of complications at home, hospital readmissions, and even deaths following hospital discharge (29, 30). Research indicates that approximately 15% to 23% of preterm infants and 50% of those with extremely low birth weights are readmitted due to complications within their first year of life. However, proper maternal readiness and support have the potential to avert a significant proportion of these complications and readmission (11).

Maternal knowledge and skills, as well as the safety of preterm infants, are significantly linked to the quality of hospital discharge education (14). To help mothers better understand the health issues of their preterm newborns, healthcare providers, particularly nurses, are expected to deliver comprehensive education during their stay in the hospital (31). However, previous studies have indicated that, while hospital discharge education is commonly provided, it often lacks the quality that is necessary to build mothers' confidence in managing their preterm infants' health problems (15, 16).

Most recently, giving a special focus on the quality of hospital discharge education, different studies were conducted to investigate the relationship between readiness at hospital discharge and the quality of hospital discharge education. Although most studies indicate a positive correlation between the quality of discharge education and mothers' readiness for discharge (10, 11, 30), some research has found no significant associations (32).

As the quality of discharge education can also be affected by different context-specific factors such as providers' workload, provider clinical skills and knowledge, and the availability of resources, it is crucial to study the local context to understand the association between this quality of hospital discharge education and readiness at hospital discharge. However, we hardly get evidence regarding this vital healthcare intervention in Ethiopia generally and in the Oromia region, most specifically regardless of its significance. Therefore, this study aims to investigate mothers' readiness at hospital discharge for home-based preterm infant care and its association with the quality of hospital discharge education in selected public hospitals in Oromia regional state, Ethiopia.

1.3. Significance of the study

This study provides relevant evidence regarding the readiness of mothers at the time of hospital discharge and its association with the quality of hospital discharge education. The findings contribute to a better understanding of the discharge preparation process for preterm infants in the study areas and highlight the importance of evaluating mothers' readiness before discharge, this assessment can help identify mothers who may need additional support and ensure that necessary interventions are provided.

The findings from this study can be utilized by the Oromia Regional Health Bureau in developing strategies that ensure a safe discharge process for preterm infants from hospitals. Additionally, these findings may trigger the development of a standardized protocol for discharging preterm infants that can ensure consistency throughout the process. Specifically, the insights gained from this study are valuable for healthcare facilities aiming to improve the quality of discharge education for mothers, which in turn enhances their preparedness. Ultimately, this can contribute to efforts aimed at reducing neonatal mortality. Furthermore, this study can serve as a baseline reference for future researchers interested in this area.

CHAPTER 2: LITERATURE REVIEW

2.1. The level of mothers' readiness up on hospital discharge

Readiness at the time of hospital discharge is important to prevent unsafe and ineffective hospital discharge that hinders the successful transition of preterm infants from hospital to home environment (33-36).

A prospective observational study of 867 families of preterm infants conducted at Beth Israel Deaconess Medical Center in the USA showed that 87% of families were prepared for discharge (11). Another study of 287 families of preterm infants discharged from a hospital in the USA revealed that 12% of families were unprepared and had less confidence in the post-discharge care of their preterm newborn (37). A similar study from the USA that employed 305 mother-father pairs has indicated that more than 20% of the mothers had poor perceptions of emotional confidence in giving home care for their infants, with a high degree of worrying and anxiety related to their child's health and future development (38). Likewise, a prospective cohort study from the USA that employed 55 mothers' infant pairs found that 20 % of mothers were not ready for discharge (39).

A quasi-experimental study of 154 parents of preterm infants conducted in China reported that 10% of parents were unprepared for their infant's discharge (13). Similarly, a mixed methods study conducted in Scotland employing 374 parents revealed that 14% of parents were unprepared for discharge. The unprepared family lacked the confidence to feed breast, administer medication, and manage minor problems like fever at home. Although 86% of participants rated ready for discharge, they reported a lack of education and advice regarding feeding during their hospital stay. Only 31% were allowed to practice feeding preparation, while only 37% received information about hunger and how to increase feeds for their preterm infant (40).

A cross-sectional study of 130 mothers of preterm infants from Iraq showed the presence of poor awareness among mothers regarding preterm baby home care. Almost 70% of mothers had neutral awareness related to illness or danger signs recognition and breastfeeding, most of these mothers also had poor awareness about infection prevention, and 66% of mothers had neutral awareness of thermoregulation of preterm babies at home (41).

A cross-sectional study conducted in Palestine among 120 mothers of preterm infants showed that 42% of mothers had poor knowledge about health care that is needed at home for their premature infants after discharge (42).

Evidence regarding the involvement of family-centered care for preterm infants is limited in low and middle-income countries (43). Specifically, there is a lack of studies addressing mothers' readiness for hospital discharge in Africa, including Ethiopia. A study conducted in Rwanda found that 43% of mothers with preterm infants had poor knowledge about providing home care for their preterm infant after discharge from the neonatal intensive care unit (44).

Overall, there is a lack of global evidence regarding mothers' readiness for hospital discharge. The few existing studies provide varying findings across different countries, with readiness reported at 43% in Rwanda and 90% in China. In Ethiopia, there is insufficient evidence concerning mothers' readiness for discharge, highlighting the need for conducting research in this area.

2.2. Quality of discharge education and readiness at hospital discharge

Readiness for hospital discharge is parental attainment of technical knowledge, skill, confidence, and emotional comfort with infant care to apply at home (10). It has been long established that effective hospital discharge education improves mothers' readiness upon leaving the hospital. For instance, a study conducted in Turkey found that women who received high-quality discharge education after giving birth were more likely to feel ready to care for themselves and their newborns (45). This finding is supported by an integrative review study that indicates a positive correlation between quality and focused hospital discharge education and discharge readiness (46). Specific to preterm, a study conducted in Canada reported that mothers who received high quality hospital discharge education are more likely to have a discharge readiness and confidence to care for their preterm infants than those who did not receive (47). Similar findings from the USA (10, 11) and China (18) have indicated that the quality of hospital discharge education is the strongest predictor of discharge readiness.

A cross-sectional study carried out in 2020 among mothers of preterm infants in a neonatology center in Western Switzerland showed that a quality discharge education program brought a 13% variance to readiness at hospital discharge from a total of 64% ready mothers, and this demonstrated the presence of a statistically significant association between readiness for hospital

discharge and quality of hospital discharge education (16). Similarly, A quasi-experimental study conducted in 2017 at Muhima District Hospital in Kigali indicated a strong relationship between the quality of hospital discharge education and maternal readiness (15). Similar studies conducted in Egypt (14), India (19))and China (13) showed a higher readiness for hospital discharge among mothers who received high-quality discharge education regarding preterm infant's home care than those who didn't receive education. Although not specific to preterm, another study conducted in Indonesia to investigate the relationship between quality discharge education and discharge readiness has found no significant relationship (32).

In conclusion, most of the reviewed literature reported a statistically significant association between readiness at hospital discharge and the quality of hospital discharge education. However, one study found no significant association. In Ethiopia, there are currently no studies available that examine the relationship between the quality of discharge education and discharge readiness.

2.3. Other factors associated with readiness at hospital discharge

2.3.1. Socio-demographic factors

Various socio-demographic factors have been linked to readiness at hospital discharge. For example, a study conducted in the USA has indicated that single marital status is a high-risk factor for mothers who lack readiness for hospital discharge (37). Similarly, a 2017 review study found that unmarried mothers were more likely to be unprepared for discharge compared to their married counterparts (28).

A cross-sectional study done in Turkey among 610 mothers revealed that women who attained a higher level of education had higher discharge readiness than those who had a lower level of education (48). Similarly, a study conducted in Rwanda reported that mothers with higher educational levels have higher knowledge and preparedness for home care than those with lower educational levels (44). Supporting this, a finding of a prospective study from the USA that employed 55 mothers showed that mothers who attained less than high school had a higher chance of experiencing hospital discharge unreadiness than those who attained high school and above (28).

Different studies have indicated the role of income influencing the readiness of mothers at hospital discharge. For example, a quantitative cross-sectional study conducted in Turkey showed that a mother with a high income or employed was more likely to be ready for hospital discharge than a mother with a low income (48). Similarly, a review study conducted in 2017 showed that mothers with low incomes were more likely to be unready for hospital discharge than those with higher incomes (28). A facility-based cross-sectional study from Iraq found that mothers who had low economic status had a higher chance of being unready than those mothers who had sufficient income (41). Inconsistent with the studies mentioned above, a cross-sectional study conducted in Palestine among 120 mothers of preterm infants indicated no significant association between employment and readiness at hospital discharge, showing the importance of further study (42).

As indicated from the above literature, almost all reviewed studies have revealed a positive association between different socio-demographic characteristics such as marital status, level of education, and income/employment. However, one study found no significant association between employment and discharge readiness.

2.3.2. Reproductive health-related factors

A cross-sectional study of 202 parents with preterm infants in a tertiary hospital in Eastern China showed that mothers with previous newborn caring experience reported higher readiness at hospital discharge than those who had no such experience (18). Similarly, a mixed-methods study from Canada that employed 71 mothers with preterm infants indicated that primiparous mothers are more likely to have low confidence in providing home-based care for their preterm infants than multiparous mothers (47). Likewise, a study from South Korea that employed mothers of premature infants indicated that women who had parenting experience were more likely to be ready for hospital discharge than those who were not experienced (49).

Previous studies also indicated that apart from parity, the mode of delivery was also associated with readiness at hospital discharge (41, 50). A facility-based cross-sectional study from Iraq has indicated that mothers who gave birth by caesarian section were less likely to be readied to care for their infants compared to those who gave birth vaginally (41). Similarly, a prospective cohort study from the USA revealed that mothers who delivered with cesarean sections were more likely to be unready than those who had vaginal deliveries (50).

A facility-based cross-sectional study was conducted at Mizan Tepi University Teaching Hospital in Ethiopia among 392 pregnant women. The study revealed that less than half of women who received antenatal care were well-prepared for obstetric complications (51).

A study at Dilchora Referral Hospital in East Ethiopia of 405 pregnant mothers who received antenatal care showed low preparedness for complications (52). Similarly, In 2022, a facility based cross-sectional study was conducted among 422 pregnant women at Yirgalem General Hospital in southern Ethiopia to observe their low birth preparedness and complication readiness practices (53).

To sum up, the studies mentioned above have reported the association between readiness at hospital discharge and different obstetric factors such as parity or previous parenting experience, mode of delivery, and antenatal care utilization. That indicates the importance of these variables in studying readiness at hospital discharge.

2.3.3. Maternal physical and mental health-related factors

A longitudinal study that was conducted in Chieti University Hospital, Italy, employing mothers of premature infants showed that mothers who have a history of depressive symptoms were more likely to have lower readiness for discharge than mothers without a history of depressive symptoms (54). Similarly, a prospective cohort study conducted in the USA showed that mothers with a history of mental health disorders were less likely to be ready for discharge compared with those mothers without a history of mental health disorders (55). Likewise, a study conducted in the USA that employed mothers with preterm infants has reported that women with stress are less likely to be readied for discharge compared to those with no stress (56).

A prospective observational cohort study from the USA that employed 4300 mothers and infants reported a high risk of discharge unreadiness among mothers who experienced chronic disease compared to women who had no chronic diseases (50). A similar review of the study has indicated that mothers who had a history of chronic disease were less likely to be ready for discharge than mothers without a history of chronic disease (10).

A cross-sectional study carried out in 2021 among 230 adult patients in China indicated that a high level of depression was associated with a lower level of readiness for hospital discharge; those patients who had a higher level of depression showed a lower level of readiness for hospital discharge (57). In line with this, a prospective cohort study conducted in the USA among 934 mothers of preterm infants showed that mothers with poor mental health were less ready for hospital discharge compared with those mothers without mental health disorders (55). A cross-sectional study conducted in 2022 at Lorestan University of Medical Sciences facilities in Iran, which included 120 women of preterm infants, found that stress is a strong predictor of readiness at hospital discharge (58). In conclusion, the studies have indicated that a history of maternal mental illness, chronic disease, and current depression status were consistently related to discharge readiness.

2.3.4. Family related factor

A Canadian mixed-method study found that mothers of preterm infants who received support from their partners or families developed greater confidence in caring for their infants compared to those who did not receive support (47). Although not specific to preterm, a study from Turkey has also indicated that women who received support from family members are more likely to be ready to give care for their preterm infants compared to mothers who did not receive support from family members (45). Both studies from Turkey and Canada have indicated the possible role of social support in improving discharge readiness.

2.3.5. Health system related factors

Good skills in delivering discharge education are necessary to ensure successful discharge readiness among mothers (46). A study conducted in Canada has shown that mothers who received hospital discharge education from knowledgeable professionals were more likely to be ready and confident through bonding and hands-on skills acquisition compared with mothers who didn't receive it (59). Apart from professional skills in delivering discharge education, the study also showed the negative relationship between an increased staff workload and readiness at hospital discharge (60) indicating the role of insufficient human power as a barrier to discharge readiness (61).

Evidence has indicated that the language barrier between healthcare providers and patients can contribute to unequal access to healthcare services and poor health outcomes (62). In line with this, a previous study conducted on readiness at hospital discharge in the USA reported that families with limited English proficiency who received care from English-speaking care providers were less likely to feel prepared for discharge compared with English-speaking families (10).

Previous studies also reported the relationship between hospital length of stay and readiness for hospital discharge (13, 63). For example, a study conducted in China among premature infant parents indicated that mothers who spent longer in the hospital were more likely to be ready for hospital discharge compared to mothers who had a shorter duration of stay in the hospital (13). In contrast, a longitudinal study from the United States discovered that mothers with shorter hospital lengths of stay were more likely to be ready for discharge than mothers with longer hospital lengths of stay (63, 64).

In summary, the above literature has consistently indicated the role of counseling language, staff workload, and professional skill in impacting maternal readiness for hospital discharge. However, evidence regarding the association between hospital length of stay and discharge readiness is inconclusive.

2.4. Conceptual framework

After reviewing the literature, the following conceptual framework was developed, to guide the assessment of the association between the quality of hospital discharge education and readiness for hospital discharge.

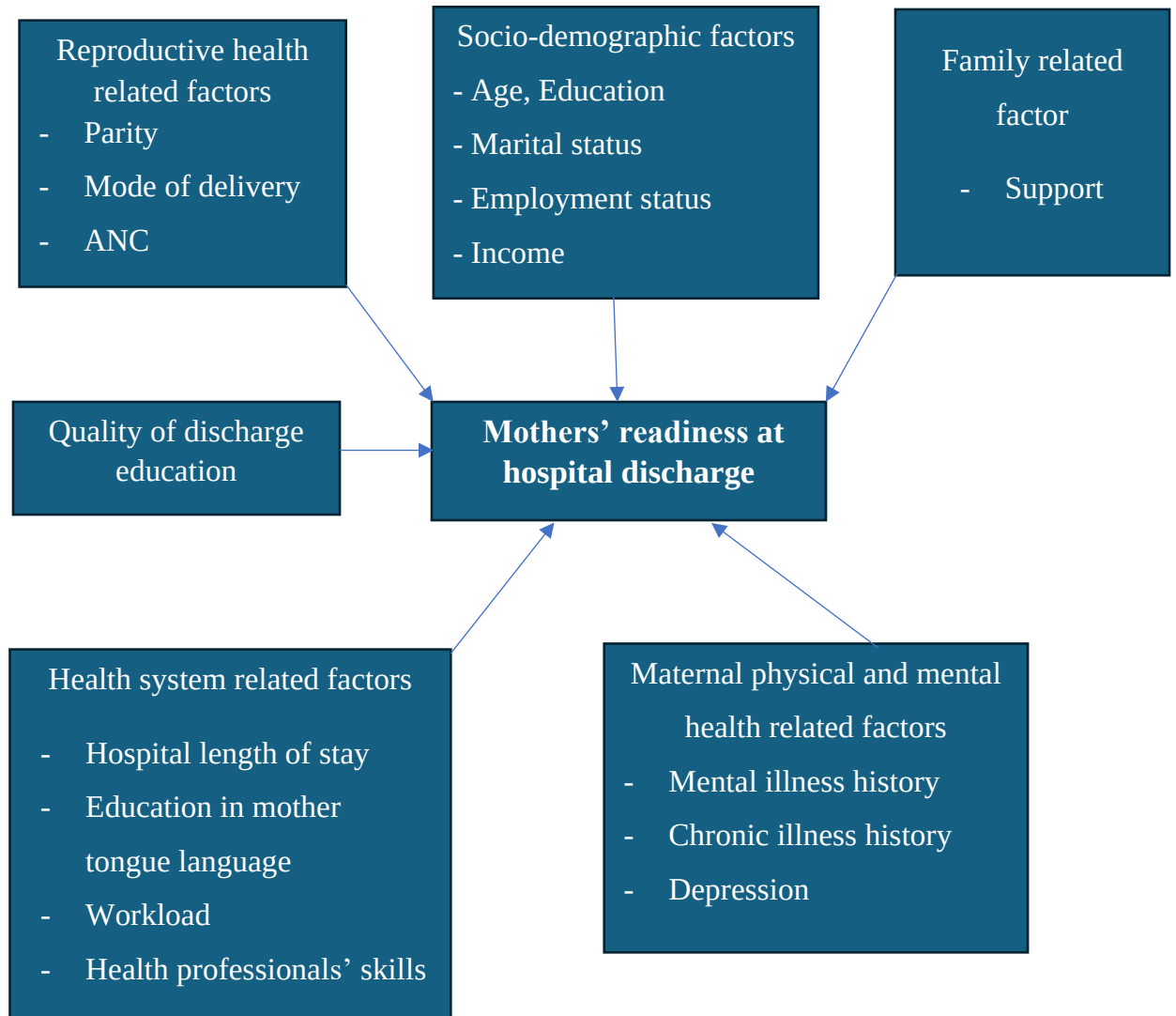


Figure 1: A conceptual framework for assessing mothers' readiness at hospital discharge for home-based preterm infants care and its association with the quality of hospital discharge education in selected public hospitals (Source: Constructed from different reviewed literatures).

CHAPTER 3: STUDY OBJECTIVES

3.1. General objective

- To assess the level of mothers' readiness at hospital discharge for home-based preterm infant care and its association with the quality of hospital discharge education in selected public hospitals in Oromia regional state, Ethiopia, from September 2023 to January 2024.

3.2. Specific objectives

- To assess the level of mothers' readiness at hospital discharge for home-based preterm infant care in selected public hospitals in Oromia regional state, Ethiopia, from September 2023 to January 2024.
- To examine the association between readiness at hospital discharge and the quality of hospital discharge education among mothers of preterm infants in selected public hospitals in Oromia regional state, Ethiopia.

CHAPTER 4: METHODOLOGY

4.1. Study setting and study period

This study was conducted in five public hospitals in central Ethiopia, namely, Bishoftu, Adama, Batu, Asella, and Shashemene. All the aforementioned hospitals are located in the Oromia regional state in the towns of Bishoftu, Adama, Batu, Asella, and Shashemene, respectively. Geographically, the towns of Bishoftu, Adama, and Asella are positioned 47 km, 100 km, and 175 km east of Addis Ababa, while Batu and Shashemene are located 168 km and 258 km south of Addis Ababa, respectively. The total population of Bishoftu and Adama towns is 227,998 and 398,144, while the population of Batu, Asella, and Shashemene towns is 79,099, 110,874, and 165,578, respectively. According to Oromia Regional Health Bureau information, these public hospitals (Bishoftu, Adama, Batu, Asella, and Shashemene hospitals) provide essential maternal and child healthcare services, including family planning, skilled delivery, immunization, and neonatal intensive care services.

In 2022, approximately 27,635 women gave birth in all five hospitals. Out of these, Bishoftu Hospital recorded 5,353 deliveries, and Adama Hospital reported 8,306 deliveries. Batu Hospital had 3,613 deliveries, while Asella Hospital reported 7,021 deliveries. Shashemene Hospital reported a total of 3,342 deliveries. Each of the aforementioned hospitals has NICU wards that provide neonatal intensive care services in a well-organized manner. All of the hospitals mentioned above allow mothers to enter the NICU ward to visit their infants and provide essential care, such as feeding, diapering, and kangaroo mothers caring for their infants during their hospital stay until the infants are about to be discharged. The study was conducted in Bishoftu, Adama, Batu, Asella, and Shashemene hospitals from July 2023 to June 2024.

4.2. Study design

A facility-based cross-sectional study was conducted among women who gave birth to preterm infants in selected public hospitals.

4.3. Population

4.3.1. Source population

All postpartum mothers who gave birth to preterm infants in selected public hospitals in the Oromia regional state, Ethiopia.

4.3.2. Study population

All postpartum mothers who had preterm infants and then received care in selected public hospitals in the Oromia regional state during the data collection period.

4.3.3. Eligibility criteria

4.3.3.1. Inclusion criteria

Mothers with preterm infants in the study hospitals were included.

Mothers who have received hospital discharge education from the hospital staff during their hospital stay.

4.3.3.2. Exclusion criteria

A mother who was unable to respond due to serious complications or a critical illness.

A mother, whose preterm infant had passed away in the hospital.

A mother who left the hospital immediately after giving birth.

4.4. Sample size determination

4.4.1. Sample size determination for the first specific objective

The required sample size was calculated by using a single population proportion formula with the following parameters: proportion of discharge readiness was 50% ($P = 0.5$) due to a lack of previous studies conducted in countries that are contextually and geographically comparable to

Ethiopia, a 95% confidence interval ($Z = 1.96$), 5% margin of error and 5% non-response rate is considered.

$$\text{Then, } n = \frac{(Z \alpha/2)^2 p (1-p)}{d^2}$$

Where: n = The required sample size
 Z = The standard score corresponding to a 95% confidence interval
 P = proportion of ready mothers upon hospital discharge
 d^2 = margin of error (the required precision) = 5%

$$\begin{aligned} &= \frac{(1.96)^2 * 0.5(0.5)}{(0.05)^2} \\ &= 384 + 5\% \text{ non-response rates} \\ &= 403 \end{aligned}$$

4.4.2. Sample size determination for the second specific objective

The quality of hospital discharge education was considered the most crucial factor associated with readiness at discharge to give home care among women who had preterm infants (13). Then the sample size was calculated by using Open Epi info version 7.2.2.2 under the assumptions of 95% CI, power 80%, the ratio of unexposed to exposed 1, and unexposed for the general population 50%. Then, among the exposed, we assumed a 15 % difference, which became 65%, and used a 5 % non-response rate (**Table 1**).

Table 1: Sample size calculation for quality of discharge education associated with readiness at hospital discharge among mothers of preterm infants in Oromia regional state, Ethiopia 2024.

Variable	Confidence interval (%)	Power (%)	Ratio of unexposed to exposed	% Outcome in unexposed group	% Outcome in exposed group	Non response rate (%)	Final sample size
Quality of discharge education	95	80	1	50	65	5	384

The sample size calculated for the second specific objective using the double population proportion formula was 384, which was lower than the sample size calculated for the first specific objective. Therefore, since 403 was the largest sample size, it was taken as the final sample size for this study.

4.5. Sampling technique

The five selected hospitals mentioned above were chosen from the Oromia regional state due to their high preterm birth caseloads. The total sample size was distributed proportionately among these five public hospitals based on their historical preterm birth caseloads. Overall, Bishoftu, Adama, Batu, Asella, and Shashemene hospitals reported an annual preterm birth caseload of 1,597. The preterm birth caseload of the selected public hospitals during the study period was 63 and 195 for Bishoftu and Adama, respectively, while Batu and Asella hospitals reported 84 and 77 cases, respectively. Shashemene Hospital documented a total of 178 cases. Therefore, all mothers who attended these selected public hospitals and gave birth to preterm neonates from September 2023 to January 2024 and women who met the inclusion criteria were engaged in this study (**Figure 2**).

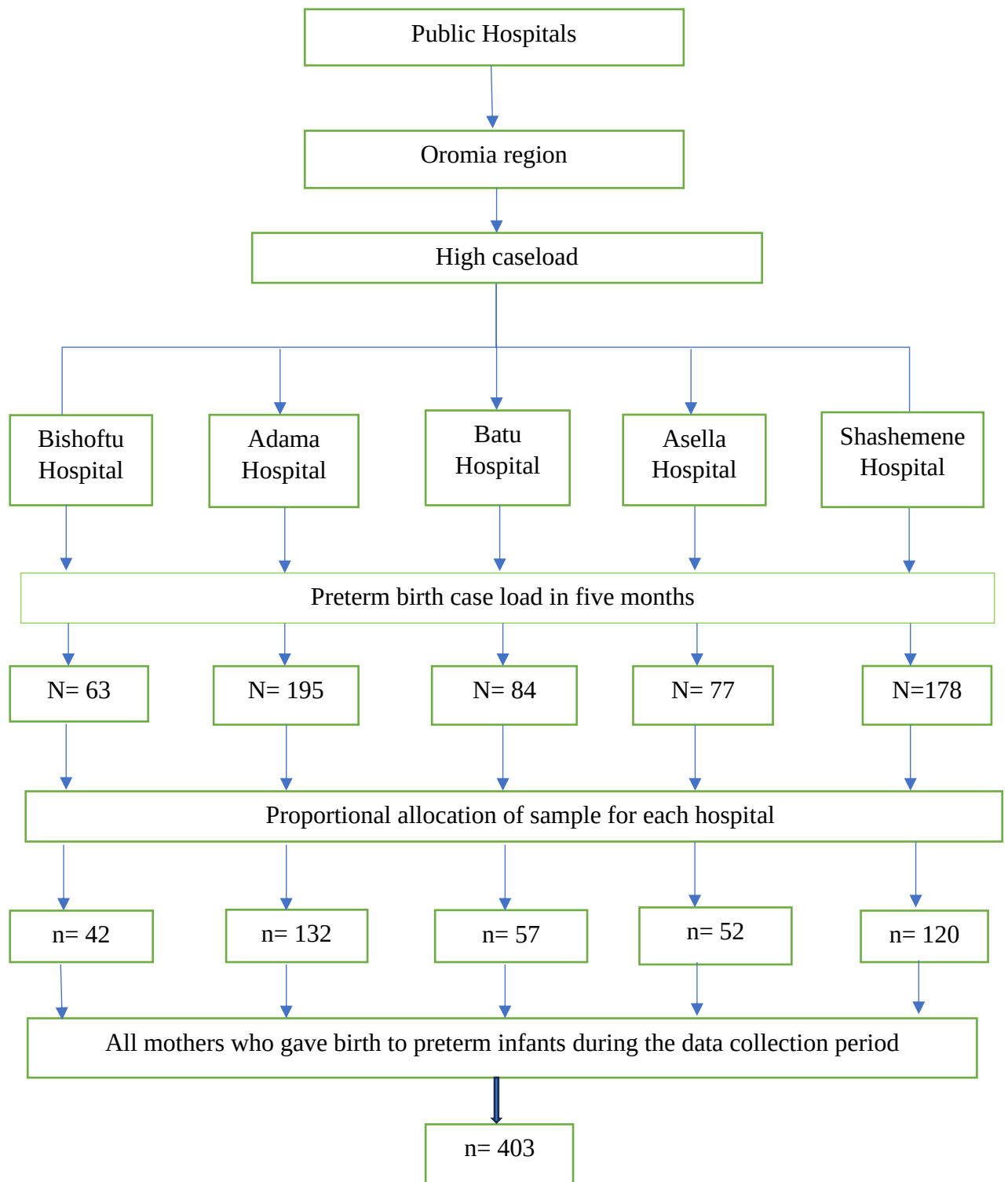


Figure 2: Schematic representation of sampling procedure

4.6. Study variables

4.6.1. Dependent variable

Mothers' readiness at hospital discharge

4.6.2. Independent variables

The quality of hospital discharge education is the main independent variable. In addition, other possible covariates were also collected. These variables are categorized as follows:

Sociodemographic factors: Age, residence, education, marital status, employment status, income.

Reproductive health-related factors: Parity, mode of delivery, number of ANC visits and time.

Health system-related factors: Hospital length of stay, education in mother tongue language, workload, health professionals' skills.

Maternal physical and mental health-related factors: Mental illness history, chronic illness history, current depression status.

Family-related factor: Support.

4.7. Operational definitions

Preterm neonate: A baby delivered at less than 37 weeks of pregnancy or fewer than 259 days from the first date of the woman's last menstrual period.

Workload: A nurse is considered to have a "high workload" if he/she looks after for more than one preterm infant in the NICU and three infants from the neonatal ward (65).

Readiness for hospital discharge refers to: A mother's ability to leave a hospital after gaining the necessary knowledge, skills, emotional stability, and confidence to care for her infant at home. This ability is measured by the Parental Readiness for Hospital Discharge Scale (RHDS) (18).

Hospital discharge education: Is teaching, providing information, guiding, and supporting mothers during hospitalization to equip them with adequate knowledge, care skills, and self confidence that will help them to take care of their fragile infant successfully at home, and

quality of hospital discharge education was measured by Quality of Discharge Teaching Scale (QDTS) (13, 14).

Depression: Is a common mental disorder that causes a persistent feeling of sadness and loss of interest in doing things and activities they enjoyed before.

4.8. Data collection tools and procedures

Data was collected using the ODK platform through face-to-face interviews using a structured questionnaire. The questionnaire was adapted from relevant literature with some modifications to fit the study objectives and the local context. The Readiness for Hospital Discharge Scale (RHDS) is a tool that was used to assess readiness for hospital discharge before the mothers were released from the hospital.

The RHDS questionnaire has been validated in several countries, including the United States, China, and Indonesia (64, 66). It consists of twenty questions, with responses measured on a Likert scale format ranging from none (scored 1) to extremely very high (scored 7), resulting in a maximum possible score of 140. The RHDS consists of twenty items divided into three subscales: Physical and emotional status-related subscale, knowledge-related subscale, and expected support-related subscale. The physical and emotional status subscale evaluates the mother's overall health status as a caregiver of her infant using six questions, the knowledge subscale assesses the mother's knowledge of caring for an infant using nine items, and the expected support subscale evaluates the mother's plan for various forms of help (about her, her child, and her household) that they will get at home after being discharged from the hospital, using five items. In general, mothers who scored a mean total of 81 or higher on the overall Likert scale were considered ready for discharge, based on the methodology from a previous study (16).

The Quality Discharge Teaching Scale (QDTS) was used to evaluate the educational preparation of mothers (13). The QDTS is a validated tool used in different parts of the world, including China. It consists of twenty-two questions scored on a 7-point Likert scale, where responses range from none (scored 1) to extremely high (scored 7). The questions have two categories: the content received subscale, which assesses the amount of information the mother received regarding the care of her infants using eleven questions, and the content delivered subscale,

which evaluates the health professionals' instructional abilities as educators, using 11 quality teaching items. The highest possible score across both scales is 154. Therefore, mothers who score a mean total of 86 or higher on this scale have received good-quality discharged education, while those who score less than 85 have received poor-quality discharged education (16).

Depression: was measured by a Patient Health Questionnaire (PHQ). The Patient Health Questionnaire (PHQ) consists of nine items that are on a 4-point scored Likert scale. The scale ranges from not at all (scored 0) to nearly every day (scored 3), with a maximum possible score of 27. Mothers who scored between 0-4 are considered not to have depression. Those who scored between 5-9 were classified to have mild depression. Those who scored between 10-14 were classified as having moderate depression, while mothers who scored between 15-19 had moderately severe depression. Lastly, mothers who scored between 20-27 were classified as having severe depression(67, 68).

The questionnaire was initially prepared in English and then translated into Amharic and Afan Oromo by an experienced language expert. Then it was translated back into English to check for any inconsistencies. The data was collected by a team of well-trained four female and one male health professionals who graduated with degrees in BSc Nursing, Public Health, and Midwifery. They were supervised by the principal investigator. The interviews were conducted before the mothers were discharged home from the hospital after explaining the purpose of the study.

4.9. Data quality assurance

To ensure the quality of data, we used a digital data collection technique that is more accurate and complete than data collected through paper forms because that does not allow the entry of invalid values, which can eliminate entry errors. Before starting the data collection, the questionnaire's appropriateness was checked on 5% of study participants in the Lemen and Amaya hospitals who were not part of the study. The Quality Discharge Teaching Scale and the Readiness for Hospital Discharge Scale had good Cronbach Alpha results of 0.80 and 0.89, respectively. The principal investigator provided three days of training to the data collectors. During this time, they learned about the study's objectives, how to approach and choose study participants, the contents of the questionnaire, how to maintain information confidentiality, data quality management, and detailed instructions with a hands-on session on using the ODK

platform to make them familiar with the data collection techniques, data collection tools, and data collection procedures. The principal investigator supervised the data collection process throughout the data collection period. The principal investigator had strong communication with the data collection team. That allowed him to provide guidance, address problems, and supervise data collection performance. Specifically, after completing each questionnaire, the questionnaire was reviewed and checked for accuracy, consistency, and completeness, followed by written feedback.

4.10. Data process and analysis

The collected data using the ODK platform was exported to Excel and then imported into STATA version 14 software. Once the data was imported, it was checked, cleaned, and recoded as needed. Additionally, a do-file documentation was created to outline the recoding of each variable. A simple frequency check was conducted to identify missing data, and maximum and minimum values were also calculated to detect any outliers. Once the data completeness was ensured, new variables were created by transforming some of the existing variables. For example, variables such as discharge readiness and hospital discharge education were computed from their respective scales. After that, a descriptive analysis was conducted by computing frequency and means for categorical and continuous variables, respectively, to analyze the basic characteristics of the participants. The findings were then summarized in text, tables, and graphs. Following this, bivariable and multivariable logistic regression analyses were used to study the association between readiness at hospital discharge and potential explanatory variables. A multicollinearity test was performed for those independent variables with a P-value of < 0.25 in binary logistic regression using the variance inflation factor (VIF). The Pearson correlation coefficient matrix was used to identify highly associated independent variables contributing to the multicollinearity issue and those problematic variables such as parity, gravidity, and others were removed. After that, crude and adjusted odds ratios with 95% confidence intervals were calculated. Variables with a P-value of < 0.25 in binary logistic regression were selected and then exported to multiple logistic regression for further analysis. Variables were considered to have an association with the outcome variable if they had a P-value < 0.05 in the multiple logistic regression analysis.

4.11. Ethical considerations

Ethical clearance was acquired from the Research and Ethical Review Committee of the School of Public Health and College of Health Science at Addis Ababa University. After receiving approval, the Department of Public Health of Addis Ababa University wrote an official letter of cooperation to the relevant authorities. Permission to conduct the study was obtained from the respective Health Bureaus and hospital administrations. Informed verbal consent was sought from each participant after explaining the purpose, procedure, risks, benefits, and significance of their participation. Participants were made aware of their right to withdraw at any time if they were not comfortable participating in the study. In addition, privacy and confidentiality were ensured by using anonymous questionnaires and storing the data in a secure location like secure cloud storage.

CHAPTER 5: RESULT

5.1. Socio-demographic characteristics of the study participants

Out of 403 mothers of preterm infants who were selected to be part of the study from selected public health facilities, 391 mothers participated, resulting in a response rate of 97%. Therefore, the data collected from these 391 mothers were analyzed. Among them, 129 (32.99%) were from Adama Hospital, and 40 (10.23%) were from Bishoftu Hospital. The mean age of the study participants was 28 years old, and 271 (69%) belonged to the 20–34 age group. Three-fourths (290, 74.17%) were married, and two-thirds (266, 68.03%) lived in urban areas. Regarding religion, about half (182, 46.55%) identified themselves as Orthodox Christians. The majority (369, 94%) of mothers had attended formal education, and among them, the highest number (232, 59.34%) had completed secondary school or higher. As for occupation, most respondents (136, 34.78%) were housewives, and 165 (42.20%) of the mothers had a monthly household income of 4,001 or higher in Ethiopian Birr (**Table 2**).

Table 2: Socio-demographic characteristics of mothers who gave birth in public hospitals in Oromia regional state, Ethiopia, 2024 (n = 391)

Variables	Category	Frequency	Percent (%)
Health facilities	Adama hospital	129	32.99
	Shashemene hospital	117	29.92
	Batu hospital	54	13.81
	Asella hospital	51	13.04
	Bishoftu hospital	40	10.23
Age	15–19	41	10.49
	20–34	271	69.31
	≥35	79	20.20
Residence	Urban	266	68.03
	Rural	125	31.97
Marital status	Married	290	74.17
	Out of marriage	101	25.83

Religion	Orthodox	182	46.55
	Muslim	120	30.69
	Protestant/ Catholic	89	22.76
Education level	No formal education/Primary	159	40.66
	Secondary and above	232	59.34
Occupation	Government employer	43	11.00
	Private employer	73	18.67
	Private business	69	17.65
	Housewife	136	34.78
	Farmer	70	17.90
Household income	≤ 3000	127	32.48
	3001–4000	99	25.32
	≥ 4001	165	42.20

5.2. Reproductive health related factors of the respondents

The majority of the respondents, 285 (72.89%) were multigravidas. Likewise, 275(70.33%) mothers were multiparous. Three-fourths of the participants, 291 (74.42%), began their first antenatal care follow-up before the fourth month of pregnancy. Concerning antenatal care follow-up visit frequency, one-third of the respondents, 132 (33.76%), had four or more visits, and about half of them, 206 (52.69%) mothers received two to three ANC follow-up visits. Regarding the mode of delivery, 336 (85.93%) of them gave birth vaginally (**Table 3**).

Table 3: Reproductive health-related factors of mothers who gave birth in public hospitals in Oromia regional state, Ethiopia, 2024 (n = 391)

Variables	Category	Frequency	Percent (%)
Gravidity	Primigravida	106	27.11
	Multigravida	285	72.89
Parity	Primipara	116	29.67
	Multipara	275	70.33

First ANC ^a initiation time	None	12	3.07
	≥ 4 months	88	22.51
	< 4 months	291	74.42
Number of ANC visit	None/ 1 visit	53	13.55
	2 visit/ 3 visit	206	52.69
	≥ 4 visits	132	33.76
Mode of delivery	Vaginal	336	85.93
	Cesarean delivery	55	14.07

^a Antenatal care

5.3. Quality of hospital discharge education among preterm infants' mothers

5.3.1. Quality of discharge education (content received subscale)

This study's findings showed that mothers received varying levels of education about caring for their infants. The amount of information received was rated on a scale of 1 to 7, with 7 being the highest level of information. Of all the mothers who participated in this study, 32%, 27%, and 19% received a high, very high, and extremely high level of information about preterm baby breastfeeding, respectively. Meanwhile, 17% and 4% of the participants received moderate and low levels of information. Moreover, 29%, 23%, and 15% of the study participants had high, very high, and extremely high practices in kangaroo mother care, respectively, while the rest had moderate practice and below. In addition, 24% of the study participants received a high level of information about neonatal danger signs, but only 7% and 1% received very high and extremely high levels of information, respectively. Furthermore, 29% of women received a high level of information about environmental temperature monitoring, while 9% and 4% received very high and extremely high amounts of information, respectively. However, 17% and 3% of the respondents reported receiving a high and very high level of information on infection prevention techniques, respectively (**Figure 3**).

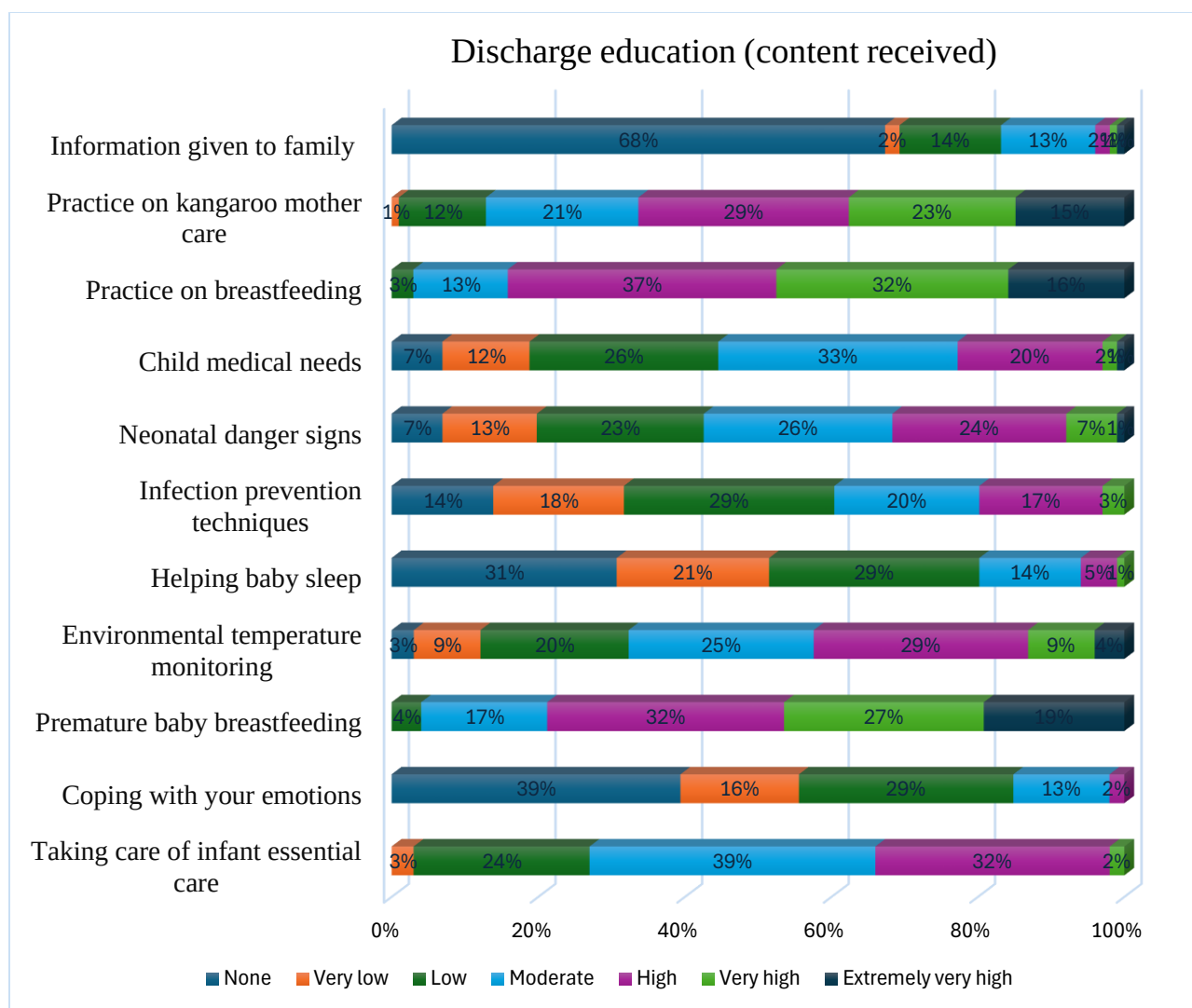


Figure 3: Quality of discharge education (content received) among mothers who gave birth in public hospitals in Oromia regional State, Ethiopia, 2024.

5.3.2. Quality of discharge education (perception about the content delivery method)

The study participants asked about how health professionals delivered information to them. Out of all participants, 10% of the respondents very strongly agreed that the information was delivered at convenient times, while 20% and 33% agreed strongly and mildly, respectively. About 27% of the mothers very strongly agreed that they received consistent content information, while 20% and 8% strongly and mildly agreed. Furthermore, 3%, 14%, and 43% of the mothers very strongly, strongly, and mildly agreed that healthcare providers had divided the content they were teaching into small amounts to help them learn, respectively. Regarding the way of presentation, 16%, 30%, and 38% of the study participants very strongly, strongly, and

mildly agreed the information had been presented in a way that was easy for them to understand, respectively. Around 10%, 18%, and 25% of respondents very strongly, strongly, and mildly agreed that the health professionals were respectful. Approximately 5%, 27%, and 41% of the respondents very strongly, strongly, and mildly agreed that the education provided addressed their specific concerns, respectively. Related to anxiety, 8%, 22%, and 32% of the mothers very strongly, strongly, and mildly agreed that the provided information reduced their anxiety about returning home (**Figure 4**).

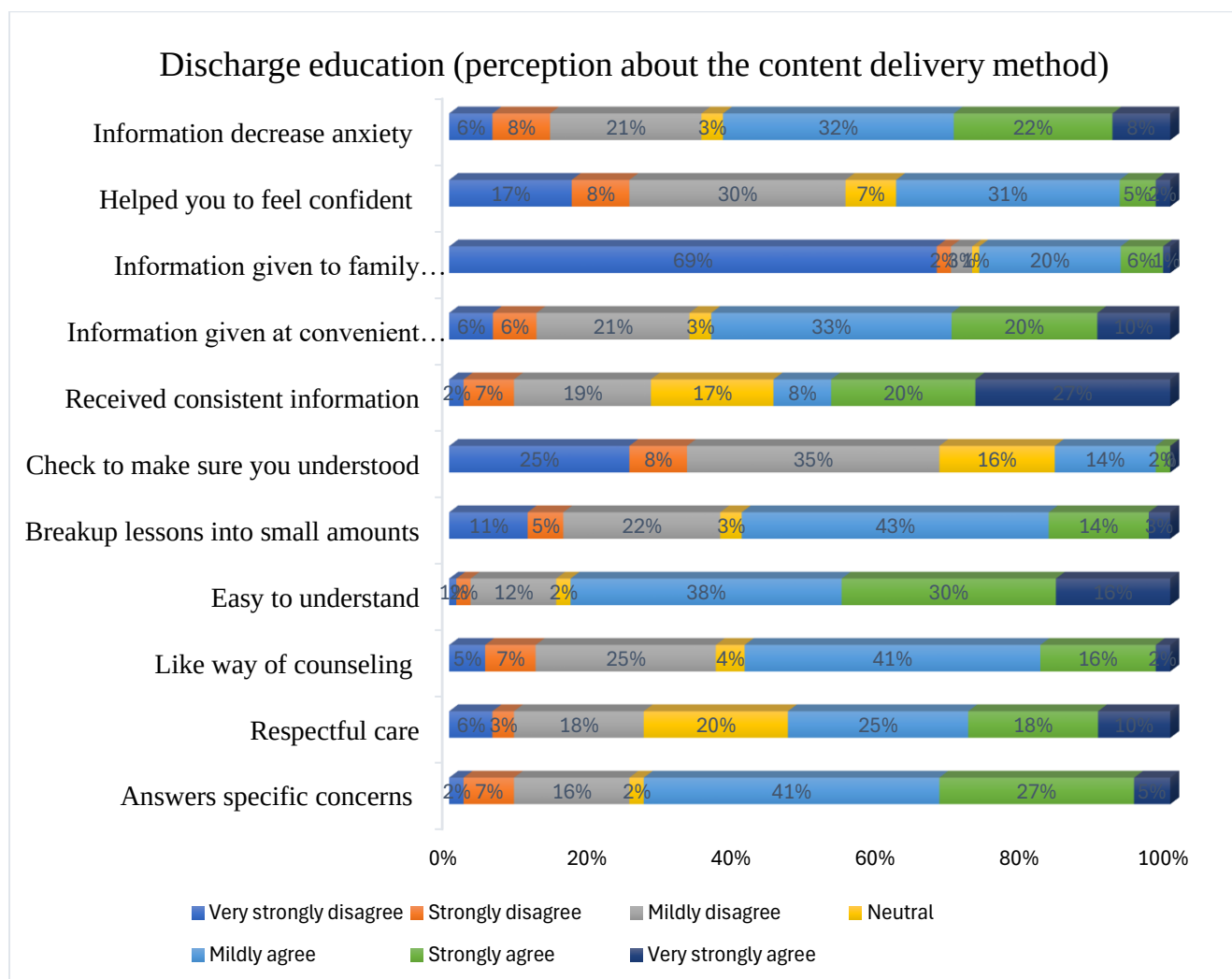


Figure 4: Quality of discharge education (perception about the content delivery method) among mothers who gave birth in public hospitals in Oromia regional state, Ethiopia, 2024.

Hence, the cumulative score of content received and perception about the content delivery method subscales provide an overall measure of hospital discharge education. A total mean value of less than 86 indicates poor-quality hospital discharge education for mothers, while a value of 86 or more indicates good-quality hospital discharge education. The study found that 58.06% of participants received good-quality hospital discharge education, while 41.94% received poor-quality education.

5.4. Family-related factors of the respondents

Of all study participants, 362 (92.58%) mothers were unable to get support from their families while giving birth (families were not allowed to enter the labor ward). After delivery, 207 (52.94%) of the respondents' families stayed in the hospital for less than fourteen days and extended their support to the mothers. In contrast, 184 (47.06%) respondents' families stayed in the facility for an average of fourteen days or above to provide support after delivery. The majority, 373 (95.4%) mothers, received adequate physical support from their family members during their stay in the hospital (**Table 4**).

Table 4: Family-related factors of mothers who gave birth in public hospitals in Oromia regional state, Ethiopia, 2024 (n = 391)

Variables	Category	Frequency	Percent (%)
Family allowed to stay in labor ward	Yes	29	7.42
	No	362	92.58
Family member hospital length of stay	< 14 days	207	52.94
	≥ 14 days	184	47.06
Families provide adequate physical support	Yes	373	95.40
	No	18	4.60

5.5. Maternal physical and mental health-related factors

In terms of the mother's medical history, it was found that 380 (97.19%) of the respondents did not have a prior history of mental illness. Similarly, 358 (91.56%) and 385 (98.47) participants reported never having experienced hypertension and diabetes mellitus, respectively. The current depression status of mothers was assessed at the time of hospital discharge, study participants were asked about any problems they faced within one week after delivering their current baby. Among the respondents, 89(22.76%) mothers reported that they experienced little interest in doing things for more than half of the day, while 40(10.23%) mothers experienced this almost every day. Moreover, 103(26.34%) mothers reported that they experienced feeling hopeless for more than half of the days, and 71(18.16%) felt the same almost every day. Of all, 43(11%) mothers had trouble falling or staying asleep nearly every day, while 194 (49.62%) didn't experience this problem. Furthermore, 37 (9.46%) mothers felt tired almost every day, while 214 (54.73%) mothers were not bothered at all. Additionally, 84(21.48%) participants reported having a poor appetite for more than half of the day, while 32 (8.18%) respondents experienced this almost every day. Among the study participants, 16 (4.09%) individuals reported having negative feelings about themselves almost every day, whereas the majority 284 (72.63%) did not feel this way at all. Lastly, 11% of the mothers thought they would be better off dead for several days. Overall, 201 (51.41%) of the respondents had mild to moderate depression (Table 5).

Table 5: Physical and mental health-related factors of mothers who gave birth in public hospitals in Oromia regional state, Ethiopia, 2024 (n = 391)

Variable	Category	Frequency	Percent (%)
History of mental illness	Yes	11	2.81
	No	380	97.19
History of hypertension	Yes	33	8.44
	No	358	91.56
History of diabetes mellitus	Yes	6	1.53
	No	385	98.47

History of heart disease	Yes	3	0.77
	No	388	99.23
Current depression status			
Little interest in doing things	Not at all	189	48.34
	Several days	73	18.67
	More than half the days	89	22.76
	Nearly every day	40	10.23
Feeling depressed/ hopeless	Not at all	118	30.18
	Several days	99	25.32
	More than half the days	103	26.34
	Nearly every day	71	18.16
Trouble falling/ staying asleep, or too much	Not at all	194	49.62
	Several days	67	17.14
	More than half the days	87	22.25
	Nearly every day	43	11.00
Feeling tired/ having little energy	Not at all	214	54.73
	Several days	59	15.09
	More than half the days	81	20.72
	Nearly every day	37	9.46
Poor appetite or overeating	Not at all	212	54.22
	Several days	63	16.11
	More than half the days	84	21.48
	Nearly every day	32	8.18
Feeling bad about yourself	Not at all	284	72.63
	Several days	42	10.74
	More than half the days	49	12.53
	Nearly every day	16	4.09
Trouble concentrating on things	Not at all	285	72.89
	Several days	45	11.51
	More than half the days	45	11.51
	Nearly every day	16	4.09

Moving or speaking so slowly that other people could have noticed or the opposite	Not at all	265	67.77
	Several days	57	14.58
	More than half the days	49	12.53
	Nearly every day	20	5.12
Thoughts that you would be better off dead	Not at all	323	82.61
	Several days	43	11.00
	More than half the days	22	5.63
	Nearly every day	3	0.77
Depression status	None	155	39.64
	Mild/ Moderate	201	51.41
	Moderately severe	35	8.95

Note: The Patient Health Questionnaire, which has a four-point Likert scale ranging from 0 to 3, was used to determine the mother's depression condition. The highest possible score in total is 27. Thus, mothers with a total score of ≤ 4 indicate no depression, those with a score of 5–9 indicate mild depression, those with a score of 10–14 indicate moderate depression, those with a score of 15–19 indicate moderately severe depression and those with a score of 20–27 indicate severe depression.

5.6. Health system related factors of the respondents

Of the participants, 168 (42.97%) received discharge education from female healthcare professionals, and 136 (34.78%) mothers received their hospital discharge education in a group setting along with other participants. Hospital discharge education was given to 338 women (86.45%) by using their mother tongue language. Regarding hospital length of stay, 176 (45.01%) mothers stayed in health facilities for more than 15 days. A single health professional cared for four preterm infants in the NICU ward at Adama and Bishoftu Hospital, five preterm infants at Asella and Shashemene Hospital, and six preterm infants at Batu Hospital. After collecting this data from each hospital, it was linked with the mothers' data based on the location of the hospital they received service from to determine the nurse-to-client ratio (**Table 6**).

Table 6: Health system related factors of women who gave birth in public hospitals in Oromia regional state, Ethiopia, 2024 (n = 391)

Variables	Category	Frequency	Percent (%)
Education provider	Male HCW ^a	96	24.55
	Female HCW	168	42.97
	Both male &female	127	32.48
Nurse to client ratio	1 to 4	169	43.22
	1 to 5	168	42.97
	1 to 6	54	13.81
Mother hospital length of stay	< 15 days	215	54.99
	≥ 15 days	176	45.01
Education in mother tongue language	Yes	338	86.45
	No	53	13.55
Education given	Both	129	32.99
	Individually	126	32.23
	In group	136	34.78

HCW ^a Health care workers

5.7. Mothers' readiness at hospital discharge

The readiness at hospital discharge was assessed using the RHDS, which comprises twenty items divided into three subscales: physical and emotion-related, knowledge-related, and expected support-related subscale.

5.7.1. Physical and emotion related readiness subscale

The physical and emotional readiness subscale evaluated the health status of mothers as caregivers of their infants, using a six-item, 7-point Likert scale. According to this study, 21% of the mothers reported high emotional readiness, 4% very high emotional readiness, and 30% reported moderate emotional readiness at discharge. Around 36%,29%, and 10% of mothers of preterm infants exhibited high, very high, and extremely very high physical readiness at

discharge, respectively. Overall, 57.29% of the participants stated that they were both emotionally and physically prepared for hospital discharge (**Figure 5**).

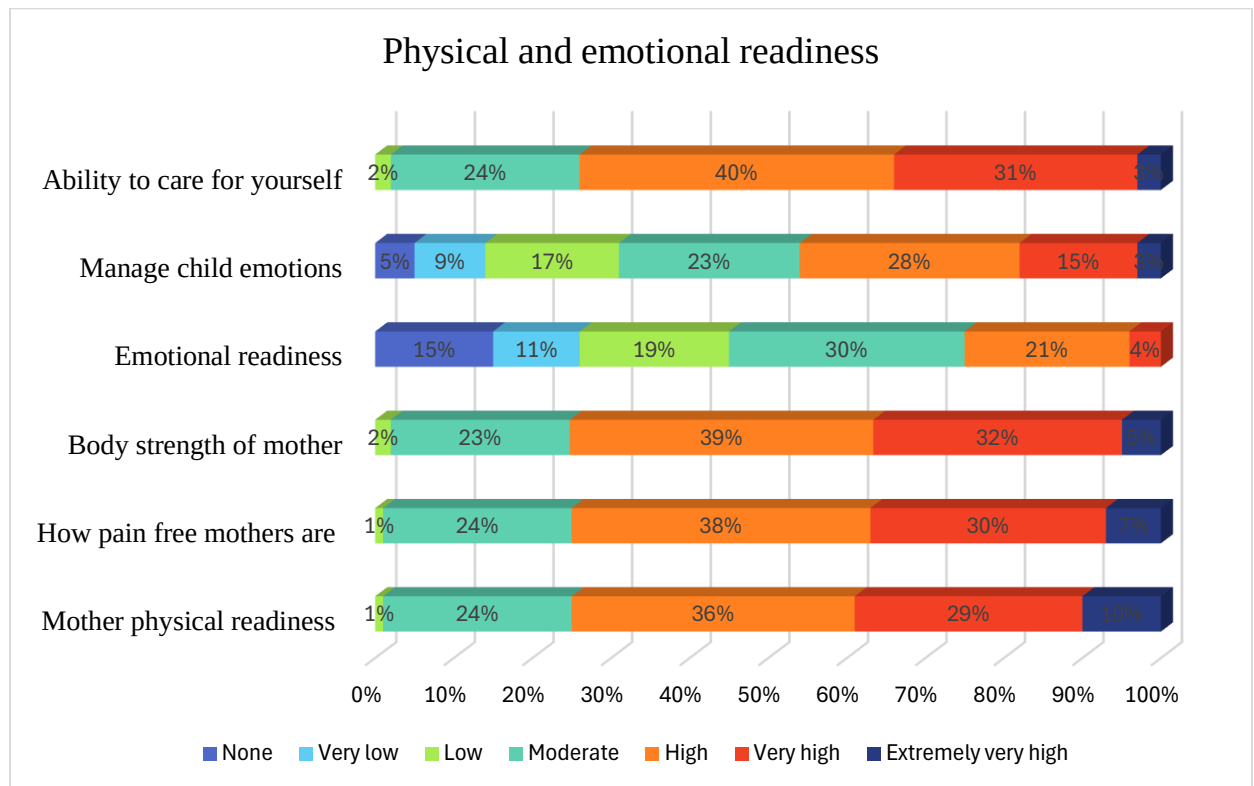


Figure 5: Physical and emotional readiness for hospital discharge among mothers who gave birth in public hospitals in Oromia regional state, Ethiopia, 2024 (n = 391)

5.7.2. Knowledge related readiness subscale

This subscale assessed the level of mothers' knowledge about caring for their preterm infants at home using a nine-item knowledge subscale. The findings revealed that 21% of the mothers had a high level of knowledge about neonatal danger signs, 2% had a very high level, but only 1% knew all about neonatal danger signs. In addition, 25% of the mothers had a good level of knowledge, 34% had a very good level, and 4% knew all about child personal care. In general, 52.94% of the study participants were knowledgeable about preterm infant care at the time of hospital discharge (**Figure 6**).

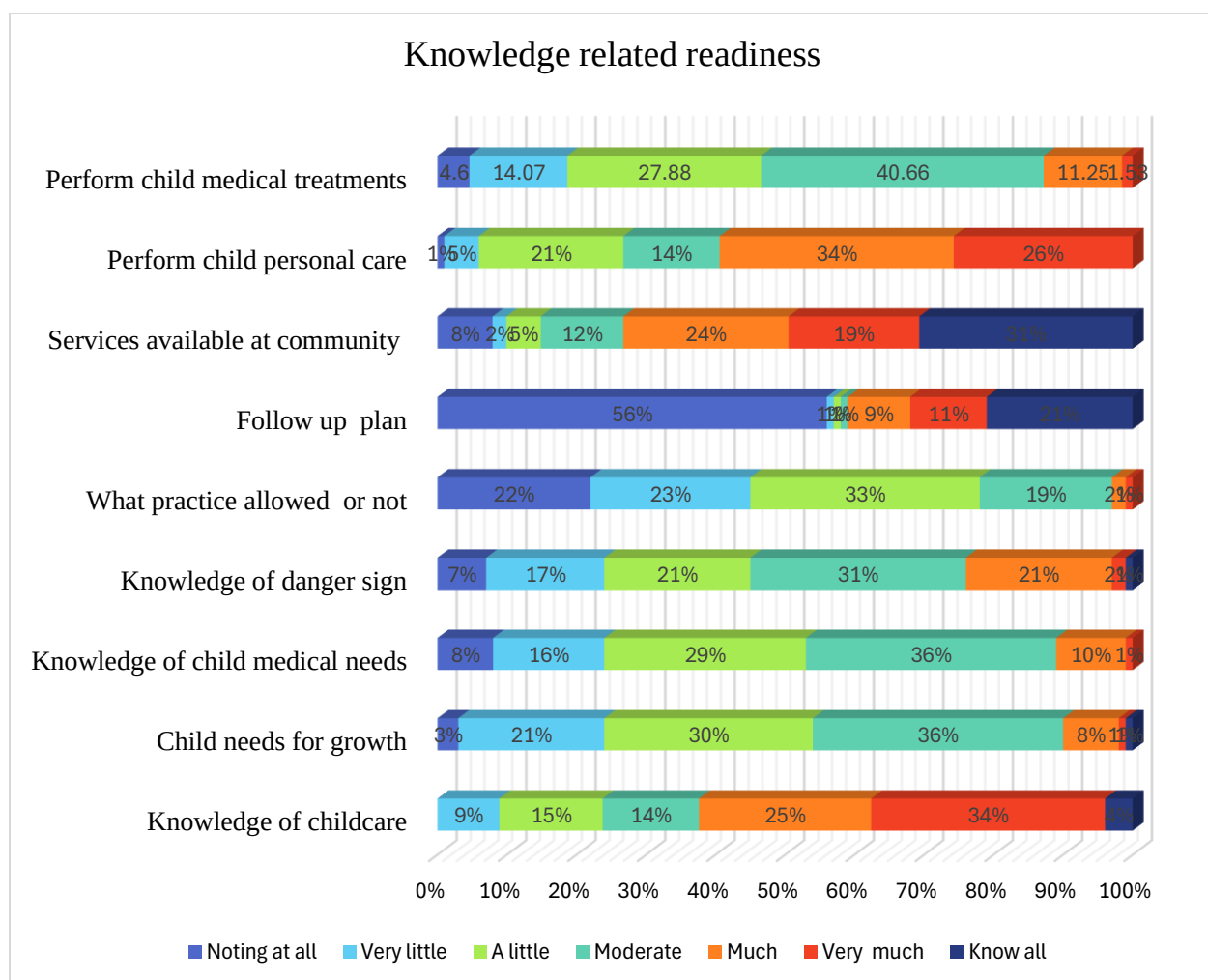


Figure 6: Knowledge-related readiness for hospital discharge among mothers who gave birth in public hospitals in Oromia regional state, Ethiopia, 2024 (n = 391)

5.7.3. Expected support related readiness subscale

The expected support subscale assessed the mothers' ability to arrange different types of help for themselves, their household, and their children at home after being discharged from the hospital. It consists of five items. Approximately 21%, 3%, and 3% of the mothers expect high, very high, and extremely high emotional support at home, respectively. Additionally, 26%, 11%, and 3% of the mothers expect high, very high, and extremely high support with childcare. In total, 54.9% of the study participants were able to establish a support system at home (**Figure 7**).

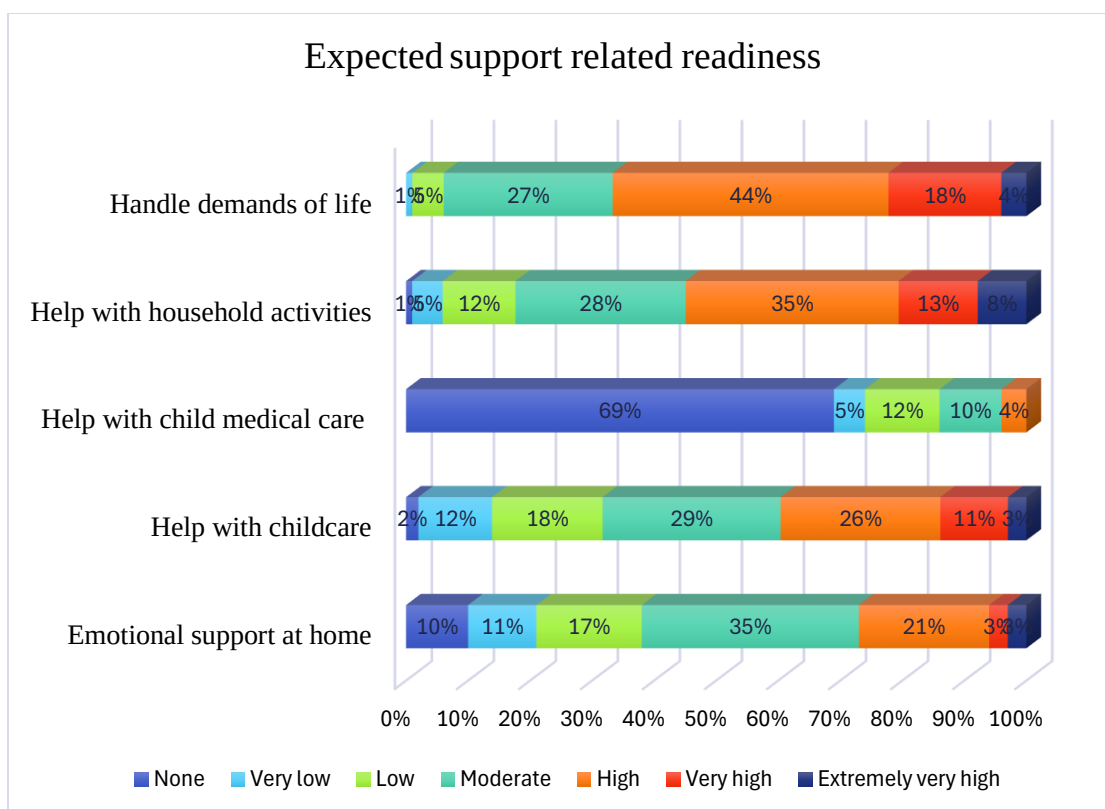


Figure 7: Expected support-related readiness for discharge among mothers who gave birth in public hospitals in Oromia regional state, Ethiopia, 2024 (n = 391)

Therefore, the combined score of all three readiness subscales (physical and emotion-related subscale, knowledge-related subscale, and expected support-related subscale) gives us the overall readiness of mothers at hospital discharge. A total mean value of less than 81 indicates that the mothers are not ready for hospital discharge, while a value of 81 or more indicates readiness for hospital discharge. This study finding showed that 54.48% of the study participants were ready to be discharged from the hospitals (**Figure 8**).

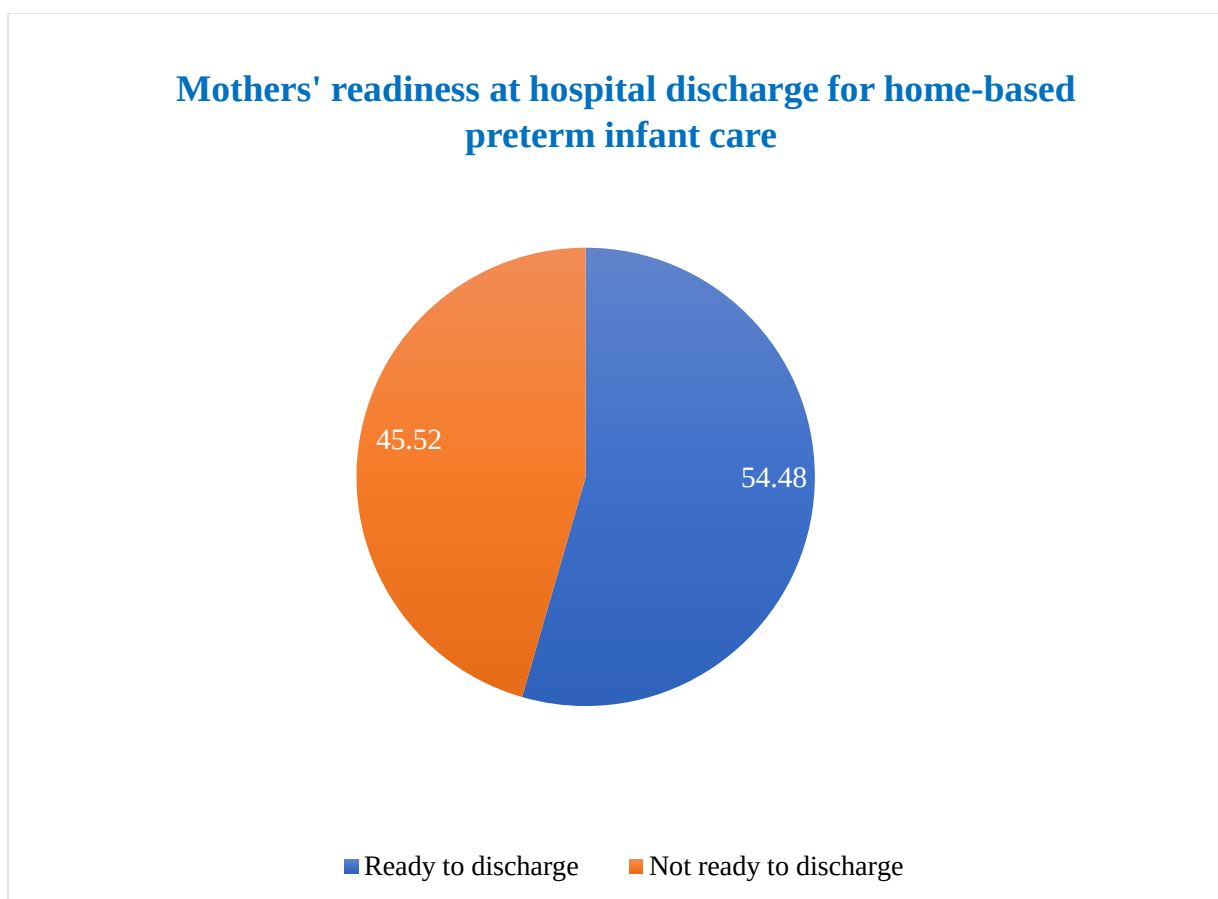


Figure 8: Readiness for hospital discharge among mothers who gave birth to preterm infants in public hospitals in Oromia regional state, Ethiopia, 2024 (n = 391)

5.8. Factors associated with readiness at hospital discharge among mothers who gave birth to preterm infants in public hospitals in Oromia regional state, Ethiopia, Bivariable analysis, 2024

In the analysis of bivariable logistic regression, the following variables were found to have a P-value of less than 0.25 at a 95% confidence interval: the quality of discharge education, age, residence, marital status, education level, occupation, household income, gravidity, parity, number of ANC visits, mode of delivery, family members hospital length of stay, depression status, physical support from a family member, mother's hospital length of stay, education in mother tongue language, and education given or mode (**Table 7**).

Table 7: Factors associated with readiness at hospital discharge among mother who gave birth to preterm infants in public hospitals in Oromia regional state, Ethiopia, Bivariable analysis, 2024

Variables	Categories	Discharge readiness		COR (95% CI)	P-value
		Not ready n (%)	Ready n (%)		
Quality of discharge education	Poor	119(72.6)	45(27.4)	1	
	Good	59(25.9)	168(74.0)	7.53(4.78, 11.8)	0.001
Age	15–19	29(70.7)	12(29.3)	1	
	20–34	117(43.2)	154(56.8)	3.18(1.56, 6.49)	0.001
	≥ 35	32(40.5)	47(59.5)	3.55(1.58, 7.97)	0.002
Residence	Urban	86(32.3)	180(67.7)	5.83(3.63, 9.36)	0.001
	Rural	92(73.6)	33(26.4)	1	
Marital status	Married	111(38.3)	179(61.7)	3.18(1.97, 5.11)	<0.001
	Out of marriage	67(66.3)	34(33.6)	1	
Religion	Orthodox	86(47.2)	96(52.7)	1	
	Muslim	51(42.5)	69(57.5)	1.21(0.76, 1.93)	0.417
	Protestant/Catholic	41(46.1)	48(53.9)	1.05(0.63, 1.74)	0.854
Education level	No formal education/ primary	106(66.7)	53(33.3)	1	
	Secondary and above	72(31.0)	160(68.9)	4.45(2.89, 6.84)	<0.001
Occupation	Government emp	16(37.2)	27(62.8)	1.89(0.87, 4.11)	0.107
	Private employee	38(52.0)	35(47.9)	1.03(0.53, 1.99)	0.923
	Private business	26(37.7)	43(62.3)	1.85(0.94, 3.64)	0.073
	Housewife	61(44.8)	75(55.1)	1.38(0.77, 2.45)	0.277
	Farmer	37(52.9)	33(47.1)	1	
Household income	≤ 3000	84(66.1)	43(33.9)	1	
	3001–4000	46(46.5)	53(53.5)	2.25(1.31, 3.86)	0.003
	≥ 4001	48(29.1)	117(70.9)	4.76(2.89, 7.83)	<0.001
Gravidity	Primigravida	74(69.8)	32(30.2)	1	
	Multigravida	104(36.5)	181(63.5)	4.01(2.49, 6.50)	<0.001

Parity	Primipara	82(70.7)	34(29.3)	1	
	Multipara	96(34.9)	179(65.1)	4.49(2.81, 7.19)	<0.001
First ANC ^a initiation time	None	6(50.0)	6(50.0)	0.78(0.25, 2.49)	0.682
	≥ 4 months	44(50.0)	44(50.0)	0.78(0.49, 1.27)	0.321
	< 4 months	128(43.9)	163(56.0)	1	
Number of ANC ^a visit	None/ 1 visit	41(77.4)	12(22.6)	0.20(0.09, 0.42)	0.001
	2 visit/ 3 visit	83(40.3)	123(59.7)	1.02(0.66, 1.60)	0.910
	≥ 4 visits	54(40.9)	78(59.1)	1	
Mode of delivery	Vaginal	134(39.9)	202(60.1)	6.03(3.01, 12.1)	<0.001
	Cesarean delivery	44(80.0)	11(20.0)	1	
Family allowed to stay in labor ward	Yes	11(37.9)	18(62.1)	1.40(0.64, 3.05)	0.395
	No	167(46.1)	195(53.9)	1	
Family hospital length of stay	< 14 days	133(64.2)	74(35.7)	0.18(0.11, 0.28)	0.001
	≥ 14 days	45(24.5)	139(75.5)	1	
Physical support	Yes	164(43.9)	209(56.0)	4.46(1.44, 13.8)	0.009
	No	14(77.8)	4(22.2)	1	
History of mental illness	Yes	6(54.5)	5(45.5)	1	
	No	172(45.3)	208(54.7)	1.45(0.43, 4.84)	0.544
History of hypertension	Yes	15(45.4)	18(54.5)	1.00 (0.49, 2.05)	0.993
	No	163(45.5)	195(54.5)	1	
History of DM ^b	Yes	6(85.7)	1(14.3)	1	
	No	172(44.8)	212(55.2)	2.42(0.44, 13.4)	0.310
History of heart disease	Yes	2(66.7)	1(33.3)	1	
	No	176(45.4)	212(54.6)	2.41(0.22, 26.8)	0.474
Depression status	None	60(38.7)	95(61.3)	2.68(1.26, 5.72)	0.011
	Mild/Moderate	96(47.8)	105(52.2)	1.85(0.88, 3.88)	0.103
	Moderately severe	22(62.9)	13(37.1)	1	
Education provider	Male HCW ^c	43(44.8)	53(55.2)	1	
	Female HCW ^c	84(50.0)	84(50.0)	0.81(0.49, 1.34)	0.415
	Both male &female	51(40.2)	76(59.8)	1.21(0.71, 2.07)	0.488

Nurse to client ratio	1 to 4	68(40.2)	101(59.8)	1.28(0.69, 2.37)	0.432
	1 to 5	85(50.6)	83(49.4)	0.84(0.45, 1.55)	0.583
	1 to 6	25(46.3)	29(53.7)	1	
Mother hospital length of stay	< 15 days	133(61.9)	82(38.1)	1	
	≥ 15 days	45(25.6)	131(74.4)	4.72(3.05, 7.30)	<0.001
Education in mother tongue	Yes	136(40.2)	202(59.8)	5.67(2.82, 11.4)	<0.001
	No	42(79.2)	11(20.7)	1	
Education given	Both	54(41.9)	75(58.1)	1.76(1.08, 2.86)	0.023
	Individually	48(38.1)	78(61.9)	2.06(1.26, 3.37)	0.004
	In group	76(55.9)	60(44.1)	1	

^a Antenatal care, ^b Diabetes mellites, ^c Health care worker. COR: crude odds ratio; CI: Confidence Interval; 1: Reference category, P value < 0.25 significant.

5.9. Factors associated with readiness at hospital discharge among mothers who gave birth to preterm infants in public hospitals in Oromia regional state, Ethiopia, Multivariable analysis, 2024

The independent variables that showed a statistical association with readiness at hospital discharge in binary logistic regression analysis were identified and tested for multicollinearity. After removing correlated variables, then the following variables were entered into multivariable logistic regression for further analysis: the quality of discharge education, residence, marital status, education level, household income, parity, number of ANC visits, mode of delivery, physical support, depression status, hospital length of stay, education given or mode, and education in mother tongue language.

The findings of the multivariable logistic regression analysis indicated that several variables were significantly and independently associated with readiness for hospital discharge. These variables include quality of discharge education, residence, marital status, parity, mode of delivery, mother's hospital length of stay, and discharge education in mother tongue.

The findings of this study showed that mothers who received good quality discharge education were 2.4 times (AOR = 2.43, 95% CI = 1.32, 4.48) more likely to be ready for hospital discharge than those who did not. Regarding residence, mothers living in urban areas were 4.8 times (AOR = 4.87, 95% CI = 2.34, 10.12) more likely to be ready for hospital discharge than those living in rural areas. Furthermore, married participants were 2.3 times (AOR = 2.34, 95% CI = 1.20, 4.59) more likely to be ready for hospital discharge than those who were out of marriage union. In terms of reproductive health-related factors, mothers who had previously given birth (multiparous) were found to be 2.8 times (AOR = 2.82, 95% CI = 1.43, 5.54) more likely to be ready for discharge compared to first-time mothers (primipara). Additionally, the mode of delivery was a significant factor in discharge readiness. Specifically, mothers who had a vaginal birth were 6.6 times (AOR = 6.69, 95% CI = 2.64, 16.96) more likely to be ready for hospital discharge than those who had a cesarean section birth. The study also found that the length of a mother's hospital stay was a factor; those who stayed in the hospital for 15 days or more were 3.3 times (AOR = 3.36, 95% CI = 1.79, 6.31) more likely to be ready for discharge compared with those who stayed less than 15 days. Lastly, Mothers who received hospital discharge education in their mother tongue language were 5.9 times (AOR = 5.92, 95% CI = 2.33, 15.09) more likely to be ready for discharge compared to those who did not (**Table 8**).

Table 8: Factors associated with readiness at hospital discharge among mothers who gave birth to preterm infants in public hospitals in Oromia regional state, Ethiopia, Multivariable analysis, 2024

Variables	Categories	Discharge readiness		COR (95% CI)	AOR (95% CI)	P-value
		Not ready n (%)	Ready n (%)			
Quality of discharge education	Poor	119(72.6)	45(27.4)	1	1	0.005 *
	Good	59(25.9)	168(74.0)	7.53(4.78, 11.8)	2.43(1.32,4.48)	
Residence	Urban	86(32.3)	180(67.7)	5.83(3.63, 9.36)	4.87(2.34,10.12)	<0.001*
	Rural	92(73.6)	33(26.4)	1	1	
Marital status	Married	111(38.3)	179(61.7)	3.18(1.97, 5.11)	2.34(1.20,4.59)	0.014 *
	Out of marriage	67(66.3)	34(33.6)	1		
Education level	No formal education/ primary	106(66.7)	53(33.3)	1	1	0.083
	Secondary and above	72(31.0)	160(68.9)	4.45(2.89, 6.84)	1.75(0.93,3.31)	
Household income	≤ 3000	84(66.1)	43(33.9)	1	1	0.696
	3001–4000	46(46.5)	53(53.5)	2.25(1.31, 3.86)	0.86(0.41,1.82)	
	≥ 4001	48(29.1)	117(70.9)	4.76(2.89, 7.83)	1.72(0.86, 3.44)	
Parity	Primipara	82(70.7)	34(29.3)	1	1	0.003 *
	Multipara	96(34.9)	179(65.1)	4.49(2.81,7.19)	2.82(1.43,5.54)	

Number of ANC ^a visit	None/ 1 visit	41(77.4)	12(22.6)	0.20(0.09, 0.42)	1.20(0.44,3.25)	0.718
	2 visit/ 3 visit	83(40.3)	123(59.7)	1.02(0.66, 1.60)	1.38(0.72,2.68)	0.332
	≥ 4 visits	54(40.9)	78(59.1)	1	1	
Mode of delivery	Vaginal	134(39.9)	202(60.1)	6.03(3.01, 12.1)	6.69(2.64,16.96)	<0.001*
	Cesarean delivery	44(80.0)	11(20.0)	1	1	
Physical support	Yes	164(43.9)	209(56.0)	4.46(1.44, 13.8)	0.77(0.17,3.58)	0.740
	No	14(77.8)	4(22.2)	1	1	
Depression status	None	60(38.7)	95(61.3)	2.68(1.26, 5.72)	2.01(0.67,6.01)	0.213
	Mild/Moderate	96(47.8)	105(52.2)	1.85(0.88, 3.88)	1.83(0.63,5.43)	0.266
	Moderately severe	22(62.9)	13(37.1)	1	1	
Mother hospital length of stay	< 15 days	133(61.9)	82(38.1)	1	1	
	≥ 15 days	45(25.6)	131(74.4)	4.72(3.05, 7.30)	3.36(1.79,6.31)	<0.001*
Education in mother tongue	Yes	136(40.2)	202(59.8)	5.67(2.82, 11.4)	5.92(2.33,15.09)	<0.001*
	No	42(79.2)	11(20.7)	1	1	
Education given	Both	54(41.9)	75(58.1)	1.76(1.08, 2.86)	1.09(0.53, 2.23)	0.817
	Individually	48(38.1)	78(61.9)	2.06(1.26, 3.37)	1.59(0.78, 3.25)	0.205
	In group	76(55.9)	60(44.1)	1	1	

^a Antenatal care follow up. COR: crude odds ratio; AOR: adjusted odds ratio; CI: Confidence Interval; *P value < 0.05; 1: Reference category

CHAPTER 6: DISCUSSION

Assessing the preterm infant mothers' readiness up on hospital discharge is essential to ensure the safety of the baby in the home environment. This study investigated mothers' readiness at hospital discharge for home-based preterm infant care and its association with the quality of hospital discharge education in selected public hospitals in Oromia regional state, Ethiopia. The results showed a strong association between hospital discharge education and readiness for hospital discharge. This information is vital for stakeholders who seek to improve hospital discharge programs, as readiness for hospital discharge is a critical component of discharge planning.

This study assessed the readiness of mothers of preterm infants to care for their babies at home after being discharged from the hospital. The findings showed that 54.48% of the mothers were prepared for discharge, indicating that more than half were ready for home-based care of preterm infants after receiving hospital discharge education. The results of this study are lower compared to other studies. For example, a study at Beth Israel Deaconess Medical Center in the USA found that 87% of the participants were ready to be discharged (11). Similarly, a study in China reported that 90% of parents were ready for their preterm infant's discharge (13). Other studies in Scotland and Indonesia showed that 86% and 94.5% of parents were prepared for hospital discharge, respectively (69). The observed difference in these studies may be due to differences in health system policies across different countries, the availability of well-qualified healthcare facilities, health facility infrastructure, human resources, economic factors, healthcare service coverage, and high health literacy. That differs from developing countries, where several barriers to accessing healthcare exist, including challenges in healthcare infrastructure and resources, inadequate funds, and a shortage of healthcare personnel (70).

Hospital discharge education is a vital component of discharge planning. Adequate discharge preparation for mothers of preterm infants was achieved by maintaining high-quality discharge education sessions and encouraging hands-on experience. These efforts significantly improved maternal readiness to care for their infants at home, resulting in a smooth discharge transition (13, 17, 71).

In agreement with that, this study indicated that mothers who received high-quality discharge education were 2.4 times more likely to be ready for hospital discharge compared to those who did not receive quality discharge education. Consistently, having quality discharge education was found to increase the odds of readiness across all subscales (4.5 times for [Physical and emotion-related readiness subscale], and 1.9 times for [Knowledge-related readiness subscale]), except for the expected support-related readiness subscale, which did not show a significant association. That may be because, in the support-related subscale, the hospital discharge education and mothers' determination were not the only factors affecting the outcome. Instead, it seems to depend on the availability of resources and support from other individuals.

Various studies support the positive impact of quality discharge education on improving discharge readiness. For instance, a study in Turkey found that women who received quality hospital discharge education after giving birth felt more prepared to care for their infants (45). Similarly, a study in Canada reported that mothers who received quality hospital discharge education were more likely to be ready and confident to care for their preterm infants compared to those who did not receive discharge education (47). Similar studies conducted in Egypt (14), India (19), and China (13) also demonstrated that mothers who received high-quality discharge education regarding preterm infants' home care were more prepared for discharge than those who did not receive education.

In addition to the quality of hospital discharge education, this study found that urban residence is associated with readiness at hospital discharge. This finding is consistent with a study conducted in Iraq, which found a significant association between mothers' place of residence and their knowledge of infant care (41). That may be because urban areas provide better access to education and healthcare services.

The results of this study also showed that women in marriage unions had a higher likelihood of being ready for hospital discharge compared to their counterparts. This finding is in line with a previous study conducted in the USA, which found that single mothers were at a higher risk of lacking readiness for hospital discharge (37) and in agreement with a finding of a review study that found that unmarried mothers were more likely to be unready compared to married mothers (28). That could be because married women often have a supporting partner who can offer them physical and psychological support to their wives as needed (72).

First-time moms (primipara) were less likely to be prepared for hospital discharge compared to mothers who had given birth previously (multiparous). This result is consistent with a study from China, which found that mothers with prior experience in newborn caring were more ready for hospital discharge than mothers without prior experience (18). Similarly, a study conducted in Canada (47) and South Korea(49) showed that women with previous parenting experience were more likely to be prepared for hospital discharge than those without it. The higher odds of discharge readiness among multiparous women might result from their previous experience and possible repeated exposure to health information during their prior deliveries.

In this study, the mode of delivery was found to be a predictor of discharge readiness. Mothers who had a vaginal birth were more likely to be ready for hospital discharge than those who had a cesarean section delivery. This finding is consistent with previous studies conducted in Iraq, which indicated that mothers who gave birth by cesarean section were less likely to be ready to care for their preterm infants compared to those who gave birth vaginally (41). Similarly, a study from the USA found that mothers who delivered via cesarean sections were more likely to be unprepared compared to those who had vaginal deliveries (50). That may be because they experience discomfort, post-birth cramps, and pain at the site of the incision, which may prevent mothers from taking good care of their babies.

Mothers who stayed in the hospital for more than 15 days after delivery were more likely to be ready for hospital discharge compared to those who stayed for fewer than 15 days. This finding was consistent with reports from previous studies (13, 63) that showed an association between readiness at hospital discharge and the duration of hospital stay. Simultaneously, a Chinese study revealed that women who stayed in the hospital for a long day were more likely to be prepared for hospital discharge than women who stayed for a shorter day (13). This result, however, contradicts a study conducted in the United States that found that mothers who had a shorter length of hospital stay were more likely to be ready for hospital discharge than those who had a longer length of hospital stay (63, 64). The discrepancy between the current study and the USA study could be explained by variations in advanced medical services provided by the two countries, besides variations in the policies of each health system and the high level of health literacy among mothers.

Accurate communication is crucial for better discharge outcomes since it enables good understanding between the health professionals and the study participants. This study result showed that mothers who received hospital discharge education in their mother tongue language were more likely to be ready for hospital discharge than those who did not receive it. Evidence has indicated that the language barrier between healthcare providers and respondents can contribute to unequal access to healthcare services and poor health outcomes (62). This finding is similar to the previous study conducted in the USA, which showed that families with limited English proficiency who received care from English-speaking care providers were less likely to feel prepared for hospital discharge when compared with English-speaking families (10).

CHAPTER 7: STRENGTH AND LIMITATION OF THE STUDY

7.1. Strengths of the study

- This study is the first to examine the relationship between readiness at hospital discharge and the quality of discharge education among mothers of preterm infants in Ethiopia.
- Involving multiple hospitals (five hospitals) in the study enhanced the representation of participants.
- Employing the face-to-face interview using the ODK platform enhanced the quality of the collected data.

7.2. Limitations of the study

- Gestational age was estimated based on self-reported last menstrual period, which could result in misclassifications of newborns by their gestational age.
- The study relied on self-reported data from mothers, which might introduce social desirability bias. However, several measures were taken to minimize this bias, including providing a detailed explanation of the study's purpose, guaranteeing complete confidentiality, and creating a comfortable environment for the interviews where respondents felt at ease expressing their opinions.

CHAPTER 8: CONCLUSION AND RECOMMENDATION

8.1. Conclusion

In conclusion, the preterm infants' mothers' level of readiness at hospital discharge was found to be suboptimal. In this study, the quality of hospital discharge education was strongly associated with readiness at hospital discharge. Other factors such as residence, marital status, parity, mode of delivery, mother hospital length of stay, and receiving discharge education in mother tongue language were all associated with readiness at hospital discharge. Therefore, providing high quality hospital discharge education to mothers during their hospital stay and offering discharge education in mother tongue language could help increase readiness for hospital discharge.

8.2. Recommendations

Based on the findings of this study, the following recommendations are given below for concerning bodies:

1. To policymakers and stakeholders

- In Ethiopia, although national admission and discharge protocols for Ethiopian hospitals emphasize the importance of preparing parents before discharge (21), there is a lack of evidence regarding discharge readiness specific to mothers of preterm infants. That indicates that policymakers need to develop standardized guidelines for the hospital discharge of premature infants.

2. To Oromia region Hospitals and health professionals

- Hospital discharge education should be provided to preterm infant mothers in their own mother tongue language, with frequent repetition of key concepts and ideas to aid retention and build confidence.
- Strengthening the involvement of fathers and other family members throughout the educational sessions.
- The health facilities must ensure an adequate supply of educational materials, such as pamphlets, handouts, and manuals, to be provided to mothers for reference after discharge at home.

3. To researchers

- The available evidence on preparing preterm infants' mothers for hospital discharge is limited in Ethiopia. Future researchers should expand on the findings of this study to address the factors that affect the provision of adequate and appropriate care to preterm infants after they are discharged from the hospital.

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5.10. Factors associated with readiness subscales among mothers who gave birth to preterm infants in public hospitals in Oromia regional state, Ethiopia, Bivariable and Multivariable analysis, 2024 (Additional findings)

The study used binary logistic regression analysis to examine the association between various readiness subscales (such as physical and emotional readiness, knowledge-related readiness, and support-related readiness) and the quality of hospital discharge education, along with other factors. After checking and accounting for multicollinearity, only the variables with a p-value of <0.25 in the binary logistic regression model were included in the multivariable logistic regression model.

The following variables demonstrated a significant association with the physical and emotion-related subscale of readiness; quality of discharge education (AOR = 4.45, 95% CI = 2.36, 8.39), residence (AOR = 3.56, 95% CI = 1.64, 7.74), parity (AOR = 5.67, 95% CI = 2.74, 11.73), mode of delivery (AOR = 5.90, 95% CI = 2.29, 15.18), depression (AOR = 4.33, 95% CI = 1.31, 14.25), mother's hospital length of stay (AOR = 3.67, 95% CI = 1.89, 7.13) and discharge education in mother tongue (AOR = 3.92, 95% CI = 1.46, 10.56) with a p-value of < 0.05 at a 95% confidence interval.

In the Knowledge-related subscale of readiness, the following variables showed a significant association: quality of discharge education (AOR = 1.91, 95% CI = 1.05, 3.49), residence (AOR = 3.50, 95% CI = 1.70, 7.23), marital status (AOR = 2.07, 95% CI = 1.09, 3.93), education level (AOR = 1.85, 95% CI = 1.01, 3.41), parity (AOR = 3.27, 95% CI = 1.71, 6.26), mode of delivery (AOR = 4.19, 95% CI = 1.82, 9.69), mother's hospital length of stay (AOR = 2.37, 95% CI = 1.30, 4.34), and discharge education in mother tongue (AOR = 3.94, 95% CI = 1.63, 9.49), all with a p-value of < 0.05 at a 95% confidence.

In the Supports-related subscale of readiness residence (AOR = 3.48, 95% CI = 1.83, 6.62), marital status (AOR = 2.82, 95% CI = 1.59, 4.99), and income (AOR = 2.18, 95% CI = 1.19, 3.97) showed a significant association with a p-value of < 0.05 at 95% confidence interval (Table 9).

Table 9: Factors associated with readiness subscales among mothers who gave birth to preterm infants in public hospitals in Oromia regional state, Ethiopia, Bivariable and Multivariable analysis, 2024 (Additional findings)

Variables	Overall readiness (Model 1)		Physical and emotion related readiness (Model 2)		Knowledge related readiness (Model 3)		Expected support related (Model 4)
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Adjusted
Quality education							
Poor	ref						
Good	7.53(4.78,11.8)	2.43(1.32,4.48) *	9.86(6.17,15.7)	4.45(2.36,8.39) *	5.75(3.70,8.93)	1.91(1.05,3.49) *	1.12(0.65,1.93)
Residence							
Urban	5.83(3.63,9.36)	4.87(2.34,10.12) *	4.28(2.72,6.73)	3.56(1.64,7.74) *	4.68(2.97,7.38)	3.50(1.70,7.23) *	3.48(1.83, 6.62) *
Rural	ref						
Marital status							
Married	3.18(1.97,5.11)	2.34(1.20,4.59) *	2.97(1.86,4.74)	1.79(0.89,3.57)	3.05(1.91,4.89)	2.07(1.09,3.93) *	2.82(1.59,4.99) *
Out of marriage	ref						
Education level							
No formal education/Primary	ref						
Secondary and above	4.45(2.89,6.84)	1.75(0.93,3.31)	3.79(2.48,5.81)	1.62(0.82,3.22)	4.15(2.70,6.37)	1.85(1.01,3.41) *	1.06(0.62,1.81)
Household income							
≤ 3000	ref						
3001–4000	2.25(1.31,3.86)	0.86(0.41,1.82)	3.80(2.18,6.63)	1.77(0.82,3.84)	2.39(1.39,4.09)	0.90(0.44,1.84)	1.13(0.60,2.13)
≥ 4001	4.76(2.89,7.83)	1.72(0.86, 3.44)	5.98(3.59,9.95)	1.93(0.95,3.96)	5.16(3.12,8.53)	1.90(0.98,3.68)	2.18(1.19,3.97) *
Parity							

Primipara	ref						
Multipara	4.49(2.81,7.19)	2.82(1.43,5.54) *	7.31(4.46,11.9)	5.67(2.74,11.73) *	4.97(3.11,7.94)	3.27(1.71, 6.26) *	0.73(0.40,1.30)
Number of ANC ^a visit							
None/ 1 visit	0.20(0.09,0.42)	1.20(0.44,3.25)	0.31(0.16,0.61)	1.82(0.66,5.01)	0.27(0.14,0.53)	1.20(0.47,3.03)	0.94(0.41,2.17)
2 visit/ 3 visit	1.02(0.66,1.60)	1.38(0.72,2.68)	0.92(0.59,1.44)	1.07(0.51,2.24)	0.88(0.56,1.38)	1.02(0.54,1.96)	1.20(0.72,2.02)
≥ 4 visits	ref						
Mode of delivery							
Vaginal	6.03(3.01,12.1)	6.69(2.64,16.96) *	4.88(2.56,9.31)	5.90(2.29,15.18) *	4.50(2.39,8.48)	4.19(1.82, 9.69) *	1.47(0.75,2.87)
Cesarean delivery	ref						
Family allowed to stay in labor ward							
Yes			1.72(0.76,3.88)	2.55(0.67, 9.72)	1.68(0.75,3.79)	2.52(0.80,8.03)	
No	ref						
Physical support							
Yes	4.46(1.44,13.8)	0.77(0.17,3.58)	5.03(1.62,15.6)	1.21(0.22,6.74)	5.15(1.66,15.9)	1.07(0.23,4.99)	2.88(0.71,11.67)
No	ref						
Depression status							
None	2.68(1.26,5.72)	2.01(0.67,6.01)	3.91(1.80,8.48)	4.33(1.31,14.25) *	3.45(1.61,7.40)	2.82(0.99,8.04)	0.84(0.36,1.95)
Mild/ Moderate	1.85(0.88,3.88)	1.83(0.63,5.43)	2.23(1.05,4.72)	3.03(0.94,9.75)	2.01(0.96,4.21)	1.99(0.71,5.57)	0.97(0.43,2.21)
Moderately severe	ref						
Nurse to client ratio							
1 to 4					1.73(0.93,3.20)	1.07(0.46,2.48)	

1 to 5					1.21(0.66,2.24)	0.93(0.41,2.13)	
1 to 6	ref						
Mother hospital length of stay							
< 15 days	ref						
≥ 15 days	4.72(3.05,7.30)	3.36(1.79,6.31) *	5.17(3.30,8.09)	3.67(1.89, 7.13) *	4.06(2.62,6.28)	2.37(1.30,4.34) *	1.56(0.92,2.63)
Education in mother tongue							
Yes	5.67(2.82,11.4)	5.92(2.33,15.09) *	5.75(2.91,11.3)	3.92(1.46,10.56) *	4.69(2.45,8.97)	3.94(1.63,9.49) *	1.75(0.82,3.75)
No	ref						
Education given							
Both	1.76(1.08,2.86)	1.09(0.53, 2.23)	1.91(1.16,3.11)	1.59(0.75,3.38)	1.96(1.20,3.21)	1.53(0.77,3.07)	0.75(0.41,1.34)
Individually	2.06(1.26,3.37)	1.59(0.78, 3.25)	1.71(1.05,2.80)	1.49(0.70,3.18)	1.95(1.19,3.20)	1.62(0.82,3.21)	1.32(0.74,2.36)
In group	ref						

^a Antenatal care follow up, * Significant at a p-value of < 0.05, ref = Reference category

Annex I: Information Sheet English version

Good morning/Afternoon, my name is _____ I am a trained data collector for the study being conducted in this facility by Ms. Munira Ebrahim who is a Master of Public Health in Reproductive Health student at Addis Ababa University.

The title of the research proposal: Discharge Readiness for home-based Preterm Infants Care among Mothers of Preterm Infants and its Relationship with Quality Hospital Discharge Education in Public Hospitals in Oromia Regional State, Ethiopia: An Institution based cross-sectional study.

Introduction: Preterm birth is still a major public health problem that causes mortality and potentially significant long-term disability of infants among some survivors in the world particularly in SSA including Ethiopia. Enrolling mothers in preterm infant care during their hospital stay helps reduce preterm infants' morbidity and mortality following discharge but most mothers don't participate in their preterm baby care as a result they fail to be ready to give the care at home because they lack the necessary skill, knowledge, and confidence towards their infant's care so that exposed them to apply poor post-hospitalization care and develop post-discharge coping difficulty.

Purpose of the study: This study aims to assess the level of discharge readiness for home-based preterm infant care among mothers who gave birth to preterm infants and its relationship with the quality of hospital discharge education in selected public hospitals found in Oromia regional state, Ethiopia. The finding of this study will be useful for policymakers to develop preterm infant hospital discharge protocol and improve the quality of hospital discharge education at the facility level that ensures preterm infant safe hospital discharge thereby reducing the negative impacts of preterm delivery in Ethiopia. The research requirement is for the partial fulfillment of the degree of master's in public health.

Procedures and participation: The data will be collected by a well-trained health professional based on face-to-face interviews within 1-2 hours. The preterm infant's mother will be asked to participate in this study and give genuine responses to the questions, if they agree they will be interviewed.

Confidentiality: The information that you provide is very important and it will be kept private. None of the answers and identification information will be available to anyone at any time. The findings of the study will also be general for all participants and will not reflect anything particular to individual participants. The questionnaire will be coded to exclude showing names. No reference will be made in oral or written reports that could link you to the research. This information will not be used for other purposes without the knowledge of the participants.

The benefit of the study: This research will benefit both the mothers (to gain skill, knowledge, and confidence towards preterm infant care) and their preterm babies (to be healthy and have sound growth and development). Besides, the findings will be very crucial for policymakers to make effective interventions and design strategies that can reduce preterm infant home-based complications and their effects and thereby improve the health and wellbeing of preterm infants.

Risk of the study: The study participants may lose their time during the interview. Beyond this, the study does not have any physical harm, psychological trauma, social discrimination, or economic loss.

Inducement, incentive, and Compensation: This study does not have any form of inducement, or coercion and does not bring any risks that incur compensation.

Results dissemination: The researcher is responsible for the dissemination of study findings by using different mechanisms, for example providing feedback to the concerned health body in the study area, presenting at different national and international scientific conferences. Moreover, publications in scientific journals.

Rights: Mothers are expected to participate in this study voluntarily and they have the right to refuse to participate or to answer any questions that they feel uncomfortable with and, they have full right to withdraw at any time that they wish. If they need further information or clarification the researchers are happy to provide it. This would not affect their health service benefits or other administrative services that they get from the health institution.

Person to Contact: If the participants have any questions or unclear issues about the study before and/or during the study or at any time they have the right to contact and crosscheck the principal investigator via the addresses provided below.

Principal Investigator: Munira Ebrahim

Phone Number: +251913353410

E-mail: muniraebrahim6@gmail.com

Annex II: Consent Form English version

Hello, my name is _____ I am working with Ms. Munira Ebrahim who is doing research as partial fulfillment for the requirement of MPH at AAU. For her research, she will be conducting a study on hospital discharge readiness for home-based preterm infant care among mothers of preterm infants and its relationship with quality hospital discharge education. She kindly requests your permission to use the data that she will collect from this specific study area. To fulfill the purpose of the study different questions will be asked mainly concerning socio demographics, health facilities, and other issue-related questions that are important for this study. The study will take 1-2 hours. Information privacy is strictly maintained by different strategies including coding. Study participants have the right not to respond to any uncomfortable and unclear questions in addition to this they can withdraw at any time after they get involved in the study. I highly appreciate the cooperation and value that you provided for this study.

Would you be willing to participate? 1. Yes 2. No

Annex III: English version questionnaire

Questionnaire ID_____

Name of the health facility_____

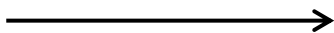
Name of interviewer _____Signature_____

Name of supervisor _____Signature_____

Section One: This part of the questionnaire contains questions that will be asked to women who gave birth of preterm baby in the hospital and have been admitted to NICU or neonatal ward. It is aimed at capturing data related to hospital discharge readiness and its factors.

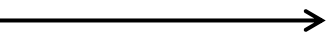
PART I: GENERAL BACKGROUND INFORMATION (SOCIO DEMOGRAPHIC FACTOR)

S.no	Questions	Response	Skip
101	What is your age?	Age in completed years _____	
102	Which zone is your residential address?	Zone name _____	
103	Which district is your home address in?	District name _____	
104	Is your home address urban or rural?	1. Urban 2. Rural	
105	What is your current marital status: are you married or living as a couple, unmarried, divorced, separated, widowed and other?	1. Married or living as a couple 2. Unmarried 3. Divorced 4. Separated 5. Widowed 6. Others specify_____	
106	What is your religion?	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Others specify_____	

107	What is your ethnicity?	1. Oromo 2. Amhara 3. Tigray 4. Gurage 5. Wolayta 6. Others specify_____	
108	Have you ever attended formal school?	1. Yes 2. No 	If No skip to Q 111
109	What is the highest level of school you attended: primary, secondary, technical /vocational, college or university?	1.Primary 2.Secondary 3.Technical/Vocational 4.College or university	
110	What is your main occupation?	1. Government employee 2. Private employee 3. NGO employee 4. Private business 5. Housemaid 6. Housewife 7. Student 8. Farmer 9. Daily laborer 10. Merchant 11. Jobless 12. Others specify_____	
111	How much is your average monthly income in Ethiopian birr?	In Ethiopian birr _____	

PART 2: REPRODUCTIVE AND PREVIOUS HISTORY OF MENTAL AND PHYSICAL HEALTH RELATED QUESTIONS

S.no	Questions	Response	Skip
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201	How many times have you been pregnant in your life, including the current last birth? (Include pregnancy that ended in miscarriage, abortion, or ended in a stillbirth)	In number _____	
202	How many babies did you deliver alive until now, including the current or last newborn?	In number _____	
203	Have you had antenatal care follow up at a health facility during your current or last pregnancy?	1. Yes 2. No 	If 'NO' skip to 207
204	How many months pregnant were you when you first received antenatal care for your last pregnancy?	In months _____	
205	How many times did you receive antenatal care at a health facility during your current or last pregnancy?	In number _____	
206	Where did you give birth to your current or last baby?	1. At a health facility 2. Outside the health facility	
207	In what way did you give birth to your current baby, is it through vagina or cesarean section?	1. Vaginal 2. Cesarean delivery	
208	Have you ever been diagnosed by a health professional to have any mental illness or health problems?	1. Yes 2. No	
209	Have you ever been diagnosed by a health professional to have hypertension?	1. Yes 2. No	
210	Have you ever been diagnosed by a health professional to have diabetes mellitus?	1. Yes 2. No	

211	Have you ever been diagnosed by a health professional to have heart disease?	1. Yes 2. No	
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PART 3: FAMILY SUPPORT RELATED QUESTIONS

S.no	Questions	Response	Skip
301	Where did you give birth to your current or last baby?	1. At a health facility 2. Outside the health facility →	If outside the health facility 303
302	Was anyone from your family members allowed to stay with you in the labor ward when you gave birth to your current baby?	1. Yes 2. No 3.If Cesarean delivery not applicable	
303	Was there any family member who stayed close to you during your stay in the hospital after delivery?	1. Yes 2. No →	If No skip to Q 401
304	How long did they stay with you?	In days _____	
305	Were your families willing to support you when you needed any help or support during your hospital stay?	1. Yes 2. No →	If No skip to Q 401
306	While you were in the hospital, do you believe that you were getting adequate physical support (assisting in carrying out everyday activities including washing, wearing clothes, going to the toilet) that you needed from your family?	1. Yes 2. No	
307	While you were in the hospital, do you believe that you were getting adequate emotional (encouragement, active listening, reassurance, empathy, and	1. Yes 2. No	

	love) support that you needed from your family?		
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PART 4: LENGTH OF STAY AND COUNSELING LANGUAGE RELATED QUESTIONS

S.no	Questions	Response	Skip
401	What is your mother tongue language?	1. Afan Oromo 2. Amharic 3. Tigrigna 4. Guragigna 5. Wolaytigna 6. Others specify_____	
402	Is the counseling or education given to you individually or as a group?	1. Individually 2. In group 3. Both individually and in group	
403	Do you know the name of the health professional(s) who gave you the counseling or education?	1. Yes 2. No 	If No skip to Q 407
404	Code of health professional(s) who gave the counseling or education?	Code _____	
405	NOTE: FROM THE LIST CHOOSE THE PROFESSION(S) OF THE HEALTH PROFESSIONAL(S) WHO GAVE THE COUNSELING	1. Neonatologist 2. Pediatrician 3. General practitioner 4. Neonatal nurse 5. Clinical Nurse 6. Health officer 7. Midwifery 8. Others specify_____	
406	What is the sex of the health professional(s) who gave you the counseling?	1. Male 2. Female 3. Male and female together	

407	In what language did the health professional(s) give you the counseling or education (which language did they use)?	1. Afan Oromo 2. Amharigna 3. Tigrigna 4. Gurageiigna 5. Wolaytigna 6. Mixed 7. Others specify_____	
408	How long did you stay in the hospital after delivery (length of hospital stay)?	In days _____	

PART 5: QUESTIONS RELATED TO THE QUALITY OF EDUCATION PROVIDED DURING THE HOSPITAL STAY

REGARDING THE CHILD'S HEALTH

S.no	Questions	Responses on scale from 1 to 7						
501	How much information or counseling did you receive from the health professionals about taking care of your child after you go home: None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
502	How much information or counseling did you receive from the health professionals about coping with your emotions (fear, stress, anger, and anxiety) after you go home: None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
503	How much information or counseling did you receive from the health professionals about your premature baby breast milk feeding after you go home: None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
504	How much information or counseling did you receive from the health professionals about environmental temperature monitoring to keep your baby warm after you go home? (Probe by keeping the room warm, changing the baby's clothing to suit the weather, and maintaining skin to skin contact): None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high

505	How much information or counseling did you receive from the health professionals on how you should help your preterm baby sleep better after you go home? (Probe by setting the right environment like dim lighting all in a quiet room, avoiding any pillows and letting your baby sleeps on his/her back): None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
506	How much information or counseling did you receive from the health professionals about common infection prevention techniques before going home? (Probe hand washing, change cot sheet often, wash medicine cup with warm water before use, keep the windows always closed and keep a clean environment): None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
507	How much information or counseling did you receive from the health professionals about neonatal danger signs that you may face after you go home? (Probe slow breathing, fast breathing, fever, body cooling, convulsion, persistent vomiting, unable to breastfeed umbilicus redness and cyanosis): None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
508	How much information or counseling did you receive from the	1	2	3	4	5	6	7

	health professionals about your child's medical needs or treatments after you go home? (Probe: giving medications or vitamins in the correct amounts and at the correct time): None, very low, low, moderate, high, very high, and extremely very high?	None	very low	low	moderate	high	very high	extremely very high
509	How much practice did you have on breastfeeding before going home? None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
510	How much practice did you have on kangaroo mother care (skin-to-skin contact) before going home?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
511	How much information or counseling did your family member(s) receive about your child's care after you go home from the hospital: None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
512	The information provided by health professionals answers your specific concerns and questions: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree
513	The health professionals were respectful to your personal beliefs: very strongly disagree, strongly disagree, mildly disagree, neutral,	1 Very	2 strongly	3 mildly	4 neutral	5 mildly	6 strongly	7 very

	mildly agree, strongly agree, and very strongly agree?	strongly disagree	disagree	disagree		agree	agree	strongly agree
514	You like the way your child's nurses taught you about how to care for your child at home: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree
515	The information that the health professionals provided to you about caring for your child was given in a way you could understand: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree
516	The health professionals break up what you're teaching into small amounts to help you learn: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree
517	The health professionals checked to make sure you understood the information and instructions: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree

518	You received consistent (the same) content of information from your child's nurses, doctors, and other health workers: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree
519	The information that you received about caring for your child was given to you at times that were convenient for you: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree
520	The health professionals gave you the information or counseling at times when your family members(s) could attend: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree
521	The health professionals helped you to feel confident in your ability to care for your child at home: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree
522	The information that the health professionals provided about your child's care at home decreases your anxiety about going home: very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree?	1 Very strongly disagree	2 strongly disagree	3 mildly disagree	4 neutral	5 mildly agree	6 strongly agree	7 very strongly agree

PART 6: HOSPITAL DISCHARGE READINESS RELATED QUESTIONS

S.no	Questions	Responses on scale from 1 to 7						
601	How would you describe the level of your physical readiness (health of your body) to go home: None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
602	How pain-free or healthy are you today: None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
603	How would you describe your body strength (energy) today: None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
604	How would you describe the level of your emotional readiness (confident, relaxed, and calm) to go home today: None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high

605	How would you describe your ability to manage your child's emotions and behavior (example: soothing your baby when he/she continually cries, becomes unhappy, upset, and restless) at home: None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
606	How would you describe your physical ability to care for yourself today (for example, hygiene, walking, and toileting): None, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
607	How much emotional support (by offering genuine encouragement, reassurance, hugs, and love) will you have after you go home: Extremely very low, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
608	How much help will you have, if needed, with your child's personal care after you go home (arranging for help that may be needed): Extremely very low, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
609	How much help will you have, if needed, with household activities (for example, cooking, cleaning, and babysitting) after you go home: Extremely very low, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high

610	How much help will you have, if needed, with your child's medical care needs (treatments, medications) after you go home: Extremely very low, very low, low, moderate, high, very high, and extremely very high?	1 None	2 very low	3 low	4 moderate	5 high	6 very high	7 extremely very high
611	How much do you know about caring for your child after you go home: (for example bathing, dressing, diapering, feeding, etc...) Noting at all, very little, a little, moderate, much, very much, and know all?	1 Noting at all	2 very little	3 a little	4 moderate	5 much	6 very much	7 know all
612	How much do you know about what your child needs for his/her growth: Noting at all, very little, a little, moderate, much, very much, know all?	1 Noting at all	2 very little	3 a little	4 moderate	5 much	6 very much	7 know all
613	How much do you know about taking care of your child's medical needs (e.g. giving medications or vitamins in the correct amounts and at the correct times) after you go home: Noting at all, very little, a little, moderate, much, very much, know all?	1 Noting at all	2 very little	3 a little	4 moderate	5 much	6 very much	7 know all
614	How much do you know about children's problems to watch for after you go home (For example slow breathing, fast breathing, fever, convulsion, persistent vomiting, unable to breastfeed, umbilicus redness and cyanosis): Noting at all, very little, a little, moderate, much, very much, and know all?	1 Noting at all	2 very little	3 a little	4 moderate	5 much	6 very much	7 know all

615	How much do you know about what your child is allowed and not allowed to do after you go home: Noting at all, very little, a little, moderate, much, very much, know all?	1 Noting at all	2 very little	3 a little	4 moderate	5 much	6 very much	7 know all
616	How much do you know about what will happens next in your child's follow-up medical treatment plan after you go home: Noting at all, very little, a little, moderate, much, very much, know all?	1 Noting at all	2 very little	3 a little	4 moderate	5 much	6 very much	7 know all
617	How much do you know about services and information available to you and your child in your community after you go home: Noting at all, very little, a little, moderate, much, very much, know all?	1 Noting at all	2 very little	3 a little	4 moderate	5 much	6 very much	7 know all
618	How well will you be able to perform your child's personal care at home: Noting at all, very poor, poor, fair, good, very good, and extremely well?	1 Noting at all	2 very poor	3 poor	4 fair	5 good	6 very good	7 extremely well
619	How well will you be able to continue or perform your child's medical treatments at home: Noting at all, very poor, poor, fair, good, very good, and extremely well?	1 Noting at all	2 very poor	3 poor	4 fair	5 good	6 very good	7 extremely well
620	How well will you be able to handle the demands of life at home: Noting at all, very poor, poor, fair, good, very good, and extremely well?	1 Noting at all	2 very poor	3 poor	4 fair	5 good	6 very good	7 extremely well

PART 7: QUESTIONS RELATED TO DEPRESSION

Over the last 2 weeks, how often have you been bothered by any of the following problems?

701	Little interest or pleasure in doing things	0 Not at all	1 Several days	2 More than half the days	3 Nearly every day
702	Feeling depressed or hopeless	0 Not at all	1 Several days	2 More than half the days	3 Nearly every day
703	Trouble falling or staying asleep, or sleeping too much	0 Not at all	1 Several days	2 More than half the days	3 Nearly every day
704	Feeling tired or having little energy	0 Not at all	1 Several days	2 More than half the days	3 Nearly every day
705	Poor appetite or overeating	0 Not at all	1 Several days	2 More than half the days	3 Nearly every day
706	Feeling bad about yourself or that you are a failure	0 Not at all	1 Several days	2 More than half the days	3 Nearly every day
707	Trouble concentrating on things, such as reading the newspaper or watching television	0 Not at all	1 Several days	2 More than half the days	3 Nearly every day
708	Moving or speaking so slowly that other people could have noticed or the opposite being so fidgety or restless that you have been moving around a lot more than usual	0 Not at all	1 Several days	2 More than half the days	3 Nearly every day
709	Thoughts that you would be better off dead, or of hurting yourself in some way	0 Not at all	1 Several days	2 More than half the days	3 Nearly every day

Section two: This part of the questionnaire contains questions that will be asked to health professionals who are currently working at NICU and neonatology ward.

HEALTH PROFESSIONAL RELATED QUESTIONS

S. no	Questions	Response	Skip
101	Health professional sex	1. Male 2. Female	
102	Level of education	1. Diploma 2. Degree 3. Master 4. Others specify_____	
103	What is your profession	1. Neonatologist 2. Pediatrician 3. General practitioner 4. Neonatal nurse 5. Clinical Nurse 6. Health officer 7. Midwifery 8. Others specify_____	
104	What is your mother tongue language?	1. Afan Oromo 2. Amharigna 3. Tigrigna 4. Gurageiigna 5. Wolaytigna 6. Others specify_____	

105	What other language can you speak?	1. Afan Oromo 2. Amharigna 3. Tigrigna 4. Gurageiigna 5. Wolaytigna 6. Others specify_____	
106	Have you received any special training related to preterm infant's mothers counseling or education?	1. Yes 2. No	
107	Have you received any special training to help mothers of preterm infants prepare for discharge from the hospital?	1. Yes 2. No	

Section three: This part of the questionnaire contains questions that will be asked to hospital head nurses who currently coordinating NICU ward are.

HEALTH FACILITY RELATED QUESTIONS

S.no	Questions	Response	Skip
101	Generally, in your hospital, a nurse gives care for how many preterm infants in a regular pediatric ward?	In number_____	
102	A nurse in NICU for daily 8-hour work shift for how many preterm infants give care?	In number_____	
103	Is there a discharge guide (protocol) for patients in the facility?	1. Yes 2. No	
104	If so, does the guide explain about preterm babies discharge from hospital to home specifically?	1. Yes 2. No	
105	Does the hospital provide education or counseling for the mothers regarding home care and support for premature infants during their stay in the hospital?	1. Yes 2. No	

Annex IV: Participant Information Sheet in Amharic language

ለጥናት ተሳታፊዎች የሚሰጥ መረጃ በአማርኛ

እንደምን አደራሽሁ/ዋለችሁ ስሜ ----- እባለሁ። እኔ የሰለጠንኩ የጥናት መረጃ ሰብሳቢ ነኝ። ዛሬ በዚህ ጤና ተቋም ውስጥ የተገኘሁት በአዲስ አበባ ዩኒቨርሲቲ የስነ ተዋልዶ ድህረ ምረቃ ትምህርቷን በመከታተል ላይ የምትገኘው ተማሪ ሙኒራ ኢብራሂም ለምታደርገው ጥናት መረጃ ለመሰብሰብ ነው።

የጥናት ርዕስ፡- የእርግዝና ሙሉ ዘጠኝ ወራት ያልጨረሰ ልጅ የወለዱ እናቶች ከሆስፒታል ተኝቶ ህክምና ወጥተው ወደ ቤት ሲሄዱ ለህጻኑ አስፈላጊውን እንክብካቤ ለማድረግ ያላቸው የዝግጁነት መጠን እና ሆስፒታሉ ከሚሰጠው የግንዛቤ ማስጨበጫ ትምህርት ጥራት ጋር ያለውን ተዛምዶ ለማጥናት በመንግስት ሆስፒታል የወለዱ እናቶችን አሳትፎ በኦሮምያ ክልል የሚደረግ ተቋም ተኮር ጥናት።

መግቢያ፡- የእርግዝና ሙሉ ዘጠኝ ወራት ሳይጠናቀቅ ቀድሞ መውለድ አሁንም ድረስ በአለም ላይ በተለይ ከሰሀራ በታች ባሉ የአፍሪካ አገሮች ኢትዮጵያን ጨምሮ ለከፍተኛ ህፃናት ሞት እና አካል ጉዳት ምክንያት የሆነ ትልቅ የጤና ችግር ነው። ያለጊዜያቸው ቀድሞው የተወለዱ ጫቅላ ህፃናት ሆስፒታል ተኝተው ህክምና በሚደረግላቸው ጊዜ እናቶች ተሳትፎ እንዲያደርጉ ማበረታታት ከሆስፒታሉ ከወጡ በኋላ የሚያጋጥማቸውን የጫቅላ ህፃናት ህመም እና ሞት በመቀነስ ላይ ከፍተኛ ጠቀሜታ አለው። ነገር ግን እናቶች ለጫቅላ ህፃን ልጃቸው በሚደረገው ህክምና እና እንክብካቤ ላይ በብዛት ተሳትፎ ባለማድረጋቸው ምክንያት በቤት ውስጥ የሚደረገውን እንክብካቤ ለማከናወን የሚያስፈልገውን እውቀት፤ ክህሎት እና በራስ መተማመን ይጎድላቸዋል በዚህም የተነሳ አጥጋቢ እና ጥሩያልሆነ እንክብካቤ በቤት ውስጥ እንዲያደርጉ ይገደዳሉ።

የጥናቱ ዓላማ ፡-የዚህ ጥናት ዋነኛ አላማ የእርግዝና ሙሉ ዘጠኝ ወራታቸው ሳይጠናቀቅ ልጅ የወለዱ እናቶች ልጃቸውን ከሆስፒታል ይዘው ሲወጡ በቤት ውስጥ ተገቢውን እንክብካቤ ለማድረግ የሚያስችላቸውን የዝግጁነት መጠናቸውን መለየት እና ዝግጁነታቸው በሆስፒታሉ ከሚሰጠው ግንዛቤ ማስጨበጫ ትምህርት ጥራት ጋር ያለውን ተዛምዶ ለመፈተሽ በኦሮሚያ ክልል ውስጥ በሚገኙ የመንግስት ሆስፒታሎች ላይ የሚሰሩ ጥናት ይሆናል። የዚህ ጥናት ውጤት ፖሊሲ ለሚቀርጹ ባለሙያዎች ውጤታማ የመፍትሄ አማራጭ ይጠቁማል ለምሳሌ፡ የጫቅላ ህፃናት የሆስፒታል መሸኛ መመሪያ

እንዲዘጋጅ እና በጤና ተቋማት የሚሰጠውን የግንዛቤ ማስጨበጫ ትምህርት ጥራት እንዲሻሻል መነሻ ይሆናል ። ያም ደግሞ የጨቅላ ህጻናትን ደህንነት ለማረጋገጥ እና አሉታዊ ችግሮችን ለመቀነስ ያስችላል።ይህ ጥናት የሚካሄደው የሁለተኛ ዲግሪ የመመረቂያ ጽሁፍ ማሟያነት ያግዝ ዘንድ ነው።

የጥናቱ አፈጻጸም እና ተሳትፎ፡-የጥናቱ መረጃ በሰለጠነ ባለሙያ አማካኝነት ፊት ለፊት ቃለ መጠይቅ በማድረግ ይሰበሰባል ይህም ከ1እስከ 2 ሠዓት ሊፈጅ ይችላል። የመወለጃ ጊዜው ያልደረሰ ጨቅላ ህጻን የወለዱ እናቶች በጥናቱ ላይ እንዲሳተፉ እና ለጥያቄዎቹ ትክክለኛ መልስ እንዲሰጡ ይጠየቃሉ ከዛም ፍቃደኛ ሲሆኑ ቃለ መጠይቁ ይደረግላቸዋል።

ሚስጥራዊነት እና የሚስጥር አጠባበቅ፡-ተሳታፊዎች የሚሰጡት መረጃ በጣም ጠቃሚ ሲሆን በአጠቃላይ በሚስጥር ይጠበቃል። የትኛውም ምላሽ እና የግል ማንነት ገልጸው የሚያሳዩ መረጃዎች በየትኛውም ሰዓት ለማንም በግል ተላልፎ አይሰጥም ከዚህ በተጨማሪ መጠይቁ በግላዊ መለያ ስለሚሰየም የተሳታፊዎችን ማንነት አያሳይም። የጥናቱ ውጤት አጠቃላይ የጥናቱን ተሳታፊ በጥቅል እንጂ የየትኛውንም ተሳታፊ ግላዊ ውጤትን አያሳይም። በመሆኑም ይህ መረጃ ከተሳታፊ እውቅና ውጪ ለሌላ ለምንም አላማ ጥቅም ላይ አይውልም ።

የጥናቱ ጥቅም፡- ይህ ጥናት የሚጠቅመው ያለጊዜያቸው ለተወለዱ ጨቅላ ህጻናት እና ለእናትየዋም ጭምር ነው። ለእናትየው ስለ ጨቅላ ህጻኑ እንክብካቤ እና አያያዝ ያላትን እውቀት፣ክህሎት እና በራስ መተማመን እንዲጎለብት ሲያስችል ለጨቅላ ህጻኑ ደግሞ ጤናማ እና ጥሩ አስተዳደግ እንዲኖረው ይረዳል። ከዚህም በተጨማሪ የጥናቱ ውጤት በተለያዩ ባለ ድርሻ አካላት ለምሳሌ፡- ፖሊሲ ለሚቀርጹ አካላት ያለጊዜው ቀድመው የተወለዱ ጨቅላዎች በቤት ውስጥ ሊያጋጥማቸው የሚችለው የጤና ውስብስብ ችግር መከላከል የሚያስችል እና ጨቅላዎች ጥሩ ጤንነት እና ዕድገት እንዲኖራቸው ሊያደርግ የሚችል ስልት እንዲነድፉ መነሻ ይሆናል።

የጥናቱ ስጋት፡-የጥናቱ ተሳታፊዎች በቃለ መጠይቅ ጊዜ መጠይቁን ለመሙላት ከ1 እስከ 2 ሰዓት ይወስድባቸዋል ከዚህ በዘለለ ግን ይህ ጥናት ምንም አይነት ማህበራዊ መድሎ፣ ኢኮኖሚያዊ ኪሳራ እና አካላዊም ሆነ ስነልቦናዊ ጉዳት አያስከትልም ።

ስጦታዎች፡-ይህ ጥናት ምንም ዓይነት ማበረታቻ ፣ማስገደጃ እንዲሁም ስጦታ የሌለው ሲሆን ከምንም በላይ ምንም አይነት ካሳ የሚያሰጥ ችግር አያስከትልም።

መረጃ ማሰራጨት:-አጥኚዎቹ የጥናቱን ውጤቶች በተለያዩ ስልቶች የማሰራጨት ሙሉ ሐላፊነት አላቸው።ከነዚህም መካከል ለሚመለከታቸው ጤና ባለሙያዎች ተገቢውን ግብረ መልስ በመስጠት ፣ በተለያዩ ሀገራዊ እና አለም አቀፋዊ ሳይንሳዊ ጉባኤዎች ላይ በማቅረብ እና ተአማኒነት ባላቸው የጥናት መጽሄቶች ላይ በማሳተም።

መብት:-እዚህ ጥናት ላይ እናቶች በሙሉ ፍቃደኝነት ላይ ተመስርተው እንዲሳተፉ ነው የሚጠበቀው ስለሆነም በጥናቱ ላለመሳተፍ ከፈለጉ ሙሉ መብት አላቸው ወይም ያልተመቻቸውን ጥያቄዎች ለመመለስ አይገደዱም እንዲሁም በፈለጉበት ጊዜ የማቋረጥ መብት አላቸው። ተጨማሪም ማብራሪያ ወይም መረጃ ካስፈለጋቸው ደግሞ አጥኚዎቹ ለመስጠት ደስተኛ ናቸው። ባለመሳተፋቸው ያገኙባቸው የነበረውን ማንኛውንም የጤናም ሆነ ሌሎች አስተዳደራዊ አገልግሎቶችን አይከለክሉም።

መረጃ ስለመጠየቅ:-የጥናቱ ተሳታፊዎች ጥናቱን የሚመለከት ምንም አይነት ጥያቄ ወይም ግልጽ ያልሆነ ነገር ካጋጠማቸው በማንኛውም ሰዓት ከዚህ በታች የተጠቀሰውን መረጃ በመጠቀም አጥኚዎቹን የመጠየቅ እና የማረጋገጥ መብት አላቸው ።

የተመራማሪው አድራሻ:- ሙኒራ ኢብራሂም

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Annex V: Consent Form in Amharic language

የጥናት ተሳታፊዎች ስምምነት መቀበያ ቅጽ

ጤና ይስጥልኝ ስሜ----- እባላለሁ። በአሁኑ ሰዓት በአዲስ አበባ ዩኒቨርሲቲ በማህበረሰብ ጤና ሳይንስ ዘርፍ የሁለተኛ ድግሪ የመመረቂያ ጥናታዊ ፅሁፏን ከምትሰራው ከተማሪ ሙኒራ ኢብራሂም ጋር በመሆን መረጃ በማሰባሰብ ላይ እገኛለሁ። የምርምሩ አላማም ሙሉ የእርግዝና ወራቸውን ሳያጠናቅቁ የተወለዱ ጨቅላ ህጻናት ያላቸው እናቶች ከሆስፒታል ተኝቶ ህክምና ወጥተው ወደ ቤት ሲሄዱ ለጨቅላው አስፈላጊውን እንክብካቤ እና ድጋፍ ለመስጠት ያላቸውን የዝግጁነት መጠን እና አጋላጭ ሁኔታዎችን መለየት ነው ስለሆነም በዚህ የጥናት ቦታ ላይ የሚሰበሰበው መረጃ ለመጠቀም የእርሶን ፍቃድ በትህትና እጠይቃለው። ጥያቄዎቹ በዋናነት የሚመለከቱት ማህበራዊ ስነህዝብ፣ የጤና ተቋማት ሁኔታ፣ እንዲሁም ሌሎች ለታቀደው ምርምር አስፈላጊ የሆኑትን ጥያቄዎች የሚይዝ ነው። ስለሚጠናው ነገር የሚሰበሰበው መረጃ ከ1 እስከ 2 ሰዓት ሊፈጅ ይችላል። በማናቸውም ጉዳዮች ዙሪያ የሚሰጡት መረጃ ሚስጢራዊነቱ በተለያዩ ዘዴ የተጠበቀ ነው። ተሳታፊዎች ላልተመቻቸው ጥያቄ ያለመመለስ መብታቸው የተጠበቀ ነው። በተጨማሪም በማንኛውም ሰዓት ማቋረጥ ይችላሉ።

በዚህ ጥናት ላይ የሚያደርጉትን ትብብር እና ዋጋ በጣም አደንቃለው!

በጥናቱ ለመሳተፍ ፍቃደኛ ነዎት? ሀ. አዎ ለ. አይደለሁም

Annex VI: Amharic language questionnaire

የአማርኛ መጠይቅ

የመጠይቅ መለያ -----

የጤና ተቋሙ ስም -----

የመረጃ ሰብሳቢው ስም -----ፊርማ -----

የተቆጣጣሪው ስም -----ፊርማ-----

ምዕራፍ አንድ: ይህ የመጠይቅ ክፍል የተለያዩ ጥያቄዎችን የያዘ ሲሆን የሚያሳትፈውም የእርግዝና ሙሉ ዘጠኝ ወር ሳይሞላው የተወለደ ጨቅላ ህፃን ያላቸውን እናቶች ነው። አላማውም ከሆስፒታል ሽኝት(መውጫ) ዝግጁነት እና ተያያዥ መንስኤዎችን የሚያሳይ መረጃ ለመሰብሰብ ነው።

ክፍል አንድ: አጠቃላይ የማህበራዊ እና ስነ ህዝብ ተዛማች ጥያቄዎች

ተ.ቁ	ጥያቄዎች	መልስ	እለፍ
101	እድሜዎት ስንት ነው?	እድሜ በሙሉ ዓመት_____	
102	የመኖሪያ አድራሻዎ የትኛው ዞን ውስጥ ይገኛል?	ዞን ስም_____	
103	የመኖሪያ አድራሻዎ የትኛው ወረዳ ውስጥ ይገኛል?	የወረዳ ስም_____	
104	የመኖሪያ አድራሻዎት ከተማ ነው ወይስ ገጠር?	1.ከተማ 2. ገጠር	
105	አሁን ያሉበት የጋብቻ ሁኔታዎ ምንድነው: ያገባች ወይም እንደ ባልና ሚስት የምትኖር፣ ያላገባች፣ የተፋታች ፣የተለያዩች ፣. ባልዋ የሞተባት እና ሌላ?	1.ያገባች ወይም እንደ ባልና ሚስት የምትኖር 2. ያላገባች 3.የተፋታች 4.የተለያዩች 5.ባልዋ የሞተባት 6. ሌላ ካለ ይጠቀስ _____	

106	ሀይማኖትዎ ምንድን ነው?	1.አርቶዶክስ ክርስቲያን 2.ሙስሊም 3.ፕሮቴስታንት 4.ካቶሊክ 5.ሌላ ካለ ይጠቀስ _____	
107	ብሄርዎ ምንድን ነው?	1.ኦሮሞ 2.አማራ 3.ትግሬ 4.ጉራጌ 5. ወላይታ 6.ሌላ ካለ ይጠቀስ _____	
108	መደበኛ ትምህርት ተምረዋል?	1.አዎ 2.አልተማርኩም →	ካልተማሩ ወደ ጥያቄ ቁጥር 111 ይዝለሉ
109	እርስዎ የደረሱበት ከፍተኛ የትምህርት ደረጃ የትኛው ነው፡. የመጀመሪያደረጃ ፣ሁለተኛ ደረጃ ፣ቴክኒክ እና ሙያ እና ኮሌጅ/ዩኒቨርሲቲ?	1.የመጀመሪያ ደረጃ 2.ሁለተኛ ደረጃ 3.ቴክኒክ እና ሙያ 4.ኮሌጅ/ዩኒቨርሲቲ	

110	መተዳደሪያ ስራዎች ምንድን ነው?	1. የመንግስት ስራ ተቀጣሪ 2. የግል ስራ ተቀጣሪ 3. መንግስታዊ ያልሆነ ድርጅት ተቀጣሪ 4. የግል ስራ 5. የቤት ሰራተኛ 6. የቤት እመቤት 7. ተማሪ 8. አርሶ አደር 9. የቀን ሰራተኛ 10. ነጋዴ 11. ስራ አጥ 12. ሌላ ካለ ይጠቀስ _____	
111	የወር ገቢዎች በአማካይ ምን ያህል ነው?	በኢትዮጵያ ብር _____	

ክፍል ሁለት፡ ከስነተዋልዶ፤ ሰውነት እና አዕምሮ ጤንነት ጋር ተዛማጅ የሆኑ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	መልስ	እለፍ
201	የአሁኑን ወሊድ ጨምሮ በአጠቃላይ ስንት ጊዜ አርግዝዋል? (ውርጃ እና ሞቶ የተወለደን ጨምሮ)	በቁጥር _____	
202	አሁን የተወለደውን ጨምሮ በህይወት ያሉ ስንት ልጆች ወልደዋል?	በቁጥር _____	
203	በአሁኑ እርግዝናዎች በጤና ተቋም ቅድመ ወሊድ ክትትል ነበረዎት?	1. አዎ 2. አይደለም →	አይደለም ከሆነ ወደ 207
204	በስንተኛ የእርግዝና ወርዎች ላይ ነዉ ክትትል የጀመሩት	በወር _____	
205	በአሁኑ እርግዝና ስንት ጊዜ (ዙር) የቅድመ ወሊድ ክትትል በጤና ተቋም አደረጉ?	በቁጥር _____	

206	የአሁኑ ልጅዎትን የት ነው የወለዱት?	1. በጤና ተቋም 2. ከጤና ተቋም ውጪ	
207	የአሁኑን ልጅ በምን አይነት መንገድ ነው የወለዱት? በማህፀን ነው ወይስ በቀዶ ጥገና?	1. በማህፀን 2. በአፕራሲዮን/ቀዶ ጥገና	
208	በጤና ባለሙያ የተረጋገጠ የአይምሮ ህመም ታመው ያውቃሉ?	1. አዎ 2. አይደለም	
209	በጤና ባለሙያ የተረጋገጠ የደም ግፊት ህመም ታመው ያውቃሉ?	1. አዎ 2. አይደለም	
210	በጤና ባለሙያ የተረጋገጠ የስኳር በሽታ ታመው ያውቃሉ?	1. አዎ 2. አይደለም	
211	በጤና ባለሙያ የተረጋገጠ የልብ ህመም ታመው ያውቃሉ?	1. አዎ 2. አይደለም	

ክፍል ሶስት፡ ከቤተሰብ ድጋፍ አሰጣጥ ጋር ተያያዥነት ያላቸው ጥያቄዎች

ተ.ቁ	ጥያቄዎች	መልስ	እላፍ
301	የአሁኑ ልጅዎትን የት ነው የወለዱት?	1. በጤና ተቋም 2. ከጤና ተቋም ውጪ →	ከጤና ተቋም ውጪ ከሆነ 303
302	የአሁኑ ልጅዎትን በወለዱበት ወቅት በጤና ተቋም ማዋለጃ ክፍል ውስጥ ከቤተሰብዎ አባላት መካከል ከእርስዎ ጋር አብሮ እንዲቆይ የተፈቀደለት ሰው ነበር?	1. አዎ 2. የለም 3. በአፕራሲዮን ወይም በቀዶ ጥገና ከወለዱ ተግባራዊ የማይሆን	
303	እርስዎ ከወሊድ በኋላ በጤና ተቋም በቆዩበት ጊዜ ከእርስዎ ጋር በቅርበት አብሮ የሚቆይ ሰው ከቤተሰብዎ አባላት መካከል ነበር?	1. አዎ 2. አይደለም →	ከሌለ ወደ ተራ ቁጥር 401 ዝለሉ
304	ለምን ያህል ጊዜ ከእርስዎ ጋር አብረው ቆዩ?	በቀናት _____	

305	እርስዎ ከወሊድ በኋላ በነበረዎት የሆስፒታል ቆይታ ጊዜ ምንም አይነት እርዳታ እና ድጋፍ እንዲደረግልዎት ሲፈልጉ ቤተሰብዎት እርስዎን ለመደገፍ ፍቃደኛ ነበሩ?	1.አዎ 2.አይደለም →	ካልነበሩ ወደ ተራ ቁጥር 401 ዝለሉ
306	እርስዎ የሆስፒታል እያሉ የሚያስፈልግዎትን አካላዊ ድጋፍ ለምሳሌ የየቀን ተግባራት የሆኑትን መታጠብ፣ ልብስ መልበስ ፣ሽንት ቤት መሄድ እና ወዘተ... የመሳሰሉትን ማድረግ እንዲችሉ በቂ የሆነ ድጋፍ ከቤተሰብዎ አባላት እያገኘሁ ነበር ብለው ያምናሉ?	1.አዎ 2. የለም	
307	የሆስፒታል እያሉ አዕምሮዎትን ወይም መንፈስዎን ለማረጋገጥ የሚያስፈልግዎትን ያህል ድጋፍ በበቂ ሁኔታ ከቤተሰቤ አባላት እያገኘው ነበር ብለው ያምናሉ? (ለምሳሌ፡ ማበረታታት፣ ማፅናናት፣ በንቃት ማዳመጥ ወዘተ... የመሳሰሉትን)	1.አዎ 2. የለም	

ክፍል አራት፡ የሆስፒታል ቆይታ ጊዜ እና የተግባቦት ቋንቋ ጋር የተያያዙ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	መልስ	እለፍ
401	የመጀመሪያ የአፍ መፍቻ ቋንቋዎት ምንድን ነው?	1.ኦሮምኛ 2. አማርኛ 3.ትግርኛ 4.ጉራግኛ 5.ወላይትኛ 6. ሌላ ካለ ይጠቀስ _____	
402	የምክር አገልግሎቱ ወይም ትምህርቱ የተሰጠዎት በየግል ነው ወይስ በቡድን?	1.በየግል 2.በቡድን 3. በየግል እና በቡድን	
403	ትምህርቱን ወይም ምክሩን የሰጠውን (የሰጡትን) ባለሙያ (ባለሙያዎች) ስም ያውቃሉ?	1.አዎ 2. አላውቅም →	ካላወቁ ወደ ተራ ቁጥር

			407 ዝለሉ
404	ትምህርቱን ወይም ምክሩን የሰጠው (የሰጡት) የባለሙያው(ዎች) ኮድ?	ኮድ_____	
405	ማሳሰቢያ ለመረጃ ሰብሳቢዎች: ትምህርቱን (ምክሩን) የሰጠውን ወይም የሰጡትን ባለሙያ(ዎች) የሙያ ዘርፍ ከፊት ከተዘረዘረው ውስጥ ይምረጡ?	1. ጨቅላ ህፃናት ልዩ ሀኪም 2. ህፃናት ልዩ ሀኪም 3. ጠቅላላ ሀኪም 4. ጨቅላ ህፃናት ነርስ 5. ክሊኒካል ነርስ 6. ጤና መኮንን 7. አዋላጅ ነርስ 8. ሌላ ካለ ይጠቀስ _____	
406	ትምህርቱን (ምክሩን) የሰጠው ወይም የሰጡት ባለሙያ(ዎች) ፃታ ምንድን ነው?	1. ወንድ 2. ሴት 3. ወንድ እና ሴት በጋራ	
407	ባለሙያዎቹ ትምህርቱን ወይም ምክሩን በየትኛው ቋንቋ ነው የሰጥዎት (የትኛውን ቋንቋ ነው የተጠቀሙት)?	1. በኦሮምኛ 2. በአማርኛ 3. በትግርኛ 4. በጉራግኛ 5. በወላይትኛ 6. ቅልቅል 7. ሌላ ካለ ይጠቀስ_____	
408	እርስዎ ከወሊድ በኋላ በሆስፒታሉ የነበረዎት የቆይታ ጊዜ ምን ያህል ነው?	በቀናት _____	

ክፍል አምስት፡ የህፃኑን ጤና በተመለከተ በሆስፒታል ቆይታ ጊዜ የተሰጠ ትምህርት ጥራት ጋር ተያይዞ ያሉ ጥያቄዎች								
ተ.ቁ	ጥያቄዎች	መልስ						
501	ለልጅዎ እቤት ከሄዱ በኋላ ማድረግ ስላለብዎት የቤት ውስጥ እንክብካቤ እና አያያዝን የሚመለከት ምክር ወይም ትምህርት ከጤና ባለሙያዎቹ ምን ያህል ተቀብሉ/አገኙ ?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
502	እርስዎ እቤት ከሄዱ በኋላ ሊያጋጥምዎት ስለሚችለው ጥሩ ያልሆኑ የውስጣዊ ስሜቶች ለምሳሌ ፍራቻ፣ ጭንቀት፣ ንዴት፣ ትካዜ ወዘተ እንዴት መቋቋም እንደሚችሉ ከጤና ባለሙያዎቹ ምን ያህል መረጃ አገኙ?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
503	የእርግዝና ጊዜው ሳይጠናቀቅ ቀድሞ የተወለደውን ጨቅላ ልጅዎት እቤት ከሄዱ በኋላ የጡት ወተት እንዴት መመገብ እንዳለብዎት የሚያስገነዝብ ትምህርት ከጤና ባለሙያዎቹ ምን ያህል አገኙ?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
504	እቤትዎ ከሄዱ በኋላ የልጅዎትን የሰውነት ሙቀት ለመጠበቅ እንዲችሉ ስለ የአካባቢ ሙቀት መቆጣጠሪያ ዘዴዎች የሚገልፅ ትምህርት ከጤና ባለሙያዎቹ ምን ያህል አገኙ? (መመርመሪያ፡ የክፍሉን ሙቀት መጠበቅ፣ የህፃኑን ልብስ ከአየር ንብረቱ ጋር እንዲስማማ አድርጎ መቀያያር	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ

	እና የእናትየዋ ደረት ላይ የህፃኑ ደረቱ እንዲነካካ አድረጎ መያዝ)							
505	የእርግዝና ግዜው ሳይጠናቀቅ ቀድሞ የተወለደውን ልጅዎትን እቤት ከሄዱ በኋላ በጥሩ ሁኔታ እንዲተኛ እንዴት መርዳት እንዳለብዎት የሚገልፅ ትምህርት ከጤና ባለሙያዎቹ ምን ያህል አገኙ? (መመርመሪያ፡ የክፍሉን ፀጥታ በመጠበቅ፣ደብዛዛ ብርሃን አድርጎ ምቹ አካባቢን በመፍጠር፣ምንም አይነት ትራስ ባለመጠቀም እና ሁልጊዜ በጀርባው እንዲተኛ በማድረግ)	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
506	የጨቅላ ህፃናት ዋና ዋና የበሽታ መከላከያ ዘዴዎችን የሚመለከት ትምህርት እቤት ከመሄድዎ በፊት ከጤና ባለሙያዎቹ ምን ያህል አገኙ? (መመርመሪያ፡ እጅን በአግባቡ መታጠብ፣የመኝታ ልብሶችን ቶሎ ቶሎ መቀያየር፣ የመድሃኒት ማጠጫ ኩባያ ከመጠቀማችን በፊት ለብ ባለ ውሃ ማጠብ፣ መስኮቶችን ሁሌ ዝግ ማድረግ እና የአካባቢን ንፅህና መጠበቅ ወዘተ...)	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
507	እቤት ከሄዱ በኋላ ሊያጋጥምዎት ስለሚችለው የጨቅላ ህፃናት ህመም አደገኛ ምልክቶችን የሚገልፅ ትምህርት ከጤና ባለሙያዎቹ ምን ያህል አገኙ? (መመርመሪያ፡	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ

	የሚዘገይ አተነፋፈስ፣ ፈጣን አተነፋፈስ፣ ትኩሳት፣ የሰውነትመቀዝቀዝ፣ ማንዘፍዘፍ፣ የማያቋርጥ ትውከት፣ ጡት አለመጥባት፣ እትብት መቅለት እና የከንፈር መጥቆር ወዘተ...))							
508	ልጅዎት እቤት ከሄደ በኋላ ስለሚያስፈልገው(ሊደረግለት ስለሚገባው) ህክምና የሚገልፅ መረጃ ከጤና ባለሙያዎቹ ምን ያህል አገኙ?(መመርመሪያ፣ የታዘዘውን መድሃኒት በትክክለኛ መጠን እና ሰአት መስጠት)	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
509	እርስዎ በቤትዎ ልጅዎትን እንዴት ጡት ማጥባት፣ እንዳለብዎት የሚያስተምር የተግባር ልምምድ እቤት ከመሄድዎ በፊት ምን ያህል አደረጉ?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
510	እርስዎ በቤትዎ የእርስዎን ገላ ከልጅ ገላ ጋር አነካክተው እንዴት ማዘል እንዳለብዎት የሚያስተምር የተግባር ልምምድ እቤት ከመሄድዎ በፊት ምን ያህል አደረጉ?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
511	የእርስዎ ቤተሰብ አባላት በቤት ውስጥ ለልጅዎት የሚያስፈልገውን እንክብካቤ ማድረግ እንዲችሉ ምን ያህል ትምህርት ተሰጣቸው?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
512	ከጤና ባለሙያዎቹ የተሠጣቸው ትምህርት እርስዎ ለሚያሳስብዎት ነገር እና ለጥያቄዎት መልስ ይሰጣል	1 እጅግ በጣም	2 በጣም	3 በመጠኑ	4 ምንም	5 በመጠኑ	6 በጣም	7 እጅግ በጣም

		አልስማማም	አልስማማም	አልስማማም	አስተያየት የለኝም	እስማማለው	እስማ ማለው	እስማማለው
513	የጤና ባለሙያዎቹ የእርስዎን ግላዊ እምነት ያከብሩ ነበር	1 እጅግ በጣም አልስማማም	2 በጣም አልስማማም	3 በመጠኑ አልስማማም	4 ምንም አስተያየት የለኝም	5 በመጠኑ እስማማለው	6 በጣም እስማ ማለው	7 እጅግ በጣም እስማማለው
514	የጤና ባለሙያዎቹ በቤት ውስጥ ልጆቻችን እንዴት መንከባከብ እንዳለብዎት የሚያስተምሩበትን መንገድ ወደውታል	1 እጅግ በጣም አልስማማም	2 በጣም አልስማማም	3 በመጠኑ አልስማማም	4 ምንም አስተያየት የለኝም	5 በመጠኑ እስማማለው	6 በጣም እስማ ማለው	7 እጅግ በጣም እስማማለው
515	የጤና ባለሙያዎቹ ልጆቻችን እንዴት መንከባከብ እንዳለብዎት ትምህርት/ምክር ሲሰጥዎት የነበረው እርስዎ በሚረዱት መልኩ ነበር	1 እጅግ በጣም አልስማማም	2 በጣም አልስማማም	3 በመጠኑ አልስማማም	4 ምንም አስተያየት የለኝም	5 በመጠኑ እስማማለው	6 በጣም እስማ ማለው	7 እጅግ በጣም እስማማለው
516	የጤና ባለሙያዎቹ የግንዛቤ ማስጨበጫ ትምህርቱን በሚሰጡበት ወቅት እርስዎን ለማስተማር እንዲረዱ በትንሽ ትንሹ ከፋፍለው ነበር የሚያስተምሩዎት	1 እጅግ በጣም አልስማማም	2 በጣም አልስማማም	3 በመጠኑ አልስማማም	4 ምንም አስተያየት የለኝም	5 በመጠኑ እስማማለው	6 በጣም እስማ ማለው	7 እጅግ በጣም እስማማለው
517	እርስዎ የተሰጠዎትን ትምህርት እና መመሪያ መረዳትዎን	1	2	3	4	5	6	7

	የጤና ባለሙያዎች በተለያዩ መንገድ ያረጋግጣሉ	እጅግ በጣም አልስማማም	በጣም አልስማማም	በመጠኑ አልስማማም	ምንም አስተያየት የለኝም	በመጠኑ እስማማለው	በጣም እስማ ማለው	እጅግ በጣም እስማማለው
518	ከተለያዩ ነርሶች ፣ ዶክተሮች እና ሌላ የጤና ባለሙያዎች ሲሰጥዎት የነበረው ትምህርት ይዘቱ ተመሳሳይ ነበር	1 እጅግ በጣም አልስማማም	2 በጣም አልስማማም	3 በመጠኑ አልስማማም	4 ምንም አስተያየት የለኝም	5 በመጠኑ እስማማለው	6 በጣም እስማ ማለው	7 እጅግ በጣም እስማማለው
519	ስለልጅዎት የቤት ውስጥ እንክብካቤ እና አያያዝን ሚመለከተው ትምህርት የሚሰጥበት ጊዜ ለእርስዎ ጥሩ እና አመቺ በሆነ ሰዓት ነበር	1 እጅግ በጣም አልስማማም	2 በጣም አልስማማም	3 በመጠኑ አልስማማም	4 ምንም አስተያየት የለኝም	5 በመጠኑ እስማማለው	6 በጣም እስማ ማለው	7 እጅግ በጣም እስማማለው
520	የጤና ባለሙያዎች ትምህርቱን ለእርስዎ ይሰጥዎት የነበረው የእርሶ የቤተሰብ አባሎች ትምህርቱን መከታተል በሚችሉበት አመቺ ሰዓት ነበር	1 እጅግ በጣም አልስማማም	2 በጣም አልስማማም	3 በመጠኑ አልስማማም	4 ምንም አስተያየት የለኝም	5 በመጠኑ እስማማለው	6 በጣም እስማ ማለው	7 እጅግ በጣም እስማማለው
521	እርስዎ ልጄን የመንከባከብ ችሎታ አለኝ ብለው በራስዎት እንዲተማመኑ የጤና ባለሙያዎች ይረዱዎት ነበር	1 እጅግ በጣም አልስማማም	2 በጣም አልስማማም	3 በመጠኑ አልስማማም	4 ምንም አስተያየት የለኝም	5 በመጠኑ እስማማለው	6 በጣም እስማ ማለው	7 እጅግ በጣም እስማማለው

522	ስለልጅዎት የቤት ውስጥ እንክብካቤ እና አያያዝ በተመለከተ የጤና ባለሙያዎቹ የሰጡት ትምህርት የእርስዎን ወደ ቤት የመሄድ ስጋትዎን ቀንስዎሎታል	1 እጅግ በጣም አልስማማም	2 በጣም አልስማማም	3 በመጠኑ አልስማማም	4 ምንም አስተያየት የለኝም	5 በመጠኑ እስማማለሁ	6 በጣም እስማ ማለሁ	7 እጅግ በጣም እስማማለሁ
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ክፍል ስድስት፡ ከሆስፒታል መውጫ (መሸጂያ)ዝግጅት ጋር ተያይዞ ያለ ጥያቄዎች								
ተ.ቁ	ጥያቄዎች	መልስ						
601	ወደ ቤት ለመሄድ አካልዎት ያለውን ጤንነት ወይም ዝግጁነት እንዴት ይገልፁታል?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
602	ዛሬ ምን ያህል ከህመም ነፃ ወይም ጤናማ ነዎት?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
603	ዛሬ ያለዎትን የሰውነት ጥንካሬ (ብርታት፣ አቅም ወይም ጉልበት) እርስዎ እንዴት ይገልፁታል?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
604	መንፈስዎ ወይም ውስጣዊ ስሜትዎ ወደ ቤት ለመሄድ ያለውን ዝግጁነት እንዴት ይገልፁታል (ለምሳሌ፡ በራስመተማመን፣መረጋጋት፣ ዘና ማለት እና የመሳሰሉት)?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
605	ልጅዎት አሉታዊ የሆኑ ባህሪዎችን ወይም ውስጣዊ ስሜቶችን ለምሳሌ፡ መከፋት፣ ማዘን፣ መቁነጥነጥ፣ መነጮነጮ ወዘተ ቤት ውስጥ ቢያሳይ ይህንን	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ

	ለመቆጣጠር እና ለማስተካከል ያሎትን ችሎታ እንዴት ይገልፁታል?							
606	እርስዎ ዛሬ እራስዎትን ለመንከባከብ ያለዎትን የአካል ችሎታ /አቅም እንዴት ይገልፁታል? (ምሳሌ ለመራመድ፤ ለመታጠብ፤ ሽንት ቤት ለመሄድ)	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
607	እቤት ከሄዱ በኋላ መንፈስዎን ወይም ውስጣዊ ስሜትዎን የሚያረጋጋ ድጋፍ ምን ያህል ያገኛሉ? (ለምሳሌ፡ ማበረታታት ፣ ማፅናናት ፣ ከልብ መውደድ፣ማቀፍ ወዘተ...)	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
608	እቤት ከሄዱ በኋላ ከልጅዎት የግል እንክብካቤ አሰጣጥ ጋር ተያይዞ እርዳታ ቢያስፈልግዎት ምን ያህል ድጋፍ ያገኛሉ?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
609	እቤት ከሄዱ በኋላ ከቤት ውስጥ ስራ ለምሳሌ፡ ምግብ ማብሰል፣ ቤት ማፅዳት እና ከሕፃን እንክብካቤ አሰጣጥ ጋር ተያይዞ እርዳታ ቢያስፈልግዎት ምን ያህል እርዳታ ያገኛሉ?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ
610	እቤት ከሄዱ በኋላ ከልጅዎት የቤት ውስጥ ህክምና አሰጣጥ ጋር ተያይዞ እርዳታ ቢያስፈልግዎት ምን ያህል ድጋፍ ማግኘት ይችላሉ?	1 ምንም	2 በጣም ዝቅተኛ	3 ዝቅተኛ	4 መካከለኛ	5 ከፍተኛ	6 በጣም ከፍተኛ	7 እጅግ በጣም ከፍተኛ

611	እርስዎ እቤት ከሄዱ በኋላ ለልጅዎት ማድረግ ስላለብዎት እንክብካቤዎች እና አያያዝ ምን ያህል ያውቃሉ (ለምሳሌ፡ ገላ ማጠብ፣ልብስ ማልበስ፣ሽንት ጨርቅ/ ዳይፐር ማድረግ/መቀየር፣ ጡት ማጥባት ወዘተ)?	1 ምንም	2 በጣም ትንሽ	3 ትንሽ	4 መካከለኛ	5 ብዙ	6 በጣም ብዙ	7 ሁሉንም
612	ለልጅዎት እድገት ምን ምን እንደሚያስፈልገው ምን ያህል ያውቃሉ?	1 ምንም	2 በጣም ትንሽ	3 ትንሽ	4 መካከለኛ	5 ብዙ	6 በጣም ብዙ	7 ሁሉንም
613	የልጅዎትን የመድሃኒት ፍላጎት እቤት ከሄዱ በኋላ ለማሟላት የሚያስችል ዕውቀት ምን ያህል አለዎት (ለምሳሌ፡ መድሃኒት እና ሽይታሚን በትክክለኛ መጠን እና ሰዓት መስጠት)?	1 ምንም	2 በጣም ትንሽ	3 ትንሽ	4 መካከለኛ	5 ብዙ	6 በጣም ብዙ	7 ሁሉንም
614	እቤት ከሄዱ በኋላ መከታተል ወይም ማየት ስላለብዎት የህፃናት ህመም አደገኛ ምልክቶች ምን ያህል ያውቃሉ? (ምሳሌ፡የሚዘገይ አተነፋፈስ፣ፈጣን አተነፋፈስ፣ ትኩሳት፣ ማንዘፍዘፍ፣ የማያቋርጥ ትውከት፣ ጡት አለመጥባት፣ እትብትመቅለት እና የከንፈር መጥቆር ወዘተ...)	1 ምንም	2 በጣም ትንሽ	3 ትንሽ	4 መካከለኛ	5 ብዙ	6 በጣም ብዙ	7 ሁሉንም
615	እቤት ከሄዱ በኋላ ልጅዎት ምን ማድረግ እንደሚፈቀድለት እና እንደማይፈቀድለት ምን ያህል ያውቃሉ?	1 ምንም	2 በጣም ትንሽ	3 ትንሽ	4 መካከለኛ	5 ብዙ	6 በጣም ብዙ	7 ሁሉንም

616	እርስዎ እቤት ከሄዱ በኋላ ስለ ቀጣዩ የልጅዎት የህክምና ቀጠሮ (ዕቅድ) ምን ያህል ያውቃሉ?	1 ምንም	2 በጣም ትንሽ	3 ትንሽ	4 መካከለኛ	5 ብዙ	6 በጣም ብዙ	7 ሁሉንም
617	እቤት ከሄዱ በኋላ በአካባቢያችሁ ለእርስዎ እና ለልጅዎ የጤና አገልግሎት እና መረጃ የሚሰጥ ተቋም ስለመኖሩ ምን ያህል ያውቃሉ?	1 ምንም	2 በጣም ትንሽ	3 ትንሽ	4 መካከለኛ	5 ብዙ	6 በጣም ብዙ	7 ሁሉንም
618	የልጅዎትን የግል እንክብካቤ ቤት ከሄዱ በኋላ ምን ያህል በአግባቡ ሊያከናውኑ ይችላሉ?	1 ምንም	2 በጣም በትንሹ	3 በትንሹ	4 መካከለኛ	5 በጥሩ	6 በጣም ጥሩ	7 እጅግ በጣም ጥሩ
619	የልጅዎትን ህክምና በቤትዎ ውስጥ ምን ያህል በአግባቡ ማስቀጠል ወይም ማከናወን ይችላሉ?	1 ምንም	2 በጣም በትንሹ	3 በትንሹ	4 መካከለኛ	5 በጥሩ	6 በጣም ጥሩ	7 እጅግ በጣም ጥሩ
620	በቤትዎ ለህይወት/ ለመኖር ዋና ዋና አስፈላጊ የሆኑ ነገሮችን ምን ያህል በአግባቡ ሟሟላት ይችላሉ?	1 ምንም	2 በጣም በትንሹ	3 በትንሹ	4 መካከለኛ	5 በጥሩ	6 በጣም ጥሩ	7 እጅግ በጣም ጥሩ

ክፍል ሰባት፡ ከመንፈስ ጭንቀት ወይም ድባቱ ጋር የተያያዙ ጥያቄዎች

ባለፉት ሁለት ሳምንታት ውስጥ በሚከተሉት ችግሮች ምክኒያት ለምን ያህል ጊዜ ተጨንቀው ወይም ተቸግረው ነበር?

701	ባለፉት ሁለት ሳምንታት ውስጥ ነገሮችን ለመስራት ወይም ለማከናወን ትንሽ ፍላጎት ወይም ደስታ ነበር ያለዎት?	0 በጭራሽ	1 ብዙ ቀናት	2 ከግማሽ ቀናት በላይ	3 በየቀኑ ማለት ይቻላል
702	ባለፉት ሁለት ሳምንታት ውስጥ የመንፈስ ጭንቀት ወይም የተስፋ መቁረጥ ስሜት ተሰምቶት ነበር?	0 በጭራሽ	1 ብዙ ቀናት	2 ከግማሽ ቀናት በላይ	3 በየቀኑ ማለት ይቻላል
703	ባለፉት ሁለት ሳምንታት ውስጥ የስቃይ ስሜት መሰማት ፣ተኝቶ መቆየት ወይም ብዙ መተኛት ያዘወትሩ ነበር?	0 በጭራሽ	1 ብዙ ቀናት	2 ከግማሽ ቀናት በላይ	3 በየቀኑ ማለት ይቻላል
704	ባለፉት ሁለት ሳምንታት ውስጥ የድካም ስሜት ወይም ትንሽ ጉልበት (ማነስ) ነበረዎት?	0 በጭራሽ	1 ብዙ ቀናት	2 ከግማሽ ቀናት በላይ	3 በየቀኑ ማለት ይቻላል
705	ባለፉት ሁለት ሳምንታት ውስጥ ዝቅተኛ የምግብ ፍላጎት ወይም ከመጠን በላይ የመብላት ፍላጎት ነበረዎት?	0 በጭራሽ	1 ብዙ ቀናት	2 ከግማሽ ቀናት በላይ	3 በየቀኑ ማለት ይቻላል
706	ባለፉት ሁለት ሳምንታት ውስጥ ስለ ራስዎ መጥፎ ስሜት ወይም ሽንፈት (ውድቀት)ይሰማዎት ነበር?	0 በጭራሽ	1 ብዙ ቀናት	2 ከግማሽ ቀናት በላይ	3 በየቀኑ ማለት ይቻላል
707	ባለፉት ሁለት ሳምንታት ውስጥ ነገሮች ላይ ትኩረት የማድረግ ችግር አጋጥሞዎት ነበር ለምሳሌ ጋዜጣ ማንበብ ወይም ቴሌቪዥን መመልከት የመሳሰሉት ላይ?	0 በጭራሽ	1 ብዙ ቀናት	2 ከግማሽ ቀናት በላይ	3 በየቀኑ ማለት ይቻላል

708	ባለፉት ሁለት ሳምንታት ውስጥ ሌሎች ሰዎች ሊያስተውሉት በሚችሉት መልኩ ከወትሮው በተለየ በጣም በቀስታ መንቀሳቀስ፣ መናገር ወይም በተቃራኒው በጣም የመቁነጥነጥ ወይም እረፍትየለሽ ሆነው ከወትሮው በበለጠ ብዙ እንቅስቃሴ የመድረግ ነገር ነበረዎት?	0 በጭራሽ	1 ብዙ ቀናት	2 ከግማሽ ቀናት በላይ	3 በየቀኑ ማለት ይቻላል
709	ባለፉት ሁለት ሳምንታት ውስጥ ብዎት ይሻለኛል የሚል ሀሳብ ነበረዎት ወይም በሆነ መንገድ እራስዎትን የመጉዳት ፍላጎት ነበረዎት?	0 በጭራሽ	1 ብዙ ቀናት	2 ከግማሽ ቀናት በላይ	3 በየቀኑ ማለት ይቻላል

ምዕራፍ ሁለት፡ ይህ የመጠይቅ ክፍል በአሁኑ ሰዓት በሆስፒታሉ የጨቅላ ህፃናት ፅኑ ህሙማን ህክምና እና መደበኛ ጨቅላ ህፃናት ህክምና ክፍል ውስጥ የሚሰሩ የጤና ባለሙያዎችን የሚያሳትፍ ነው።

ክፍል 1፡ከጤና ባለሙያዎች ጋር የተያያዘ ጥያቄዎች

ተ. ቁ	ጥያቄዎች	መልስ	እለፍ
101	የጤና ባለሙያው ፆታ	1.ወንድ 2.ሴት	
102	የእርስዎ ትምህርት ዝግጅት (ደረጃዎት) ምንድን ነው?	1. ዲፕሎማ 2. ዲግሪ 3. ማስተር 4. ሌላ ካለ ይጠቀስ ____	
103	እርስዎ የተመረቁበት የሙያ ዘርፍ ምንድን ነው?	1. ጨቅላ ህፃናት ልዩ ሀኪም 2. ህፃናት ልዩ ሀኪም 3. ጠቅላላ ሀኪም 4. ጨቅላ ህፃናት ነርስ 5. ክሊኒካል ነርስ 6. ጤና መኮንን 7.አዋላጅ ነርስ 8. ሌላ ካለ ይጠቀስ ____	
104	የመጀመሪያ የአፍ መፍቻ ቋንቋዎት ምንድን ነው?	1.አሮምኛ 2.አማርኛ 3.ትግርኛ 4.ጉራግኛ 5. ወላይትኛ 6.ሌላ ካለ ይጠቀስ ____	

105	እርስዎ ሌላ መናገር የሚችሉት ቋንቋ ምንድን ነው?	1.አሮምኛ 2.አማርኛ 3.ትግርኛ 4.ጉራግኛ 5. ወላይትኛ 6.ሌላ ካለ ይጠቀስ ____	
106	የእርግዥና ግዜው ሳይጠናቀቅ ቀድሞ የተወለደ ጨቅላ ህፃን ላላቸው እናቶች ምክር ወይም ትምህርት አሠጣጥ ጋር የሚያያዝ የተለየ ስልጠና ወስደዋል?	1.አዎ 2.አይደለም	
107	የእርግዥና ግዜው ሳይጠናቀቅ ቀድሞ የተወለደ ህፃን ያላቸው ወላጆች ከሆሰፒታል ለመውጣት ዝግጅት እንዲያደርጉ መርዳትን የሚመለከት የተለየ ስልጠና ወስደዋል?	1.አዎ 2.አይደለም	

ምዕራፍ ሶስት፡ ይህ የመጠይቅ ክፍል በአሁኑ ሰዓት የሆስፒታሉን የጨቅላ ህፃናት ፅኑ ህሙማን ህክምና ክፍልን በማስተባበር ላይ የሚገኙ ሃላፊዎችን የሚያሳትፍ ሲሆን ከጤና ተቋማት ጋር ተያያዥነት ያላቸውን ጥያቄዎች ይዳስሳል።

ክፍል1: ከጤና ተቋማት ጋር የተያያዙ ጥያቄዎች

ተ. ቁ	ጥያቄዎች	መልስ	እላፍ
101	በመደበኛ ጨቅላ ህፃናት ህክምና መስጫ ክፍል ውስጥ አንድ ነርስ ለሰንት ያለጊዜው ለተወለደ ጨቅላ ህፃን ነው እንክብካቤ/ አገልግሎት የሚሰጠው ?	በቁጥር _____	
102	በጨቅላ ህፃናት ፅኑ ህሙማን ህክምና ክፍል ውስጥ አንድ ነርስ ለሰንት ያለጊዜው ለተወለደ ጨቅላ ህፃን ነው እንክብካቤ/ አገልግሎት የሚሰጠው?	በቁጥር _____	
103	በተቋሙ ውስጥ የታካሚዎች ከሆስፒታል መሸኛ መመሪያ አለ?	1.አዎ 2.አይደለም	
104	መመሪያው ካለ ያለጊዜያቸው ስለተወለዱ ጨቅላ ህፃናት ከሆስፒታል ወደ ቤት አሸኛኝትን በተለየ መልኩ (ለብቻው) ያብራራል?	1.አዎ 2.አይደለም	
105	እናቶች ሆስፒታል በሚቆዩበት ወቅት ያለግዜያቸው ለተወለዱ ጨቅላ ልጆቻቸው በቤት ውስጥ ማድረግ ስላለባቸው እንክብካቤ እና ድጋፍን የሚመለከት ትምህርት እና ምክር በሆስፒታሉ ይሰጣል?	1.አዎ 2.አይደለም	

Annex VII: Participant Information Sheet Afan Oromo

Raga Hirmaattoota Qorannootiif Kennamu

Akkam bultaan/oltaan maqaan koo jedhamaa. Ani kanaan lenji'e, raga qo'annof ta'uu funaanuudha. Guyya har'aa kana kanaan asitti argameef dhabbata fayya univarsitii Addis Ababaatti digrii lammaffaa muummee fayyaa Hormaataa tan barttuu, aadde Muniiraa ibraahim, Qorannoo taasistuuf raga qorannoo funanuufi.

Mataa dureen qoranno: - haadhollin daa'iman yeroon isaanii osoo hin ga'in dhalataniif kunuunsaa barbachisa ta'ee daa'imman dhalataniif gochuuf qophii isaan qabanii fi hubanoo ogeessi hospitaalii mootumaa kennu naanno oromiyaa keessatti maal akka fakkatu qorachuufi.

Seensaa: - yeroo da'umsaa osoo hin gahin da'uun hangaa har'ati addunya kana irratti keessuma biyyota Africaa sabsahara gaditti argaman Itiyopiyaa dabalatee du'ati olaanaa fi hir'inaa qaama rakko fayya gudda ta'era. yeroon osoo hin ga'iin da'imman dhalatan hospitala cisanii walansii yeroo godhaamuf haadholiin hirmana akka godhan gochuun du'ati fi dhukubi hir'sun fayida gudda qaba garuu yeroo baay'ee haadholiin hedduun da'iman akkasi gara mana yaala osoo hin fidiin manuma keessatti kunusa barbaachisa kan ogumman hin degaramne gochuuf dirqamuu.

Kayyoon qorannoo: - **kayyoon** qorannoo kanaa inni guddan haadholin yeroon isaan osoo hin ga'iin da'an da'iman isaan fudhatanii gara mana erga deemani booda da'immicha kunuunsuf kaka'umsaa isaan qaban adda basuu fi qophii isaani kara hospitaalattin hubanno fi barnoonni isaaniiif kennamu adda basuuf naannoo oromiyaa fi magaalaa finfinneti kan argaman hospitala motumma kessatti kan hojjetamu ta'a. Bu'aan qorannoo kana himaata hara basuuf /tolchuf ogesoonni yaada hara dhimma da'imman yeroo male dhalatan fayyuma isaanii mirkaanesuufi rakko yeroo hunduma hir'suuf gargara. Qoranno kun waraqaa ebba digirii lamaffa qotamuu dha.

Hirmaattoota qorannoo: - **ragan** qoranno kana ogeessa baratten bakka nama raga kennu biraa demmun gaafii afaani sa'a 1 hanga 2 fudhachuun haadholii da'imman yeroon isaanii osoo hin gahin da'an hirmachisuun heyyamamoo yoo ta'an gaafiin afaani itti fufa.

Icciti fi akkata iccitiin egamuu: - ragaan hirmattotni kenan fayida guddaa waan qabuuf iccitiin isaa ni eegama. Ragaan hirmaata kammiyyuu qaama biraaf dabarfamee hin kennamu akkasumas

maqaan nama dhunfa hin barreffamuu. bu'aan qorannicha akka waliigalati male raga dhunfa kammiyyu agarsiisuu hin danda'u.

Bu'aan qoranno:- qorannon kun da'imman yeroon isaanii osoo hin ga'in dhalatanii fi haadholiifi faayida qaba .haadhoolin waa'ee kunuunsa fi akkata qabinsa da'immicha beekumsi eshiin qabdu , ofitti hamanuu fi dandeti yoo dabalatee da'immichaaf immo fayyuma fi guddinna gaarii akka qabatuf gargara akkasumas qoodatan qoranno kana bu'aa isaati fayyadame himamata hara dhima da'imman yeroo malee dhalatan ilaalatu mana kessati yoo dhalatan rakko fayyuma isaan hir'suufi guddina garii akka isaanif tahuu yaada jalqaba ta'uu danda'a.

Shakki qorannicha: - hirmaatan gaafii afaan godhamuuuf sa'aat 1 hanga 2 fudhachuu danda'a kanarra kan hafe hirmaata irrati rakko /midhaa qaama, xinsammu, hawasumma fi economii kamiyyu geesisu hin danda'u.

Kenna /Abaalii: - qoranno kun jajjabessutu akkasumas kenna adda adda Hin jiru.

Karaa ragaan sassabamu: - qorattootni qoranno kana raga akka isaaniif mijatuuti sassabuuf mirga qabu. Isaan kana keessa ogessa fayya deebii gaha kenu fi akkuma seera fayya addunyatti barressu fi maxxansuu.

Mirga: - qoranno kana irrati haadholiin fedhii isaani irrati hunda'ee hirmaachuu qabu yoo barbadaan gaafii isaanitti hin tolee biraa darbuu danda'u akkasumas guutuuma guututi hirmachuu dhisuu danda'u.

Ragaa gaafachu: - hirmaatootni qoranno kana gaafii kammiyyu qorannoo kana kan ilaalatu hunda yoo isiin qunamee yeroo kamiyyuu gaafachuuf mirga qabu.

Teesoo barattuu: - Muniiraa Ibraahim

Lakkoofsa bilbilaa: - +251913353410

Email :- muniraebrahim6@gmail.com

Annex VIII: Consent Form Afan Oromo

Qorannoo kanaf fedhii hirmaattoota gaaffachuu

Fedhii hirmaattoota gaaffachuu

Akkam jirtu maqaa koo jedhama. Yeroo amma kana yuniversity Addis ababa sayiinsii fayya hawaasaati qorannoo ebbaa digirri lammata hojjetan wajjin ta'uudhan ragaa funana jira. Kayyoon qoranno kana da'imman osoo yeroo isaani hin gahin dhalatan hadhollin yeroo hospitaala keessa bahan dai'mman isaanif kununsa godhani fi kaku'umsa isaan qaban adda basuf qoranno gargaru waan ta'eef isiinis raga funanamu irrati heyyemamoo tatani gargarsa akka gotan isiin gaafana. Gaafiiwwan qoranno kana kessa jira sirna hawasa, haala dhabbata fayya akkasumas wantoota qoranno hawasa barbachisan of kessa qaba mirgi hirmataa kamiyyuu kan egamedha akkasumas yeroo barbaddan gaafii dhabsisuun ni danda'ama.

Qoranno kana hirmachuuf eeyyamamodha? A. eyyen B. eeyyamamoo miti

Annex IX: Afan Oromo questionnaire

Gaaffilee afaan oromoo

Codi gaaffi

Maqaa dhabbata fayya

Maqaa raga funanamaallatto

Maqaa to'ataa ragamallatto

Gaffiiwwan kun kan qopha'aan hadholii daa'immaan yeroon isanii hin ga'iin dhalatan lafa turtii yookaan oksijinii keessa turaan kan ilaalatudha. Kayyoon isas mana yaalaa keessa yaalii xumurani ba'uu isaani raagaa funanuuf kan qopha'eedha.

Seekshinii Tokkoffaa

Kutaa 1: Gaafii walii gala sirna ummataa fi hawasaa

TL	Gaaffilee	Deebii	Darbii
101	Yeroo amma kana umriin kessan meeqa?	Umrii gutuu waggaan _____	
102	Gudinni keessa jiraattan eessa?	Godina_____	
103	Anaan keessa jiraattan eessa?	Aanaa_____	
104	Bakki jireenya kessani dhabataadhaan magaalaa dha moo baadiyyaadhaa?	1. Magaala 2. Baadiyaa	

TL	Gaaffilee	Deebii	Darbii
105	Haali gaa'ila yeroo amma kana?	1.Heerume/Hiriyyaa waliin jiraadha 2. Hin heerumne 3.Hiikame 4. Gar gar baane 5.Abbaan warraa ni du'e 6. kan biro, ibs_____	
106	Amantaan kessan maali?	1. Ortoodoksii 2.Muslima 3.Pirootestaantii 4. katoolikii 5.kan biro, ibsi_____	
107	Sabni keessan maali?	1. Oromoo 2. Amaara 3. Tigree 4. Gurage 5.Wolaayitaa 5. kan biro, ibsi_____	
108	Baruumsa baratanituu?	1. Eyyen 2. Hin barane →	Hin baranne yoo ta'e gara gaaffi 111 darbii

TL	Gaaffilee	Deebii	Darbii
109	Kutaa olaanaan isin barattan?	1. Sadarkaa tokkoffa 2. Sadarkaa lammaffa 3. Teknika 4. kollejii/yuniversity	
110	Gahee hojii kessan maali?	1. Qacaramaa mana hojii motumma 2. Qacaramaa hojii dhunfa 3. Qacaramaa miti motumma 4. Qacaramaa dhunfaa 5. Hojjataa mana kessaa 6. Haadha warra 7. Barataa 8. Qotee bulaa 9. Hojjataa guyyaa 10. Daldalaa 11. Hojii dhabaa 12. kan biro, ibsi_____	
111	Galiin keessan kan ji'aa jiddu galeessaan meeqa ta'a?	Birrii itiyoophiyaatti _____	

Kutaa 2: Gaaffiilee waa'ee walhormaataa fi fayyaa qaamaa fi sammun wal qabatan

TL	Gaaffilee	Deebii	Darbii
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TL	Gaaffilee	Deebii	Darbii
201	Hanga yoonaa (kan du'ae, gara bahee dabalate) yeroo meeqaaf ulfooftan?	Lakkoofsaan _____	
202	Kan lubbun jiran ijoollee meeqa deessan?	Lakkoofsaan_____	
203	Yeroo daa'ima kana ulfa turtanitti hordoffii ulfaa godhattanii turtanii?	1. Eeyye 2. Lakkii	
204	Yeroo jalqaba hordoffii ulfa xumuraa kana eegaltu ulfi kee ji'a meeqa ture?	Ji'aan-----	
205	Yeroo daa'ima kana ulfa turtetti yeroo meeqaaf hordoffii ulfaa kana hordaftan?	Lakkoofsaan-----	
206	Daa'ima boodaa kana eessatti deesse?	1.Buufata fayyaatti 2. Buufta fayyan alatti	
207	Da'ima amma deessan akkamiin deessan?	1. Haaluma baratameen rakkoo malee dahe 2.Walansaa baqaqsani hodhuun	
208	Ogeessa fayyaatin kan mirkanaa'e dhukuba sammu dhukkubsattanii beektu?	1. Eyyen 2. Lakki	
209	Ogeessa fayyaatiin kan mirkanaa'e dhukubni dhiibbaa dhiigaa isin qabee beekaa?	1. Eyye 2. Lakki	
210	Ogeessa fayyaatiin kan mirkanaa'ee dhukubni sukkaraa isin qabee beekaa?	1. Eyye 2. Lakki	
211	Ogeessa fayyaatiin kan mirkana'ee dhukkuba onnee dhukkubsatte beektaa?	1. Eyye 2. Lakki	

Kutaa 3: Gaaffilee deeggarsa Maatiin wal-qabatan

T. L	Gaaffilee	Deebii	Darbi
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301	Daa'ima boodaa kana eessatti deesse?	1. Buufata fayyaatti 2. Buufata fayyan alatti →	Gara 303
302	Yeroo deessu sanatti, miseensa maatii keessanii irraa kutaa da'umsaa akka sibira turan hayyamameefii turee?	1. Eeyye 2. Lakkii 3. Operesiyoniin waniin daheef hin dandayamne	
303	Miseesa maatii keetii irraa yeroo ati hospitaala turtetti namni isin bira YKN dhiheenya keessan ture jira turee?	1. Eeyyee 2. Lakkii →	Yoo "lakki" ta'e gara 401
304	Hangam takkaaf isnii waliin turan?	Guyyaan-----	
305	Turtii hospitaala kana keessatti yeroo gargaarsa barbaaddanitti maatiin keessan isin gargaaruuf fedhii qabu turanii?	1. Eeyyee 2. Lakkii →	Yoo "lakki" ta'e gara 401
306	Turtii hospitaala keessan kana keessatti, maatii keessan yeroo gargaarsa barbaaddan harkaan (FKN, yeroo ofii dhiqattan/daa'ima dhiqqan, yeroo uffattan/daa'ima uwwifan, yeroo mana fincaanii fayyadamtan) isin gargaaranii turanii?	1. Eeyyee 2. Lakkii	
307	Turtii hospitaala kana keessatti, maatiin keessan yeroo gargaarsa barbaaddan hamileen isin jajjabeessuun (FKN, naasuu isiniif qabaachuun, isin jajjabeessuun, hamilee teysan isiniif ijaaruun, jaalalaan) isin gargaaranii turanii?	1. Eeyyee 2. Lakkii	

Kutaa 4: Gaaffilee turtii mana yaalaa fi Afaan ittiin tajaajila gorsaa itti kennaman ilaalu

T. L	Gaaffilee	Deebii	darbii
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T. L	Gaaffilee	Deebii	darbii
401	Afaan dhalootaa keessanii kami?	1. Afaan Oromoo 2. Afaan Amaaraa 3. Afaan Tigree 4. Afaan Guraagee 5. Afaan Wolaita 6. Kan biroo, ibsi-----	
402	Gorsi fayyaa isiniif kenneme dhunfaa keessanitti isiniif kenname moo namoota hedduu waliin bakka takkatti isiniif kenneme?	1. Dhunfaani 2. Namootaa waliin 3. Dhunfaani fi namootaa waliin	
403	Ogeessa gorsa isiniif kenne maqaan beeytuu?	1. Eeyye 2. Lakkii →	‘lakkii yoo ta’e gara 407
404	Maqaa ogeessa tajaajila gorsaa isiniif kennee?	Maqaa-----	
405	Hubachiisa: Ogummaa ogeessa tajaajila gorsaa kennee as keessaa laalii guuti.	1. Ogeessa daa’ima ji’aa gadii 2. Ogeessa daa’immani 3. Haakima digrii duraa 4. Narsii daa’imaa jiaa gadii 5. Nursi kilinikaalaa/walii galaa 6. Qondaala fayyaa 7. Midwaayfarii 8. kan biro, ibsi-----	
406	Saala ogeessa fayyaa tajaajila gorsaa kennee kami?	1. Dhiira 2. Dhalaa 3. Dhiiraa fi dhalaa-waliin	
407	Afaan kamiin ogeeyyiiin fayyaa tajaajila gorsaa isiniif kennan?	1. Afaan Oromoo 2. Afaan Amaaraa	

T. L	Gaaffilee	Deebii	darbii
		3. Afaan Tigree 4. Afaan Guraagee 5.Afaan Wolaayitaa 6.Afaan tokkoo oliin 7. Kan biroo, ibsi-----	
408	Hospitaalaa kessa yeroo hagamiif turtan?	Guyyaan_____	

Kutaa5: Gaaffiilee Qulqullina Barumsa yeroo mana yaalaatii bahaniin wal-qabattu

T. L	Gaaffiilee	Deebii						
		1 Homa	2 Baayyee Gad- aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
501	Daa'imaaf manatti tajaajila barbaachisu kennuuf, ogeessa fayyaa irraa odeffannoo hammam argattan?	1	2	3	4	5	6	7
502	Ogeessa fayyaa irraa odeffannoowwan hammilee/miira keessan jajjabeessan (sodaa fi cinqii fayya-dhaba daa'ima keessanii irraa tan isin jajjabeesitu) hammam argattan?	1	2	3	4	5	6	7
503	Ogeessa fayyaa irraa haala daa'ima osoo yeroon hin gahin deessan kana ittiin hoosisuu qabdan irratti odeffannoowwan hangam argattan?	1	2	3	4	5	6	7
504	Ogeessa fayyaa irraa haala ho'ina naanoo keessanii too'achuun hoo'a qaama daa'imaa eeguu irratti odeeffannoowwan hangam	1	2	3	4	5	6	7

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayyee Gad- aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
	argattan? (gad-fageenyaan gaggaafadhu: manni akka hoo'aa tahu gochu, uffata daa'immaa haala qilleensaan walsimu uffisuuf, qama haadhaa fi daa'immanii akka waltuqu gochuu)							
505	Ogeessa fayyaa irraa akkaataa daa'imni keessan qixa sirrii taheen rafuu danda'u irratti odeeffannoowwan hangam argattan? (gad-fageenyaan gaafadhu: kutaa jeequmsa hin qabne keessatti ibsaa irraa xiqqeessun raffisuu,boraatii/makaddaa fayyadamuu dhabuu, dugdaan daa'imni akka rafu gochuu)	1	2	3	4	5	6	7
506	Ogeessa fayyaa irraa mala daariqa (infekshiniin) daa'ima ittiin ittisuun danda'amu irratti odeeffannoowwan hangam argattan? (Gad-fageenyaan gaafadhu: harka	1	2	3	4	5	6	7

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayyee Gad- aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
	dhiqachuu, afata daa'ima ammaa ammatti jijjiiruu, waan qoricha ittin kennaniif dhiquu, fooddaa mana yeroo mara cufuu, nannoo ofii qulqulluu taasisuu).							
507	Ogeessa fayyaa irraa dhibee tasa daa'ima reefu dhalatan manatti mudatuu danda'an irratti odeeffannoowwan hangam argattan? (gad-fageenyaan gaafadhu: suuta harganuu, ariitiin harganuu, gubaa qaamaa, qaamni qorruu, hurgufannaa qaamaa, ammaa amma daddeebisuu, harma hodhuu diduu, handuurri diimachuu ykn dhiiga hanqatuun addaachuu)	1	2	3	4	5	6	7
508	Ogeessa fayyaa irraa waa'ee barbaachisummaa fayyaa ykn wallaansa daa'ima keetii kan manatti kennanmuu irratti odeeffannoowwan hangam argattan? (gad-	1	2	3	4	5	6	7

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayyee Gad- aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
	fageenyaan gaafadhu: qoricha YKn vitaamiina yeroo sirriittii fi hanga sirrii ta'e kennuufii)							
509	Daa'imaaf manatti tajaajila wallaansaa, harma hoosisuu, irratti manatti galuu keessaniin dura shaakallii hangam gootan?	1	2	3	4	5	6	7
510	Qama daa'ima fi kan haadhaa waltuqsiisuun hoo'a qaamaa eeguufii irratti manatti galuu keessaniin dura shaakallii hangam gootan?	1	2	3	4	5	6	7
511	Ogeessa fayyaa irraa daa'imni keessan eega hospitaalaa manatti galtanii tajaajila akkam akka kennuufii qabdan irratti maatiin keessan odeeffannoowwan hangam argatan?	1	2	3	4	5	6	7
		Deebii						

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayyee Gad- aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
		1 Baayyee bayisee akasitti hinamanu	2 Baayyisee akasittihin amana	3 Hanga tokko akkasitti hinamanu	4 Humaa hin ja`u	5 Hanga tokko akkasittin amana	6 Baayyisee akkasittiin amana	7 Baayyee baayyisee akkasittiin amana
512	Odeeffannoowwan ogeessa fayyaan isiniif kenneman gaafii fii yaaddoo keessan isiniif deebisaa?	1	2	3	4	5	6	7
513	Ogeessi fayyaa yaada fi ilaalcha koo naaf kabaja?	1	2	3	4	5	6	7
514	Akkataan Nursiin daa'ima keetii kunuunsa daa'imaaa irratti barnoota iti siif kennite jalatteertaa?	1	2	3	4	5	6	7
515	Odeeffannoowwan ogeessi fayyaa kunuunsa daa'ima irratti isiniif kennan haala isiniif galuun isiniif kennamee?	1	2	3	4	5	6	7

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayyee Gad- aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
516	Ogeessi fayyaa yeroo gorsa isiniif kennan akaataan isiniif galuun waan isin gorsa qooqqodanii isin barsiisuu turanii?	1	2	3	4	5	6	7
517	Ogeessi fayyaa akka isin ergaa barattan hubattan ni mirkaneeffata turee?	1	2	3	4	5	6	7
518	Isin gorsa walfakkaattu Nursii, doktoraa fi ogeeyyiilee fayyaa kan daa'ima keessan wallaanan irra argattee turtee?	1	2	3	4	5	6	7
519	Odeeffannoowwan ogeessa fayyaa irraa argattan yeroo isiniif mijjatutti argachuu turtanii?	1	2	3	4	5	6	7
520	Odeeffannoowwan ogeessa fayyaa irraa argattan yeroo maatiin keessan isinii waliin hirmaachuun mijjatuufitti isiniif kannemee ture?	1	2	3	4	5	6	7
521	Ogeessi fayyaa ofiitti amantummaa akka	1	2	3	4	5	6	7

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayyee Gad- aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
	horattanii manatti tajaajila daa'ima keessaniif kennitan isin gargaaree jiraa?							
522	Odeeffanoowwan ogeessa fayyaan isiniif kenneme manatti daa'ima keessaniif tajaajila fayyaa kennamu irratti soda qabdan isiniif furee jiraa?	1	2	3	4	5	6	7

Kutaa6: Gaaffilee qophii hospitaalaa bahuutiin wal-qabatan

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayee gad-aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
601	Gara mana galuuf qaamni /fayyaan kessan hamam qophiidha?	1	2	3	4	5	6	7
602	Guyyaa har'aa haala dhukkubii qaama kessanii akkamitti ibsitu?	1	2	3	4	5	6	7

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayee gad-aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
603	Haalli jabina qaama kessani guyya har'aa maal fakkata?	1	2	3	4	5	6	7
604	Isiin har'aa gara manaa galuuf miirri kessan hamam qophiidha?	1	2	3	4	5	6	7
605	Erga manatti galtanii booda, haala da'imni kessan ittii jiru Kanaan hamilee fi amala daa'ima keessanii too'achuun (FKN daa'ima yeroo booyu ykn aaru sossobuun) tajaajila kennuuf irratti hagam takka dandeettii qabdu?	1	2	3	4	5	6	7
606	Ofiin of kunuunsuf (FKN dhiqannaaf, mana fincaaniitti fayyadamuuf fi daddeemuuf) dandeettiin keessan maal fakkata?	1	2	3	4	5	6	7
607	Eega manatti galtanii hagam takka nama hamilee isin jajjabeessu (nama isin haammatu, jajjabina isiniif kennuu fi isin jaalatu) argachuu dandeessa?	1	2	3	4	5	6	7
608	Eega manatti galtee kunuunsa daa'ima keetii kennuuf hagam takka gargaarsa gargaarsa	1	2	3	4	5	6	7

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayee gad-aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
	argachuu dandeessa?							
609	Eega manatti galtee hojii mana keessaatiin (fkn nyaata bilcheessuu, qulqullina, fi daa'ima si gargaaruu) wal-qabatee hangam takka gargaarsa argachuu dandeessa?	1	2	3	4	5	6	7
610	Eega manatti galtee, yoo daa'imni tajaajila wallaansaa barbaade (fkn Qoricha fudhachuu, wallaansa argachuu), hangam takka gargaarsa argachuu dandeessa?	1	2	3	4	5	6	7
		Deebii						
		1 Hinbe eku	2 Baayyee xiqqa	3 Xiqqa	4 Jidu galeessaa	5 Nan beekaa	6 Baayyeen beekaa	7 Hundaa nanbeeka a
611	Erga manatti galtee, daa'ima keetiif tajaajila kennuu (dhiquu, uffisuu, daayparii itti godhuu, nyaachisuu) hangam takka beektuu?	1	2	3	4	5	6	7

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayee gad-aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
612	Guddina daa'imaaf maal maaltu akka barbaachisu hagam beektu?	1	2	3	4	5	6	7
613	Erga gara manaa deemanii booda fayyaa mucaatiif maal akka barbachisuu hagam beektu (fkn qoricha ykn viitaamiina yeroo sirrii fi hanga sirrii ta'e kennuufi)	1	2	3	4	5	6	7
614	Erga gara mana deemtanii booda fayya mucaa hordofuuf wantoota hordofamuu qaban (fkn ho'ina qaama, hidhiin guracha'uu /ijii keloo ta'u, dafe dafe afuura bafachuu, ho'insii qaama hir'achuu fi dhiguu) hagam beektuu?	1	2	3	4	5	6	7
615	Erga gara manaa galtanii booda daa'imni kessan maal gochuun akka heyyamamuuf fi hin eyyamamneef adda bastanii hangam takka beektuu?	1	2	3	4	5	6	7
616	Erga manaa galtanii karoora wallaansa daa'ima keessatti waan itti aanuun dhufan tan akka hordoffii daa'ima, wallansa yaalaan walqabautturratti	1	2	3	4	5	6	7

T. L	Gaaffilee	Deebii						
		1 Homa	2 Baayee gad-aanaa	3 Gad- aanaa	4 Jiddu galeessa	5 Ol'aanaa	6 Baayyee olaanaa	7 Baayyee baayisee ol'aana
	hubannoo hagam qabdu?							
617	Erga gara manaa galtanii booda isiini fi da'imaan keesssanif gorsaa fi tajaajila fayya naannawa keessanii argachuu dandeessan irratti hubannoo hagam qabdu?	1	2	3	4	5	6	7
		1 Hinbe eku	2 Baayyee dadhabaa	3 Dadha baa	4 Hoomaa hinjeedhu	5 Gaariidha	6 Baayyee gaariidha	7 Baayyee baayyee gaariidha
618	Mana keessatti Kunuunsa dhunfa da'ima kessanii sirritti gutuuf hagam beeytu?	1	2	3	4	5	6	7
619	Hangam takka tajaajila wallaansa daa'ima mantti itti fufisaan kennuufii dandeessa?	1	2	3	4	5	6	7
620	Mana keetitti hangam takka fedhii jireenya keetii guuttachuu dandeessa?	1	2	3	4	5	6	7

Kutaa 7: Gaafiilee miira nuffitii (of-jibbuu) waliin wal-qabatan					
Torbaanan lamaan darban keessatti, kanneen asii gadii keessaa rakkooleen isin qunname ni turee					
701	Waa hojjachuuf fedhii dhabuu	0 Lakkii homaa	1 Guyyaa hedduu	2 Guyyaa walakkaa oliif	3 Xiqqo malee guyyuu
702	Abdii kutachuu ykn of isin jibbisiisuu	0 Lakkii homaa	1 Guyyaa hedduu	2 Guyyaa walakkaa oliif	3 Xiqqo malee guyyuu
703	Hirriiba rafuuf rakkachuu ykn baayyee rafuu	0 Lakkii homaa	1 Guyyaa hedduu	2 Guyyaa walakkaa oliif	3 Xiqqo malee guyyuu
704	Miira dadhabbii isinitti dhagayamuu ykn humna dhabuu	0 Lakkii homaa	1 Guyyaa hedduu	2 Guyyaa walakkaa oliif	3 Xiqqo malee guyyuu
705	Nyaata isin jibbisiisuu ykn baayyee nyaachuu	0 Lakkii homaa	1 Guyyaa hedduu	2 Guyyaa walakkaa oliif	3 Xiqqo malee guyyuu
706	Waa'ee mataa keessanii waan badaa/gaarii hin tahin yaaduu	0 Lakkii homaa	1 Guyyaa hedduu	2 Guyyaa walakkaa oliif	3 Xiqqo malee guyyuu
707	Waan hojjattan tan akka dubbisuu, TV ilaalu irratti xiyyeeffannaa godhuu dadhabuu	0 Lakkii homaa	1 Guyyaa hedduu	2 Guyyaa walakkaa oliif	3 Xiqqo malee guyyuu
708	Hanga namni biroo isinirraa hubachu danda'utti, suuta	0	1	2	3

	deemuu ykn suuta dubbachuu Ykn ammo faallaa isa kanaa tasgabbii dhabuun hedduu haasawuu ykn deeddeemuu	Lakkii homaa	Guyyaa hedduu	Guyyaa walakkaa oliif	Xiqqo malee guyyuu
709	Du,uu hawwuu Ykn of-miidhuuf yaaduu	0 Lakkii homaa	1 Guyyaa hedduu	2 Guyyaa walakkaa oliif	3 Xiqqo malee guyyuu

Seekshinii Lammaffaa

Kutaan gaffilee kun oggesoota fayyaa yaalii da'iimmaan refeu dhalataniif deggersa gochaa jiran kan hirmaachisuudha.

T. L	Gaaffiilee	Deebisaa	Darbi
101	Asxaa ogeessa	1.Dhiira 2.Dhalaa	
102	Sadarkaa barumsa keessanii maali?	1. Diplooma 2. Digrii jalqabaa 3. Degree lamaffaa 4. Ka biro ibsi-----	
103	Ogummaan teessan kami?	1.Ogeessa daaima ji'aa gadii 2. Ogeessa daa'immani 3. Haakima digrii duraa 4.Narsii daa'ima jia'aa gadii 5. Nursi kilinikaalaa/walii galaa 6. Qondaala fayyaa 7.Midwaayfarii 8. Ka biro ibsi.....	
104	Afaan dhalootaa keessan kami?	1. Afaan Oromoao 2. Afaan Amaaraa 3. Afaan Tigree 4. Afaan Guraagee 5. Afaan Wolaayitaa 6. Kan biroo, ibsi-----	
105	Afaan biro kam beektu?	1. Afaan Oromoo 2. Afaan Amaaraa 3. Afaan Tigree 4. Afaan Guraagee 5. Afaan Wolaayitaa 7. Kan biroo, ibsi-----	

106	Waa'ee gorsa haadhoolii daa'ima yeroo malee dhalattuuf kennamuu kan yeroo hospitaalaa bahanii ilaalchisee leenjii fudhatte qabdaa?	1. Eeyyee 2. Lakki	
107	Haadhoolii daa'ima yeroo hin gahin deesse hospitaalaa baatee akka manatti galtu qopheessuu irratti lenjii addatti xiyyeeffate fudhattee turtee?	1. Eeyyee 2. Lakkii	

Kutaan gaffilee Kun hoggantoota yaalii da'iimmaan ref dhalataan deggersaa gochaa jiran kan hirmachisudha.

Seekshinii 3

Kutaa1: Gaafillee dhaabata fayyaa wajjiin wal-qabattu tan duree nursii kutaa daa'immanii gaafachuun guutamtu

T. L	Gaaffiilee	Deebisaa	Darbi
101	Akka walii galaatti, Nursiin takka daa'ima reefu dhalattan meeqaaf tajaajila kennu (lakkoofsaan)?	Lakkoofsaan-----	
102	Kutaa tasa dhibee da'iimmanii itti wallaanamu keessatti ogeessi fayyaa tokko yeroo hojii sa'atii saddeet kessatti da'iimman meeqaaf yaalii kenna?	Lakkoofsaan-----	
103	Hospitaalichi qajeelfama hospitaalaa bahinsa/gaggeeffamuu irratti qophaaye ni qabaa?	1. Eeyyee 2. Lakki	
104	Qajeelfamni yoo jiraate, waa'ee daa'imman yeroo malee dhalatanii irratti addatti waan ibsu qabaa?	1. Eeyyee 2. Lakki	
105	Hospitaalli keessan daa'ima yeroo malee dhalatuuf gargaarsa manatti kennamu ilaalchisee gorsa haadhooliif kennaa jiraa?	1. Eeyyee 2. Lakki	

Annex X: Assurance of Investigator

ASSURANCE OF PRINCIPAL INVESTIGATOR

The undersigned agrees to accept responsibility for the scientific, ethical, and technical conduct of the research project and for provision of required progress reports as per terms and conditions of the research publications office in effect at the time of grant is forwarded as the result of this application.

Name of the student: _____

Date _____ Signature _____

Approval of the Advisor

Name of the advisors: _____

Date _____ Signature _____