

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
SCHOOL OF NURSING AND MIDWIFERY
DEPARTMENT OF PEDIATRICS AND CHILD HEALTH
NURSING AND MIDWIFERY

**PARENTAL SATISFACTION AND BARRIERS WITH THEIR
NEONATES CARE SERVICES IN THE NEONATAL INTENSIVE
CARE UNIT AT SELECTED PUBLIC HOSPITALS IN ADDIS
ABABA, ETHIOPIA 2025.**

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Acronyms and abbreviations

FCC----- Family-Centered Care

HCP..... Health Care Professional

MIICSH-----Menelik II Comprehensive Specialized Hospital

NICU----- Neonatal Intensive Care Unit

NGTF----- Naso Gastric Tube Feeding

SPHMMC--- St. Paul's Hospital Millennium Medical College

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Abstract

Background: Parental satisfaction is a way of responding to the expectation to meet the health needs of their newborn. It is a belief and attitude of parents towards a service given in the neonatal intensive care unit. It is a key indicator of healthcare quality, encompassing patient- and family-centered care, clinical outcomes, and medical malpractice claims. This measure is frequently used and is central to evaluating healthcare quality in the neonatal intensive care unit.

Objective: To explore the parents' satisfaction and barriers with their neonates' care services in the neonatal intensive care unit at selected public hospitals in Addis Ababa, Ethiopia, 2025.

Method: A descriptive phenomenological study was conducted from February 6, 2025, to March 6, 2025, at three selected public hospitals in Addis Ababa. The purposive sampling method was used to select parents who met the inclusion criteria. The sample size was determined by the saturation of data in each hospital. An open-ended interview guide was prepared, and data were collected using the in-depth interview method. The in-depth interviews were audio-recorded, transcribed, translated to English, and then analyzed using the inductive thematic analysis method after being imported to Atlas ti 9 qualitative software. The results were presented through a detailed description of generated themes and sub-themes.

Result: Four major themes and fourteen sub-themes emerged: parental satisfaction, quality of care, emotional and informational aspects, and the NICU and its environment. This study identifies that parents were satisfied with the response provided by health professionals to their questions. This study identifies that parents were dissatisfied with poor professional skills, lack of family-centered care, insufficient respect, absence of information, discharge timing, restriction, unavailability of laboratory services and drugs, shortage of water, and scarcity of restrooms.

Conclusion and recommendation: This study identifies that parents were dissatisfied with the poor professional skills, lack of family-centered care, insufficient respect, absence of information, discharge timing, restriction, unavailability of laboratory services and drugs, shortage of water, and scarcity of restrooms. improve facilities services, including waiting areas, additional beds, restrooms, and arrange the discharge time.

Keywords: Parental Satisfaction, Parent, newborn, Neonate, Neonatal Intensive Care Unit.

Introduction

1.1 Background

Parental satisfaction is a way of responding to the expectation to meet the health needs of their newborn. It is a belief and attitude of parents towards a service given in the neonatal intensive care unit(1). It is a key indicator of healthcare service quality, encompassing patient- and family-centered care, clinical outcomes, and medical malpractice claims. This measure is frequently used and is central to evaluating healthcare service quality. In the neonatal intensive care unit(NICU), parental satisfaction is essential for assessing clinical practice and enhancing the quality of treatment for newborns and their families(2, 3).

Parental experience offers a vital perspective on service quality, contributing directly to overall parent satisfaction. Such experience can serve as valuable metrics for assessing care quality in a hospital setting and can guide improvement in healthcare delivery. Satisfaction in healthcare reflects the consumer's preferences, expectations, and the quality of care they receive; it is an emotional and cognitive response to the environment, the caregiving approach, and the outcome of the service provided (4, 5).

High parent satisfaction levels are closely associated with key factors such as compassion, empathy, reliability, and responsiveness in care delivery. Elevated parental satisfaction correlates with improved outcomes, including enhanced newborn care and decreased mortality rates in neonatal care. Prioritizing these elements can lead to a more effective and supportive environment for parents and their neonates. Low parental satisfaction may result in a discharge against medical advice, higher readmission rates, morbidity, and neonatal mortality(6, 7).

Since neonates cannot communicate their needs, parents' experiences, opinions, and satisfaction are crucial for determining the most suitable healthcare services. Parent Satisfaction with NICU service is influenced by factors like socio-demographic status, Healthcare provider communication, laboratory services, pharmacy services, waiting room services, and restroom facilities (8, 9). Parental satisfaction is instrumental in enhancing neonatal care service quality, significantly impacting healthcare interventions and providing valuable insights for evaluating staff performance, advancing healthcare systems, and developing effective neonatal care strategies for the future. (3, 10).

1.2 Statement of the problem

Globally, over 3.3 million babies die every year within their first month of life, and neonatal mortality has increased in all regions of the world, with a current estimation of 47%(11). The majority of these deaths (>90%) occur in regions with limited economic resources. Sub-Saharan Africa accounts for one-third of all newborn mortality. Neonatal deaths in Ethiopia account for 42% of under-five mortality.

The assessment of parental satisfaction is crucial for evaluating clinical practices and improving the quality of care services provided to both neonates and parents in neonatal intensive care units (NICU) (2).

Parental satisfaction with the services provided in the neonatal intensive care units (NICUs) varies by geographical location. Satisfaction levels have been reported as follows: 76% in Norway, 86% in Turkey, 70% in Germany, 80% in India, 58% in Ethiopia, and 60% at Tikur Anbessa Specialized Hospital. (3, 4, 12-15). In most hospitals, newborns are admitted to the Neonatal Intensive Care Units (NICU) and are primarily cared for by doctors and nurses, with limited involvement from family members. Parents typically see their infant once daily and receive updates about their baby's condition during counseling sessions (16).

Involving parents in caring for their newborns can improve parent satisfaction, strengthen the bond between parents and their babies, enhance developmental support, and promote stable attachment between neonates and their parents. However, in low-income countries, neonatal intensive care unit (NICU) services often suffer from a shortage of well-trained healthcare personnel, inadequate facilities, and limited access to technology. As a result, healthcare providers face significant challenges, decreasing parent satisfaction and lower quality of care for newborns (6).

Parental satisfaction can be influenced by cultural, behavioral, and socio-demographic characteristics: (sex, previous admission, educational status, occupational status, quality of care, length of hospital stay, poor newborn care, lack of effective nursing, medical and family-centered care, lack of prescribed drug, cost, poor communication, restricted time to visit their baby, unclean ward and poor newborn handling) (2, 3, 17).

The hospitalization of newborns brings significant changes to the lives of families. These challenges can stem from feelings of anxiety regarding the care of their child, discomfort, and sadness in an unfamiliar environment, and concerns about the quality of neonatal care. To increase

parent's satisfaction and enhance the health of newborns, there is a need to transition toward a more family-centered care (FCC) approach. This includes allowing parents unrestricted visiting hours, actively involving families in the care process, acknowledging their essential role in delivering medical support, encouraging collaboration between parents and healthcare professionals, and addressing the discrepancies between parents' expectations and the services provided. By embracing these principles, we can create a more supportive and effective environment for both families and their newborns (5, 11, 18-21).

Evaluating parental satisfaction with healthcare service quality is essential for developing a healthcare service plan that aligns with parents' expectations. Ethiopia places a high priority on the quality of healthcare services for women and children (10). The Ethiopian Health Service Alliance for Quality prioritizes self-motivated and transparent collaborations to promote innovation in healthcare quality management and learning across hospitals (22, 23). Even though several studies have been conducted in Ethiopia, to my knowledge I can't find researches that are conducted to assess- parental satisfaction and barriers with their neonatal care services in the neonatal intensive care units, therefore, this study aims to explore Parental Satisfaction and barriers with their Neonates Care service in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia.

1.3 Significance of the study

The significance of this study is to explore parental satisfaction and barriers with their neonates care services in the Neonatal Intensive Care Unit (NICU) at a selected public hospital in Addis Ababa. The findings of this study will provide up-to-date information for healthcare providers regarding areas where parents feel dissatisfied with the care provided to their newborns. It will increase parent-infant bonding, benefiting the infant's emotional and cognitive development. This research will serve as a reference for NICU staff, the head nurse of the NICU, public hospital administration, and the Ministry of Health in enhancing healthcare service quality. The findings of this study can inform the development of evidence-based guidelines and best practices for neonatal care, leading to a more patient-centered and effective healthcare system. The insights gained from this study will demonstrate that addressing parental satisfaction is essential for improving overall healthcare service quality in the NICU, thereby reducing neonatal morbidity and mortality. Additionally, the findings will help alleviate parental stress by identifying factors that negatively impact satisfaction and promoting positive influences.

Literature review

1.4 Introduction

Neonatal intensive care units (NICUs) play a crucial role in providing specialized care to critically ill newborns. Parental satisfaction with the care provided in these units is a key indicator of the quality of care. Understanding the factors that influence parental satisfaction can help healthcare providers identify areas for improvement and enhance the overall quality of neonatal care. This literature review explores parental satisfaction and barriers with their neonates care services in the neonatal intensive care unit at selected public hospitals in Addis Ababa. It includes the global and regional literature relevant to the research topic. The reviewed concept consists of an overview of parental satisfaction with neonatal care service in the NICU, the socio-demographic, and health service-related barriers.

1.5 Overview of parental satisfaction

An American qualitative study conducted among 11 parents to explore parent satisfaction with care given in the NICU revealed that most parents were satisfied with the care provided in the neonatal intensive care unit (5). A Cross-sectional study conducted in Greece to assess parental satisfaction with care given in the NICU among 301 parents shows that most parents are satisfied with NICU service(24).A Correlational study was conducted in Iran among 150 preterm babies of mothers to assess Mothers' Perceptions of Family-Centered Care and Satisfaction with Care in the Neonatal Intensive Care Unit, The findings revealed that mothers reported a significantly higher level of satisfaction regarding the quality of care provided in the NICU(25).

A pooled national-level study to examine parent satisfaction with neonatal care services in the neonatal intensive care units (NICUs) across Ethiopia conducted a systematic review involving 2,255 parents. The findings revealed that almost half of these parents expressed dissatisfied with the care provided in the neonatal intensive care unit. In contrast, a cross-sectional multicenter study involving 396 parents indicated that most of the parents who received the services in a level II NICU expressed high levels of satisfaction. Additionally, another cross-sectional study conducted in southern Ethiopia surveyed 401 parents and found that 63% expressed satisfaction with the care provided to their children in the NICU. (3, 11, 17, 26).

1.6 Barriers to Parental satisfaction with their neonates' care

1.6.1 Socio-demographic factors

A cross-sectional study conducted in the USA among 102 parents revealed racial differences in parental satisfaction with NICU care. White parents expressed dissatisfaction primarily due to inconsistent nursing care and a lack of information about their neonate. In contrast, Black parents reported dissatisfaction with the lack of emotional support from nurses, as well as feelings of disrespect and a lack of compassion in their care (27).

A study conducted in Turkey on parental satisfaction reported that parental satisfaction in NICU care is influenced by socio-demographic factors (age, gender, education level, employment status, and health insurance status of the parents) are reported to affect parent satisfaction. Another non-experimental study conducted in Greece involving 550 parents (297 mothers and 253 fathers) revealed that parent satisfaction is influenced by age, gender, education level, and place of residence. Additionally, a separate study conducted in Greece among 102 parents revealed that the mother's age impacts the level of satisfaction; specifically, as the mother's age decreases, the level of satisfaction increases. (7, 22, 28).

A systematic study was conducted in Ireland to examine the factors influencing parental satisfaction with the care provided to their infants in the Neonatal Intensive Care Unit (NICU). The findings highlighted that non-modifiable factors, such as the gender and age of parents, play a significant role in satisfaction with the baby care experience. This insight indicates that demographic characteristics can impact their perceptions and feelings regarding the care their infants receive(29).

A quantitative cross-sectional study conducted among moderately premature newborns at 10 hospitals in California and Massachusetts identified several major factors influencing parental satisfaction with care provided in neonatal intensive care units. These factors include the parents' history of infertility treatment, the support they receive from their families, and their overall satisfaction with social support (4, 30). Another cross-sectional study conducted in southern Ethiopia found that parents with no formal education have higher satisfaction with the care provided in the neonatal intensive care unit (17).

1.6.2 Health service-related barriers

Quality of care

A Cross-sectional study conducted in the USA among 102 parents reported that most parents are dissatisfied with NICU service due to the following factors: nurses who didn't effectively inform the care plan, parents who did not participate in the decision-making regarding their neonates, a high rate of nursing staff turnover/ care given by multiple staff, and nurses who didn't respect the parent, restricted time to visit their baby, unclean ward (3,27).

A study conducted in Iran with a cross-sectional design to determine the degree of parent satisfaction among 300 parents of neonates admitted to the NICU at selected governmental hospitals in Tehran found that most parents are satisfied with three domains, such as nursing care, medical care, and welfare services(20)

A descriptive correlational study conducted to assess the perceived needs and satisfaction of care among six mothers of neonates admitted to the NICU at a selected hospital in Mangalore, India, revealed that the majority of parents expressed satisfaction with the care provided by healthcare professionals during their newborn's hospitalization (25, 31). A cross-sectional quantitative study conducted to assess Parental satisfaction with the quality of neonatal care in different levels of hospitals in Vietnam among 340 Parents of preterm neonates revealed that they were less satisfied when they stayed in the hospital for a long period and/or when their newborn's health condition deteriorated (8).

A cross-sectional study conducted in Germany to assess Safety and Parental Satisfaction With Early Discharge of Preterm Infants on Nasogastric Tube Feeding and Outpatient Clinic Follow-Up showed that Preterm newborns safely discharged early on nasogastric tube feeding (NTF) with regular close outpatient clinic follow-up are more satisfied than home care nursing services(32).

A multicenter cross-sectional study conducted in Ethiopia to assess Parents' Experience and Satisfaction in the Neonatal Intensive Care Unit revealed that Drugs, medical equipment availability, accessibility of laboratory, radiology services, and waiting area affect parents' satisfaction (26). Another cross-sectional study conducted in northern Ethiopia among 400 parents of admitted neonates showed that parent involvement in decision-making increases parent satisfaction(6).

Communication and Information

Institutional Multilevel modeling research conducted in Germany among 1277 parents shows availability of information indicator using direction and availability of adequate seat in the waiting area are associated with parental satisfaction. (17, 33). Another quasi-experimental study conducted among 80 mothers of preterm neonates admitted in the NICU to assess the Effectiveness of internet-based education on maternal satisfaction in the NICUs of two hospitals in the same country reported that parents who have received health education through virtual space-based education are satisfied (34).

A study done in north India regarding Providing effective communication with parents and adequate information regarding their baby, Parents who are in single-family NICU rooms and parents who are informed that they will be discharged are satisfied with the care of the newborn in the NICU, but most parents who are in traditional open baby NICU systems are dissatisfied because family-centered care(FCC) is reduced in traditional open baby NICU systems (16, 35).

A descriptive correlational study conducted to evaluate the perceived needs and satisfaction with care among six mothers of neonates admitted to the NICU at a selected hospital in Mangalore, India, found that most parents reported high levels of satisfaction with the effective communication and support provided by the medical team (31). In contrast, A Correlational study conducted in Iran among 150 preterm babies of mothers expressed lower satisfaction with the information provided by the healthcare provider(25)

Respect and Emotional Support of parents

The most important aspects of parents' satisfaction with neonatal intensive care unit services include the decision-making process concerning their neonate, respect and empathy from the health care provider, and the ongoing treatment and care of the newborn. However, there are also some problems with which parents are less satisfied, such as how the NICU provides ongoing care for siblings, parents, and newborns during the later stages of their hospital stay(4). A cross-sectional study conducted in the USA involving 102 parents revealed that a lack of emotional support and instances of disrespect from nurses significantly reduce parent satisfaction levels (27).

1.7 Conceptual framework

A Conceptual framework is developed after reviewing a variety of literature, which focuses primarily on the barriers to parental satisfaction, such as: - Socio-demographic and Health service-related barriers. This framework will guide the development of the interview guide, allowing for in-depth exploration and meaningful dialogue (4, 6-8, 16, 17, 20, 22, 25, 28, 29, 31, 33, 34).

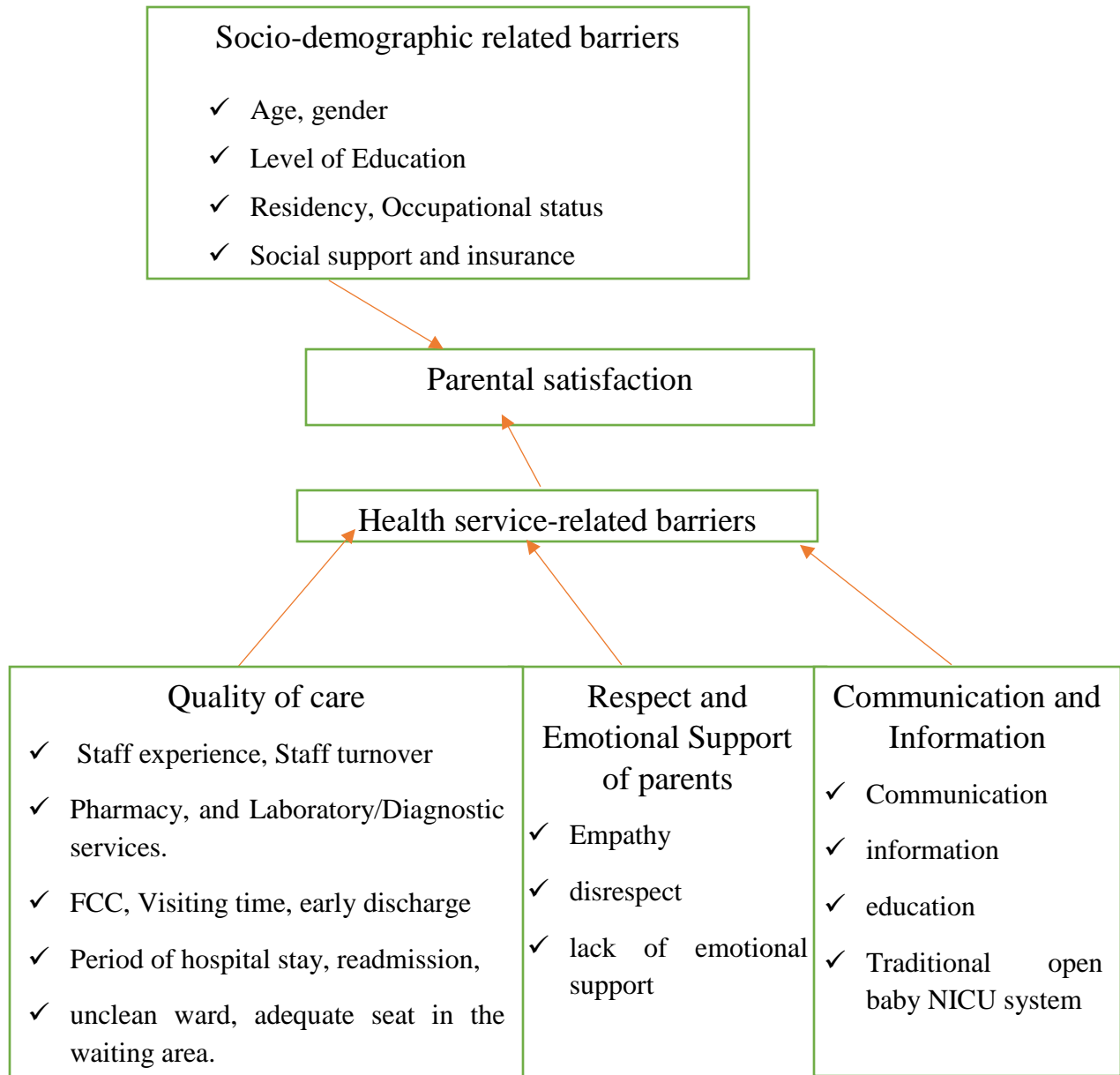


Figure 1: Conceptual framework for parental satisfaction and barriers with their neonates' care services in the neonatal intensive care unit at selected public hospitals in Addis Ababa, Ethiopia, 2025.

Objective

1.8 General objective

To explore parental satisfaction and barriers with their Neonates Care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia, 2025.

1.9 Specific objectives

- ✓ To explore parental satisfaction with their neonate's care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia, 2025.
- ✓ To identify barriers to parental satisfaction with their neonates' care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia, 2025.

Methods

1.10 Study area and period

Addis Ababa is the capital city of Ethiopia, the Seat of the African Union, and the United Nations Economic Commission for Africa. It is located on a well-watered plateau surrounded by hills and mountains in the geographic center of the country. It covers 527 square kilometers and has 10 sub-cities and 116 woredas. According to the 2024 World Population Review, the estimated population of Addis Ababa is around 5.7 million(36).

The city has 12 government hospitals, of which 11 have Neonatal Intensive Care Units (NICUs). These are Tikur Anbessa Specialized Hospital, Zewuditu Memorial Hospital, Yekatit 12 Hospital Medical College, Gandhi Memorial Specialized Hospital, Menelik II Comprehensive Specialized Hospital, St. Paul's Hospital Millennium Medical College, Alert Comprehensive Specialized Hospital, Ras Desta General Hospital, Eka Kotebe General Hospital, Tirunesh Beijing General Hospital, and St. Peter Specialized Hospital. St. Paul's Hospital Millennium Medical College, Gandhi Memorial Specialized Hospital, and Menelik II Comprehensive Specialized Hospital were the study areas that were randomly selected. SPHMMC was established by Emperor Haile Selassie in 1961 and became a medical college in 2007. This hospital has 60 NICU beds. This hospital has three neonatologists and 58 neonatal nurses. On average, it provides services for 215 newborns monthly (37). Gandhi Memorial Specialized Hospital was established by Emperor Haile Selassie in 1960. The NICU has 47 beds and cares for 287 high-risk newborns monthly. The NICU has one pediatrician and 33 neonatal nurses (38). MIICSH, founded in 1902 GC, it is crucial in maternal and neonatal care. It has one pediatrician and 30 neonatal nurses. The NICU has 27 beds and 8 incubators, enabling it to care for an average of 84 newborns monthly(39). The study period was from February 6, 2025, to March 6, 2025.

1.11 Study design

A qualitative approach, descriptive phenomenological study design was used to explore parental satisfaction and barriers with their Neonates' Care services in the Neonatal Intensive Care Unit.

1.12 Source population

All parents of neonates who admitted their newborn to the neonatal intensive care unit at public hospital in Addis Ababa, Ethiopia.

1.13 Study population

Parents of neonates who admitted their newborn to the neonatal intensive care unit during the data collection period at selected public hospitals in Addis Ababa, Ethiopia.

1.14 Eligibility criteria

1.14.1 Inclusion criteria

All parents of neonates who admitted their newborn to the neonatal intensive care unit who stayed at least for seven days at selected public hospitals during the study period.

1.14.2 Exclusion criteria

Parents who were assumed unable to provide valid information because of hearing, speaking, or other medical problems that disturb the interview, can't talk to Amharic, caregivers beyond primary families, and parents waiting less than seven days at selected public hospitals were excluded.

1.15 Participant recruitment

Parents who met the inclusion criteria were selected using a purposive sampling method. Those waiting more than one week in the neonatal intensive care unit were identified as potential informants, while other parents and health professionals assisted in selecting key informants. Participation in the study was entirely voluntary and based on individual willingness.

1.16 Sample size

A total of 13 parents participated in the study on satisfaction with their neonates' care in the neonatal intensive care unit. The sample size was determined based on data saturation within each hospital.

1.17 Conceptual definition

Parent Satisfaction is a parents of neonates admitted to the Neonatal Intensive Care Unit (NICU) are content with the care provided to their child and their overall experience with the healthcare team and the NICU environment. This satisfaction is explore by assessing parents' perceptions of various aspects of care, including Quality of Care, communication, Emotional Support, and environment(40, 41).

Parents are the primary caregivers of a neonate admitted to the Neonatal Intensive Care Unit.

The neonatal intensive care unit (NICU) is a specialized nursery in a hospital designed to provide care for sick neonates or premature babies(42).

A neonate is a newborn infant in the first 28 days of life after birth (43).

Newborn:- The first one week after birth (44)

1.18 Interview guide and procedure

Face-to-face in-depth interviews were conducted using an open-ended interview guide. The open-ended interview guide was carefully crafted, incorporating potential probes derived from a comprehensive review of relevant literature to ensure the study objectives are effectively addressed (5, 6, 10). The interview guide was initially prepared in English and subsequently translated into Amharic. To ensure consistency and accuracy, the translated interview guide was then retranslated into English. Additionally, the final versions were validated by two neonatologists and one pediatrician to confirm their reliability and appropriateness for the study. A BSC nurse who works in the NICU but is from outside the study area was recruited and trained for two days on the interview guide to ensure accurate data collection. Two volunteer parents from Tikur Anbessa Specialized Hospital participated in a pilot study to evaluate whether the research questions effectively aligned with the study's objectives. Based on feedback from this pilot study, modifications were made to the interview approach and questions. The data collector conducted the interviews in Amharic in a quiet and private space within the facilities. Each interview was audio recorded with the participants' written consent, and notes were taken to accurately capture their responses and verify explanations by referencing their original answers. The duration of each session ranged from 15 to 54 minutes. Data collection was concluded when the last two respondents reiterated previously gathered information, indicating that no new concepts were emerging from each hospital. Daily verbatim transcriptions of the recorded audio and field notes were conducted in Amharic using Microsoft Word, followed by translation into English by qualified language experts.

1.19 Data analysis procedure

An inductive thematic analysis approach was employed to analyze the data gathered from in-depth interviews, following the steps outlined by Braun and Clarke(45, 46): Step 1:- Become familiar with the data in this step, the audio recordings of individual interviews was transcribed using

Amharic language, and verbatim translation from Amharic to English by English experts together with the principal investigator, the transcribed, and translated data were checked with the audio recorded to ensure its accuracy and was imported into Atlas ti 9 Qualitative data analysis software by the principal investigator; Step 2: generating initial codes- After uploading the translated data into the software, the data was coded line by line. A Codebook was developed after interviewing a few study participants to guide the researcher in making sure that coding consistency is in place throughout the data analysis process. Emerging ideas during the interview were added to the codebook, and similar ideas were merged into previous codes after the researcher coded the transcripts independently. Step 3: Searching for themes- Themes were obtained from the coded data. The researcher checked the codes for clarity and consistency by selecting a given text, and several codes were combined into a single theme. Step 4: Reviewing themes- The researcher checked themes and ensured their usefulness and accurate data representation. Step 5: Defining and naming themes- In this step, the final lists of themes were named and defined. The acquired themes and codes were examined by an expert academician apart from the main researcher. Step 6: Producing the report- The researcher wrote the data analysis. The researcher's notes and memos were linked to their documents to assist in the analysis.

1.20 Trustworthiness

The credibility, dependability, conformability, and transferability of this qualitative data were determined its trustworthiness.

Credibility: To ensure the study's credibility, the investigator prolonged engagement with study participants, conducted Member checks, conducted Method triangulation, and continuously discussed the research process with advisors, other staff, and qualitative study experts.

Transferability: a thick description of the study area, research design, data collection, and analysis, the results were given to ensure the transferability of the research findings to other similar settings.

Dependability: An external auditor evaluated the study's conclusions and sought clarification on any necessary adjustments. Additionally, audio recordings of participant interviews, along with notes and verbatim transcriptions, were utilized to cross-check the process and ensure consistency in the interpretations.

Conformability: field notes and audio records were maintained as an audit trail to ensure that the data interpretation accurately reflects the participants' own words rather than the researchers' opinions or views by utilizing the participants' own words from interview transcripts.

1.21 Ethical consideration

This study was conducted after obtaining approval and a support letter from the Department of Pediatrics and Child Health Nursing and Midwifery, School of Nursing and Midwifery, College of Health Sciences, Addis Ababa University. A support letter and approval sheet were provided to the Addis Ababa Health Bureau and SPHMMC research team. A letter of permission was prepared for each hospital involved in the study from the Addis Ababa Health Bureau and the SPHMMC research team. Before participants signed the consent form, the researcher ensured that they completely understood all the provided information. Upon agreeing, participants signed the consent form, indicating their voluntary participation in the study and granting permission for the audio recording of interviews. Participation was entirely voluntary, and participants could withdraw from the study at any moment if they felt uncomfortable. The rights of participants to anonymity and confidentiality were strictly protected. To ensure this, the researcher implemented several measures: all information shared by participants was treated with the utmost confidentiality and was only used for research purposes. The raw data was collected, securely stored, locked in a safe place, and protected by a password. Additionally, participants' names were not included in study records, and data were reported in a way that prevented the identification or linkage of participants with their information.

1.22 Dissemination of the study

The result of this study has been disseminated to Addis Ababa University College of Health Sciences, School of Nursing and Midwifery, St. Paul's Hospital Millennium Medical College, Gandhi Memorial Specialized Hospital, and Menelik II Referral Hospital. Finally, there will be an attempt to publish parts of the research findings in reputable local and/or international journals.

Result

This study aims to explore parental satisfaction and barriers with their Neonates' Care services in the Neonatal Intensive Care Unit at St. Paul's Hospital Millennium Medical College, Gandhi Memorial Specialized Hospital, and Menelik II Comprehensive Specialized Hospital in Addis Ababa. The findings of this study are organized into two main sections. The first section highlights results about individual socio-demographic characteristics, while the second section explores the emerging themes and sub-themes identified through the thematic analysis of in-depth interviews.

1.23 Socio-demographic characteristics of parents

In this study, the researcher recruited 13 participants, including 4 fathers and 9 mothers, with a mean age of 31 years (ranging from 22 to 44 years). All recruited participants are married (100%) and can read and write (70%), with 30% holding a Diploma or higher. The majority of participants reside in urban areas (92%). Most participants have a monthly income exceeding 5,000 ETB (85%). The majority of participants' neonates were delivered before 37 weeks (69%).

Table I: Socio-demographic characteristics of the recruited participants to explore parental satisfaction and barriers with their Neonates' Care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa.

Participant	Age	Sex	Marital. S	Education	Residency	Occupation	Income (ETB)	GA (wks)
1	23	F	Married	Able to read & write	Urban	Housewife	≥ 5001	<37
2	22	F	Married	Able to read & write	Urban	Merchant	≥ 5001	<37
3	27	F	Married	Diploma	Urban	Government employee	≥ 5001	<37
4	40	F	Married	Able to read & write	Urban	Housewife	1001-5000	≥ 37
5	24	M	Married	Able to read & write	Urban	Daily laborer	1001-5000	≥ 37
6	24	F	Married	Able to read & write	Rural	Housewife	≥ 5001	<37
7	33	F	Married	Degree & above	Urban	Government employee	≥ 5001	≥ 37
8	43	M	Married	Degree & above	Urban	Private employee	≥ 5001	<37

9	28	M	Married	Able to read&write	Urban	governmental employee	≥ 5001	≥ 37
10	30	F	Married	Able to read &write	Urban	Housewife	≥ 5001	<37
11	35	F	Married	Able to read &write	Urban	Housewife	≥ 5001	<37
12	27	F	Married	Degree&above	Urban	government employee	≥ 5001	<37
13	44	M	Married	Able to read &write	Urban	Farmer	≥ 5001	<37

1.24 Emerged themes

The study aims to explore parental satisfaction and barriers with their neonates' care services in the Neonatal Intensive Care Unit (NICU). Four key themes emerged through a comprehensive thematic analysis of in-depth interview data collected through an open-ended interview guide: parental satisfaction, quality of care, emotional and informational aspects, and the NICU and its environment. The initial coding process generated 109 codes and 16 subthemes. However, after careful refinement, these were streamlined into 55 codes and 14 cohesive subthemes. This analysis is supported by 150 quotations that effectively capture the diverse experiences and challenges that parents faced.

Table II: Themes, subthemes, and codes identified through in-depth interviews with parental satisfaction and barriers with their Neonates' Care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa

Themes	Description of themes	Sub-themes	Codes
Parental satisfaction	Highlights the feedback and experiences of parents concerning the care their neonates receive in the NICU.		Satisfied
			Dissatisfied
Quality of care	Emphasizes the health professional's skill and the effectiveness of the medical attention provided to neonates.	Professional skill	Medication is not given properly
			Compassion
			Competent
			Discharge time
			Doctors are not confident
			Don't give good care
			Good care

			The laboratory staff don't work properly
			Lots of medication
			Medication on time
			Repeated blood draw
		FCC	No parental involvement
			I can ask
			I can't ask questions
		Service availability	A restricted place for the lab
			Available in the hospital
			Distance of the laboratory, pharmacy
			Free services
			Lack of medication, laboratory services
		Barriers to accessing NICU services	Cost
			Place of Residency
Emotional and informational aspects	Addresses the information shared with health professionals to the parents and their emotional responses when their newborns are admitted to the NICU.	Respect of the parents	Respect
			Don't have an attitude
			Good professional attitude
			No respect
		Response of health professionals	Responsive
			Non-responsive
		Information & Education	Reassure
			Enough information
			Lack of information
			Health education
		Feeling	No education
			Stress
			Not stressed
Family support	Happy		
	Lack of family support		
NICU and its environment	Focuses on aspects such as the cleanliness of the NICU ward, the waiting area for families, and the regulations governing the NICU environment.	Cleanliness of the NICU ward	No chair
			Clean NICU ward
			cleanliness issues
			Enough newborn beds
		Restriction	Restriction
			No restriction
		Security and cleaning staff	Security
			Cleaner attitude
			Cleaning time issue
		waiting area	Shortage of water
Bed issue			
Crowded waiting room			
Good waiting area			

			Lack of a waiting area for the attendant
			Restroom issue
			Shortage of blankets
			Uncomfortable waiting area

1.24.1 Theme 1: Parental satisfaction

According to this study, some parents expressed satisfaction with their neonates' care in the neonatal intensive care unit and with the treatment provided to their newborns. One participant, a 35-year-old mother, explored her feelings regarding the satisfaction of her baby care.

“Their medical care is excellent; they attend to the newborn even better than a mother would. They are always very attentive, and I feel satisfied and happy. If they maintain this level of care, I will continue to be delighted. Whenever it is determined that the baby needs something, whether inside or outside the facility, it is quickly addressed, and the baby receives the necessary treatment” (interview 1, 35 years). Other participants also tell us, *“Internally, I feel very pleased with what I have witnessed, especially regarding the staff’s kindness. They give detailed advice on how to care for neonatal patients, what actions are necessary, and how to address different situations. They are incredibly supportive and provide exceptional care. Besides a minor language issue, everything else is praiseworthy”* (interview 13, 44 years).

Some other respondents expressed that they were dissatisfied with their neonates' care in the neonatal intensive care unit due to the poor medical care system. One male respondent shared his experience: *“I am not satisfied. The treatment here is not good. It would have been good if they had quickly found a solution and completed the process. They said the child is expected to recover normally, but he has a fever and also a blood infection. I have bought the medication from abroad twice, but the results are being delayed day to day”* (interview 9, 28 years old).

1.24.2 Theme 2: Quality of care

In line with this major theme, the study highlighted several key sub-themes, such as professional skills, family-centered care (FCC), service availability, and barriers to accessing NICU services.

Sub-theme 1: Professional skills

Most participants express that health professionals are compassionate when they handle the newborn, as a mother would. 22-year-old mother shared her thoughts as follows

“The health professionals are excellent and do their work diligently and responsibly. They care for the newborn more than we do” (interview 2, 22 years old).

In this study, some parents are dissatisfied with medication administration, and some health professionals don't administer the medication properly. The parents who purchased the medication are in the mini store. When they ask why the purchased medication is not given to their child, they are upset rather than being provided a reasonable response.

“Medications are not administered correctly in the neonatal care unit; the medications that are brought in are placed in storage. Instead, they gave only glucose. Since I entered, it has been 20 days, but there is no change. When I ask about the medication, they tell me to be silent, saying, 'What do you know?'” (interview 6, 24 years old).

In this study, some parents express dissatisfaction with physicians' decision-making skills, citing a perceived lack of confidence among doctors. They observe that opinions among physicians can vary widely; for instance, while one doctor may confidently endorse a particular treatment or approach, another might firmly recommend a contrasting course of action.

“Each doctor examines and gives a different opinion; one might say not to do something, while another says to do it. This confuses us (interview 4, 40 years old)”. Additionally, another participant noted that “Lack of decision and fear, there's fear in this ward, a fear of decision among physicians. This child that I have here is I had exhausted for nine months in the uterus, and I have the right to raise my question” (interview 7, 33 years old).

In this study, some parents complained that the discharge times are usually after 4:00 AM, though some parents may be discharged at 2:00 AM if they are lucky. Those leaving around 5:00 AM often face challenges if they lack nearby relatives. It's essential to be prepared for discharge notifications, whether at noon or the next day. Relatives, whether local or from other areas, should ideally be informed by noon, or at the latest, before 1:00 AM to ensure a smooth process for the clients. Regarding this, one male parent thought as follows

“Typically, discharge times occur after 4:00 AM, although occasionally, fortunate parents may be discharged around 2:00 AM. However, where discharge is around 5:00 AM, some parents may encounter challenges, especially if they do not have relatives nearby to support them. Doctors are aware of the planned discharge times, so preparation is essential. Whether parents are informed

that their discharge is scheduled for the following day or are told at noon to prepare for leaving, it's important to be ready. Relatives should be contacted promptly, whether from a distance or based here in Addis Ababa. Ideally, patients should be notified starting from noon or, at the very latest, by 1:00 AM to allow sufficient time for arrangements. Early notification is strongly recommended to mitigate difficulties” (interview 13, 44 years old).

Sub theme2: Family-centered care

When a change in treatment is necessary, I can engage in discussions with my doctors. I feel comfortable asking any questions I may have, and I appreciate that my concerns are taken into account during the decision-making process.

“When there is a treatment change with different instructions, I discuss it with the doctors and ask questions if needed” (interview 4, 40 years old).

In this study, most parents describe their complaints about being excluded from the decision-making process regarding their newborn's medical care. They felt that medical decisions were made solely by health professionals without considering parents' perspectives or suggestions. One male participant shared his view as follows:

“We are not involved in the medical services or decisions. It requires this much care. Even when they say this is necessary, they don't consider where the father is, as if the father is completely absent. Here, only mothers are considered, and they tell mothers even when they tell mothers the health professionals upset the mothers, we are outside and not allowed in. A father should be included in decisions” (interview 5, 24 years old).

Sub-theme 3: Service availability

Some participants responded that most services, such as medication, laboratory, and radiology, are available in the hospital. However, sometimes we may need to purchase services outside the hospital, and investigations may be done externally if they want to cross-check with those conducted in the hospital.

“The services within the hospital, including the laboratory, pharmacy, and radiology, are excellent and fast. Medication is available within the hospital, and only occasionally do we need to go outside for laboratory tests. Other than that, everything is within the hospital” (interviewee 8, 43 years old).

Most parents describe their complaints as most medication and laboratory services are not available in the hospital, and we have access to only syringes and gloves; the other things are outside the hospital.

“The medication given to our newborn should be available inside, but we have to go outside to get it. This is an issue for poor families. The government hospital aims to provide services to poor communities at a low cost. A hospital should serve the poor, but here, it does not. The medicine for children, especially for newborns, should be provided free.” “The specific medicine we get for free is gloves and a syringe. Any cannula is from outside; we have to buy from outside, most of the time. The glucose is also from outside. Everything comes from outside” (interview 5, 24 years old).

Sub-theme 4: Barriers to accessing NICU services

Some parents have expressed concerns about the high costs of laboratory services outside the hospital. This financial burden poses a significant challenge for families with limited income.

“For laboratory investigations, we have to go outside, and it is very costly. It costs more than two thousand birr to run a lab test. The medication given to our newborn should be available inside, but we have to go outside to get it. This is an issue for the poor family” (interview 5, 24 years old).

1.24.3 Theme 3: Emotional and informational aspects

Under this major theme, the identified subthemes are Respect, Response, Information and Education, Feeling, and Family Support.

Sub-theme 1: Respect of the parents

Some parents report that the majority of health professionals demonstrate strong respect for neonates when administering treatment.

“When they provide treatment, especially for neonates, they show great respect. Even if you don't have breast milk, they will tell you it's okay and comfort you, especially when it comes to neonates. They work very well and tirelessly” (interview 3, 27 years old). In addition to this, another parent expressed that *“ some staff are courteous, and some are very quick and collaborative. They create a positive atmosphere for mothers” (interview 5, 24 years old).*

The majority of participants responded that some health professionals don't count as people, and they don't respect parents

“Some doctors are great and loving, but others are terrible. When I enter, they immediately tell me to leave before I speak to them. They don't see us as people.” Some health professionals don't look like they've given birth. Someone I said her, 'You gave birth and see how it is difficult’ (interview 5, 24 years old). In addition, another parent shared their idea as the nurses haven't attitude: “When I ask about the medication, they tell me to be silent, saying, 'What do you know?’ They neither acknowledged nor administered the medication; instead, they dismissed me. If you are a doctor, you would know better, and you should do it yourself. This is what the women working inside say. doctors have to check the baby every three hours, saying, 'Give the medication, and then they leave, but the female nurses neither administer the medication nor give proper feeding’ (interview 6, 24 years old).

Sub-theme 2: Response of health professionals

The majority of participants shared their experience as the health professionals gave a good response to their questions *“I don't want to ask too many questions, but if I ask them, they respond, and some of them even provide additional information. I have enough information about my baby” (interview 10, 30 years old).*

Some participants noted that a few health professionals were uncooperative in responding to our questions. *“When the newborn is in the neonatal intensive care unit, we see him whenever we want, but when we ask about things we don't understand about the medication, they get irritated. Sometimes they do not give us a proper answer, possibly because of their workload. The neonatal intensive care unit is very hot, and it makes them uncomfortable and tired” (interview 2, 22 years old).*

Sub-theme 3: Information & Education

Some participants shared their thoughts, noting that their scheduled evening classes have helped them appreciate the commendable teaching method.

“There are also evening classes where nurses teach us. If they continue with this, it is great. Most of them came from the countryside, so education is necessary. The teaching they provide is excellent, and they do it from their heart” (interview 1, 23 years old) In addition to this another participant noted that the waiting room has a teaching screen, and health professionals come to give lectures about hygiene, care, and sun exposure” (interview 7, 33 years old).

Most participants noted that we haven't any information about our newborn. This idea was supported by one male participant as follows: *"The quality of neonatal care services is very good; I am not doubting that at all. However, the problem is that the professionals do not provide any information on the condition of the infant, which is a major issue"* (interview 8, 43 years old). In addition to this, another respondent noted that *it is difficult to explain to the family what the problem with the newborn. Here, the family considers that the newborn has a physical disability"* (interview 2, 22 years old).

Sub-theme 4: Feelings of parents

Some parents shared their thoughts, as when their baby was admitted to the neonatal intensive care unit, they were happy because they knew the newborn would be admitted to the neonatal intensive care unit if the baby was delivered before 37 weeks." *I knew the baby would enter the incubator; I had heard before that premature babies are placed in incubators to help them grow as if they were still in the womb. That thought makes me happy. Also, because I know they are taking care of my baby, I feel so happy. The reason is so the baby can grow and develop well"* (interviewee 10, 30 years old). In addition to this, another participant noted, *"When the baby was placed in the incubator, I was happy because it helped with her breathing. The doctor had told me that the baby might either survive or not, but now that she is in the incubator and receiving oxygen, she is alive up to this time. Before this, I didn't know much about incubators, but I have learned about them after coming here. I now understand and appreciate what has been done to save my baby's life"* (interview 11, 35 years old).

The majority of participants noted that when they first entered the neonatal intensive care unit, they were distressed when they saw their newborns, but slowly became reassured when they checked that the baby could be breastfed.

"When I first entered the neonatal ward, I was very distressed seeing the newborn. While slowly observing when the nurse fed them, I saw that they could breastfeed. When I came here and started getting to know my child, I began to think like a human. Initially, I was very stressed because the newborns admitted here were very sick. Seeing this situation affects our emotions." When you see the mothers, they are generally stressed; there is nothing that makes them happy, to be honest" (interview 2, 22 years old).

Sub-theme 5: Family support

Some participants expressed that once the baby is with the mother, there is often a lack of support, making it challenging for her to find time to rest and sleep. *“Once a neonate is in the mother's hands, it will be difficult to handle the baby. So, even if we stay a lot in the neonatal intensive care unit, we won't worry. But here, there is no assistant; there is no sleep”* (interview 2, 22 years old). In addition to this, another participant noted, *“I haven't family, and I haven't got family support here, and apart from this, I haven't encountered any other problems”* (interview 4, 40 years old).

1.24.4 Theme 4: NICU and its environment

This major theme encompasses four key sub-themes: the cleanliness of the NICU ward, restrictions, security and cleaning staff, and the waiting area.

Sub-theme 1: Cleanliness of the NICU ward

Most respondents shared their views by noting the cleanliness of the neonatal intensive care unit. When they enter the ward, they always wash their hands. Even in the absence of running water, hand sanitizer is used to ensure proper hygiene.

“The neonatal ward is very clean. When we enter, we wash our hands. If water is unavailable, we sanitize our hands with sanitizer” (interviewee 10, 30 years old). In addition to this, another participant shared their thoughts as follows: *“The neonatal ward is good. The room is cleaned up to four times a day”* (Interview 3, 27 years old).

Sub-theme 2: Restriction

The majority of the women respondents explain their thoughts by noting that there is no restriction to visiting our newborn, we can see our newborn as needed. *“They give a uniform, and by wearing it, we can visit our baby at our preferred times. We can go in, feed her, and sit with her without any restrictions”* (interview 11, 35 years old).

All male participants explained their complaints; they are not allowed to see their newborns. only mothers are allowed to see and sit with the newborn; this restriction reduces their satisfaction level.

“Mothers are always allowed to stay with their children, while fathers are not. In the neonatal ward, mothers can stay, but I have not been able to see my child; it's been a week” (interview 8, 43 years old). In addition to this, another respondent shared their thoughts as follows: *“What will*

a father do if he hasn't seen his newborn here?" This newborn, even if she dies or becomes something, they won't show me. Even if they changed her, I wouldn't know it's my child. This is not a good thing" (interview 5, 24 years old).

Sub-theme 3: Security and cleaning staff

Some respondents shared their idea that the time for cleaning the neonatal intensive care unit ward should be adjusted, it is better when it will be when the parents are stable and sit in their waiting area. *"It would be great if they could adjust their cleaning hours to a time when people can sit and be quiet. Currently, when we are in urgent situations, they close the door, saying it is cleaning time. Also, when the neonate is in critical condition and crying, they say we cannot pass because it is cleaning time. When the blood is drawn, and we are told to take it quickly, they do not let us in because it is cleaning time. There is a lot of difficulty during cleaning hours. During cleaning, nothing is moved, and if they could adjust this, it would be a good and allow people to move freely if there is an urgent situation" (interview 2, 22 years old).* In addition to this other respondent also noting *"at the time of cleaning it is difficult for people to walk; this needs to be corrected" (interview 8, 43 years old).*

Some participants shared their view on the security issue: they should take training they work only by tradition: *"Improvement is needed in training security guards. The guards, who work out of habit, need to be taught how to speak to people" (interview 8, 43 years old).*

Sub-theme 4: Waiting Area

Some participants shared their thoughts about the shortage of beds in the waiting area; even the accessible beds are too old and move when somebody sits on. *"It would be good if the bed could be adjusted." It would be good if the number of beds were increased. Moreover, the beds are completely damaged, I don't know whether it's a long period of service or its quality. When someone sits on the bed, it feels unstable and may collapse. It moves around, and it seems like it could fall apart. If it is fixed, there will be no other issues" (interview 4, 40 years old).*

Most participants reported that there is only one waiting area for all mothers, which they described as overcrowded and lacking in cleanliness, and there is no waiting place for attendants.

“There is a resting area for mothers where all the mothers share the same space. The cleanliness is good, but one room is overcrowded, which is not ideal” (interview 12, 27 years old). In addition to this, another parent thought as *“The hospital has given us the room where we will stay. However, due to the number of people, cleanliness is a challenge” (interview 7, 33 years old).* There is no resting place for men, and they are not allowed to stay because the place is for mothers, not for fathers. *Every night, I stay in my car, while others sleep on the corridor” (interview 8, 43 years old).*

Most people expressed their concerns about the lack of enough restrooms. *“The restroom is very crowded. For 30 to 40 people, there is only one restroom, which is problematic” (interview 2, 22 years old).* Some participants expressed concerns regarding the lack of water in the waiting area, noting that without water, it becomes difficult to use the restroom due to cleanliness issues.

“What troubles us is the shortage of water and the lack of adequate restroom facilities. When the water is unavailable, the restroom emits an odor, which makes it unpleasant” (interviewee 10, 30 years old). Some participants described their dissatisfaction with the shortage of blankets and linen, it is not changed for a week. *“They have not changed the linen and blanket for a week. They say the blanket is still wet and not dry yet. There is no adequate supply” (interview 3, 27 years old).*

Discussion

This study aimed to explore parental satisfaction and barriers with their Neonates' Care services in the Neonatal Intensive Care Unit (NICU) at selected public hospitals in Addis Ababa. Through a comprehensive thematic analysis of in-depth interview data collected using a semi-structured questionnaire, four major themes and fourteen sub-themes emerged. The first theme, parental satisfaction, highlights the feedback and experiences of parents concerning the care their neonates receive in the NICU. The second theme, quality of care, emphasizes the health professional's skill and the effectiveness of the medical attention provided to neonates. The third theme, emotional and informational aspects, addresses the information shared with health professionals to the parents and their emotional responses they experience when their newborns are admitted to the NICU. Finally, the fourth theme, the NICU and its environment, focuses on aspects such as cleanliness, the waiting area for families, and the regulations governing the NICU environment.

In this study, parents were dissatisfied with the care provided to their neonates in the neonatal intensive care unit (NICU). This study is in line with the earlier meta-analysis research carried out in Ethiopia where it was shown that parents were dissatisfied with the care provided to their neonates in the neonatal intensive care unit (3), however, this result is contrary to the study done in America with the same study design, Greece, and Iran (5,24,25). This discrepancy might be attributed to variations in socioeconomic levels, as socioeconomic status is a barrier that impacts parental satisfaction with the care of their neonates in the neonatal intensive care unit. This could also be linked to the healthcare infrastructure of high-income countries, along with variations in the quality of health services provided (22).

Professional skills, family-centered care (FCC), service availability, and barriers to accessing NICU services are the primary challenges that hinder the quality of care and limit parental satisfaction with their neonatal care in the neonatal intensive care units (NICUs). Many participants expressed that the competency of healthcare professionals (improper medication administration, confidence of doctors) is a barrier that affects their satisfaction in the neonatal intensive care unit. The finding is contrary to a study conducted in India, which revealed that the majority of parents expressed satisfaction with the care provided by healthcare professionals during their newborn's hospitalization (31). This might be a result of the exceptional expertise of Indian health professionals in newborn care, reflecting their extensive training and commitment to

ensuring the well-being of newborns. Discharging time is the major barrier to paternal satisfaction. Most participants indicated that the timing of discharge from the hospital is challenging; discharges typically occur after 4:00 AM, although some parents may leave at 2:00 AM if they are fortunate. This finding contrasts with a study conducted in Germany, which showed that preterm newborns discharged early on nasogastric tube feeding (NTF) with regular outpatient clinic follow-up reported higher satisfaction levels (32). This discrepancy might stem from the discharge timing at our hospital, which occurs after 10 hours of DLT, posing difficulties for parents who lack social support and for those from rural areas, as they struggle to reach their homes.

In this study, the results showed that a lack of family-centered care (FCC) is a barrier to parental satisfaction for most parents regarding their neonates' care in the neonatal intensive care unit. This finding aligns with a study conducted in the USA, which reported that most parents were dissatisfied with NICU services due to their lack of participation in the decision-making process concerning their neonates' care (27). The reason might be attributed to the reduction of family-centered care in traditional open-baby neonatal intensive care unit systems; in contrast, family-centered care increases in single-family NICU rooms (16,35). However, a study conducted in North India reported that most parents are satisfied with the neonatal intensive care unit due to effective decision-making involving both families and health professionals (16). This satisfaction might be related to the presence of single-family NICU rooms, which enhance the relationship between health professionals and parents, fostering a suitable environment for decision-making regarding their neonates.

In this study, the shortage of service availability in the hospital includes reliance on a single private laboratory for diagnostic investigations, the considerable distance between the laboratory and pharmacy from the NICU ward, as well as shortages of essential medications and laboratory services, all of which act as barriers to parental satisfaction regarding their neonates' care in the neonatal intensive care unit. This finding aligns with a study conducted in the same country, which reported that the availability of drugs and medical equipment, as well as access to laboratory and radiology services, significantly impacted parents' satisfaction (26). This might be attributed to the fact that the study was conducted within the same country, where the neonatal intensive care units share almost similar setups, and there are no significant differences between them. Additionally, the availability of infrastructure in public hospitals is limited.

In this study, a lack of respect for parents serves as a barrier to parental satisfaction with their neonates' care in the neonatal intensive care unit. Most participants report that some health professionals do not show respect to parents when providing care for their neonates; they don't see us as parents, which upsets us. This finding is consistent with a study conducted in the USA, it was reported that the lack of emotional support and instances of disrespect from nurses significantly reduce parent satisfaction levels (27). The most important aspects of parents' satisfaction with neonatal intensive care unit services include the decision-making process concerning their neonate, respect, and empathy from the healthcare provider (4). This situation might be result from the increasing nurse-to-patient ratio and extended working hours. The high temperatures in the NICU ward contribute to staff fatigue, which can affect their interactions with parents, potentially leading to a decrease in respect and attentiveness.

This study reveals that most parents are pleased with the responses provided by health professionals to their inquiries. Most participants expressed positive experiences, noting that the health professionals addressed their questions effectively and with care. This finding aligns with a study conducted in India, which showed that the majority of parents expressed high levels of satisfaction regarding the effective communication and support offered by the medical team (31). However, it contradicts a study conducted in Iran that reported lower satisfaction among parents with the information provided by healthcare providers (25). This difference might be linked to the higher educational status and awareness of Iranian parents concerning neonatal care compared to their Ethiopian counterparts. Consequently, the responses from health professionals may not adequately meet the needs of Iranian parents.

In this study, it was found that most fathers lack information regarding their newborn's condition. This finding is consistent with the study conducted in Iran, which reported lower satisfaction with the information provided by healthcare providers (25). This situation might be due to fathers not being allowed to enter the neonatal intensive care unit to visit their newborns. In this study, the finding shows that some participants reported that once the baby is with the mother, there is often a lack of support, making it challenging. This finding is consistent with the study conducted in the USA, which revealed that a lack of emotional support and instances of disrespect from nurses significantly reduce parent satisfaction levels (27). This might be linked to once the newborns become stable, they will often be with their mothers throughout day and night. However, since

family support is crucial for the mothers, the restriction on family members entering the NICU can create challenges for them. This study reveals that male participants are dissatisfied with the restrictions on visiting their newborns; they are not allowed to enter the neonatal intensive care unit. This finding aligns with a study conducted in the USA, which found that parents are unhappy with the limited time they have to visit their newborns. (27). The restriction might be implemented to decrease the overcrowding in the NICU ward or to minimize the risk of infection for the newborns. In this study, most parents expressed dissatisfaction with the shortage of beds in waiting areas, restrooms, linen, blankets, and water, as well as cleanliness issues in waiting rooms and overcrowding. This finding is in line with the study done in Ethiopia showed that waiting areas affect parents' satisfaction (26).

Strengths and Limitations

1.25 Strength

This study tries to explore parental satisfaction and barriers with their Neonates' Care services in the Neonatal Intensive Care Unit. This study identifies barriers in each public hospital by purposely selecting participants who have had better experiences in the NICU. This study used one hospital barrier as a probing question for other public hospitals.

1.26 Limitations

In this study, the participation of male subjects was lower than that of their female counterparts due to challenges in reaching parents, as they often lack a waiting room and may leave instead. When health professionals required parents, interruptions during in-depth interviews happened when health professionals called on parents, necessitating a pause in the interview process before it could be resumed.

Conclusion and recommendations

1.27 Conclusion

Four major themes and fourteen sub-themes emerged, including parental satisfaction, quality of care, emotional and informational aspects, and the NICU and its environment. This study identifies that parents were dissatisfied with the poor professional skills, lack of family-centered care, insufficient respect, absence of information, discharge timing, restriction, unavailability of laboratory services and drugs, shortage of water, and scarcity of restrooms.

1.28 Recommendation

For policymakers and the government: To enhance parental satisfaction with neonatal services in the Neonatal Intensive Care Unit (NICU), prioritize strengthening public hospitals by improving infrastructure. Develop and implement guidelines prioritizing parental involvement in neonatal care, ensuring that parents are considered partners in the decision-making process.

For Hospitals: Provide in-service training for healthcare professionals in empathetic communication. Ensure the availability of medications and laboratory services. Improve facilities services by adding waiting areas, additional beds, restrooms, and arranging the discharge time. Offer comprehensive training for security personnel and cleaning staff to improve service quality. Set up systems for parents to provide feedback on their NICU experience.

For Researchers: This study employed a qualitative research design. It is recommended that future studies replicate this research in a different location with a similar context. Using a mixed-methods approach alongside focused group discussions could provide deeper and more comprehensive insights.

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ANNEXES

Annex I: English version of participants' information sheet

Title of the Research Project: Parental satisfaction and barriers with their neonates care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia 2025.

Name of Principal Investigator: Deribew Awoke

Name of the Organization: Addis Ababa University College of Health Sciences School of Nursing, and Midwifery Department of Neonatal Nursing.

Name of the Sponsor: Addis Ababa University College of Health Science.

Introduction

This information sheet and consent form are prepared with the aim of exploring Parental satisfaction and barriers with their neonates care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia 2025.

Purpose of the Research Project: This study aims to explore Parental satisfaction and barriers with their neonates care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia.

Procedure: This study involves parents who can fulfill the inclusion criteria. You are selected to be one of the study participants if you are willing to take part in this study and we kindly invite you to take part in our project. If you are willing to participate, we are so happy and we need you to clearly understand the aim of this study and show your agreement. Finally, you are kindly requested to give your genuine response in the interview.

Benefits, Risks, and /or Discomfort

By participating in this research project, you may feel some discomfort in wasting your time. However, your participation is important to explore the satisfaction of parents with care given in the neonatal intensive care unit. There is no risk or direct benefit in participating in this research project.

Right to Refusal or Withdraw

You have the full right to refuse to participate in this research. You have also the full right to withdraw from this study at any time you wish.

Person to contact

This research project were reviewed and approved by the Institutional Review Board (IRB) of Addis Ababa University College of Health Sciences. If you have any questions, you can contact any time, and you may ask at any time you want.

Name: Deribew Awoke

Phone No: 0929268617

E-mail: dervata@gmail.com

Annex II: English version of informed consent

Addis Ababa University College of Health Science School of Nursing and Midwifery Department of Neonatal Nursing.

A semi-structured questionnaire prepared to explore Parental satisfaction and barriers with their neonates care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia 2025.

Dear

Hello, my name is _____ I am a master's neonatal nursing student at Addis Ababa University College of Health Sciences. I am interested in the title Parental Satisfaction and Barriers with Their Neonates Care Services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia. This semi-structured questionnaire is designed for academic purposes and approved by Addis Ababa University, College of Health Sciences, School of Nursing and Midwifery, in partial fulfillment of a master's degree in Neonatal Nursing. I hope you will help me by answering these questions. None of your answers will be available to anyone. All the information you give me will be kept private. Anyone who is not willing to participate in the study will have the right to discontinue at any time during the process. Confidentiality and privacy are maintained by ensuring the respondents answer the questions in a separate place where no one can see them. Therefore, I need your honest and genuine response. The study results will hopefully serve as an important input for policy and intervention programs.

Would you be willing to participate in this study?

1. Yes
2. No

If yes, proceed to the next page.

If not, please stop here.

Name of Researcher: Deribew Awoke

Address: Addis Ababa University College of Health Science

Phone No: +251929268617

E-mail; - dervata@gmail.com

Name of data collector _____ signature _____

Date of interviewing _____ month _____/2017 E. C.

Time of interview began _____ hours _____ minutes

Time of interview finished _____ hours _____ minutes

Checked on _____ date _____ month/2017 E.C.

I am informed that this study have been conducted to explore Parental satisfaction and barriers with their neonates care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia. I am informed that the information I give have been kept confidential and only used for this study. I am also conscious that I have the right not to respond to any question without my interest. Hence, I agree to participate in the research voluntarily.

Signature _____ Date _____

Annex III: English version of a Semi-structured interview guides

Interview guide to explore Parent satisfaction and barriers with their neonate care services in the Neonatal Intensive Care Unit at selected public hospitals in Addis Ababa, Ethiopia.

Part I: Socio-demographic and Characteristics of Parents/neonates

No	Socio-demographic characteristics	Answer
1.	How old are you?	A. ≤24 B. >24-39 C. >39
2.	Gender	A. Male B. Female
3.	What is your marital status?	A. Single B. Married C. Widowed D. Divorced
4.	What is your level of education?	A. unable to read and write B. Able to read and write C. Diploma D. Degree and above
5.	Residency?	A. Rural B. Urban
6.	What is your occupation?	A. Housewife B. Government employee C. Private employee D. Merchant E. Farmer F. Daily laborer G. Other -----
7.	The average income per month (ETB)?	A. ≤ 1000 B. 1001-5000 C. ≥ 5001
8.	Gestational age	A. <37wks B. ≥ 37wks

Part II: Semi-structured in-depth interview guide

1. How would you assess the quality of care provided to your baby?

Probing question

- I. Can you tell me about your experiences caring for your baby in the neonatal intensive care unit (NICU)? (Decision-making, Visiting hours, your level of satisfaction, and the duration of your stay).
- II. What do you think about the neonatal intensive care unit services? (Nurse Experience and care, doctor experience and care, bed, room).
- III. Did you think that your baby received all the necessary care? (Right person, right medication, right time, right diagnosis, and right management).

2. What are the challenges you faced during your stay in the NICU?

Probing question

- I. How do you access laboratories, pharmacies (medication, glove, syringe), and X-ray/diagnostic facilities?
- II. What do you feel about the waiting area for parents? (enough space, safety, security)
- III. Did you experience emotional challenges? (Fear, anxiety, sadness, or hopelessness).

3. What do you think about the information and emotional support provided by the HCP?

Probing questions

- I. Can you tell me about the information provided by the healthcare provider regarding your newborn? (Clear, easy, in your language, timely, continuously updated information).
- II. Did you feel the healthcare providers were responsive to your questions and concerns? (Doctors, Nurses).

<p>III. Did you think you understood and were supported by the healthcare providers? (give a response to your question, empathy)</p> <p>IV. In NICU any counseling and supportive services is available for you? Can you tell us what type of support you have got?</p>
<p>4. What are the most common barriers you encounter in accessing and utilizing neonatal care services? (e.g. financial constraints, residency, lack of awareness, social support)</p>
<p>5. What was the most positive aspect of your experience in the NICU?</p>
<p>6. What do you think, which area should be improved in NICU services care?</p>

Thank you for your Participation

Annex IV: Amharic version of the information sheet

በጥናቱ ለሚሳተፉ የስምምነት ዉል እና አጠቃላይ መረጃ

የጥናቱ ርዕስ ጉዳይ: በአዲስ አበባ ከተማ ዉስጥ በሚገኙ በተመረጡ የመንግሥት ሆስፒታሎች ስለሚሰጥ የጨቅላ ህጻናት ህክምና/ እንክብካቤ እርካታ ለመዳሰስ የቀረበ ጥናት ነው።

ጥናቱን የሚያካሂደዉ ስም: ደርበዉ አወቀ

የተቋሙ ስም: አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ

የስፖንሰሩ ስም: አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ

መግቢያ: ይህ የመረጃ ዝርዝር እና የስምምነት ቅፅ በአዲስ አበባ ከተማ ዉስጥ በሚገኙ በተመረጡ የመንግሥት ሆስፒታሎች ስለሚሰጥ የጨቅላ ህጻናት ህክምና/ እንክብካቤ እርካታ ለመዳሰስ የቀረበ ጥናት ነው።

የጥናቱ አላማ: የዚህ ጥናት ዋና አላማ በአዲስ አበባ ከተማ ዉስጥ በሚገኙ በተመረጡ የመንግሥት ሆስፒታሎች ስለሚሰጥ የጨቅላ ህጻናት ህክምና/ እንክብካቤ እርካታ ለመዳሰስ የቀረበ ጥናት ነው።

የዚህ ጥናት ዉጤት በአዲስ አበባ ከተማ ጨቅላ ህጻናት ላይ የሚሰጠዉን ህክምና/ እንክብካቤ በማሻሻል ለ ወላጆች እርካታ መስጠት እና የህጻናትን ሞት ለመቀነስ ያግዛል ።

የጥናቱ ሂደት: በጥናቱ ዉስጥ ለመሳተፍ የተካተቱትን መመዘኛዎች ያሟሉ ወላጆችን ያካትታል። በዚህ ጥናት ለመሳተፍ ፍቃደኛ ከሆኑ በታላቅ አክብሮት ተጋብዘዋል። ለመሳተፍ ፍቃደኛ ከሆኑ፤ እኛ በጣም ደስተኞች ነን እናም የዚህን ጥናት አላማ በትክክል መረዳት እና ስምምነትዎን እዲያሳይ እንፈልጋለን። በመጨረሻም በቃለ መጠይቁ ትክክለኛ ምላሽዎን እንዲሰጡ በአክብሮት እንጠይቃለን።

ጥቅማጥቅም፤ ጉዳት እና/ወይም የማይመች ነገር: በዚህ ጥናት በመሳተፍዎ የተወሰነ ደቂቃ ሊፍጂበዎት ይችላል ሆኖም ግን የናንተ ተሳትፎ በጨቅላ ህጻናት ህክምና/እንክብካቤ ሁሪያ የወላጆች እርካታ ለማጥናት እና አስፈላጊዉን መፍትሄ እዲወሰድ ያግዛል። በዚህ ጥናት በመሳተፈዎ ምንም አይነት ጉዳት ወይም ቀጥተኛ ጥቅም አይኖረዉም።

ማበረታቻ/ለማበረታቻ ክፍያዎች: በዚህ ጥናት ለመሳተፍ ማበረታቻ ወይም ክፍያ አይኖረዉም።
ሚስጥራዊነት: ከእርሶዎ የተሰበሰበዉ መረጃ በኮምፒተር ዉስጥ ስምዎ ሳይኖር በሚስጢር ይቀመጣል።
የመቃወም ወይም የመተዉ መብት: በዚህ ጥናት ዉስጥ ያለመሳተፍ ሙሉ መብት አለዎት በተጨማሪም ጥናቱን ሳያጠናቅቁ በፈለጉት ሰዓት የመተዉ መብትዎ የተጠበቀ ነዉ።

ማግኘት የሚችሉት ሰው፡ ይህ ጥናት አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ በተቋማት ግምገማ በርድ እዲፀድቅ ይደረጋል።ማናቸውም ጥያቄ ሲኖረዎት በማንኛውም ጊዜ ማነጋገር ይችላሉ በተጨማሪም ማንኛውንም መረጃ በፈለጉት ጊዜ ማግኘት ይችላሉ።

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ኢ-ሜል፡ dervata@gmail.com

Annex V: Amharic version of informed consent

አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ ነርሲንግ እና ሚድዋይሬሪ ትምህርት ቤት

ነርሲንግ ትምህርት ክፍል

በአዲስ አበባ ከተማ ዉስጥ በሚገኙ በተመረጡ የመንግሥት ሆስፒታሎች ስለሚሰጥ የጨቅላ ህጻናት ህክምና/ እንክብካቤ እርካታ ለመዳሰስ የቀረበ ጥናት ነው።

ዉድ የጥናቱ ተሳታፊዎች!

ጤና ይስጥልኝ፣ስሜ----- ይባላል። በአሁኑ ወቅት በአዲስ አበባ ዩኒቨርሲቲ በነርሲንግ እና ሚድዋይሬሪ ትምህርት ክፍል የሁለተኛ ዲግሪ ትምህርቴን እየተከታተልኩ እገኛለሁ።የሁለተኛ ዲግሪዬን ለመጨረስ ይረዳኝ ዘንድ በአዲስ አበባ ከተማ ዉስጥ በሚገኙ በተመረጡ የመንግሥት ሆስፒታሎች ስለሚሰጥ የጨቅላ ህጻናት ህክምና/ እንክብካቤ እርካታ ለመዳሰስ በሚለዉ ርዕሰ ጉዳይ ላይ ጥናት እያደረኩ እገኛለሁ።ጥናቱ አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ትምህርት ቤት በነርሲንግ እና ሚድዋይሬሪ ትምህርት ክፍል የጸደቀ ነው። ፡ ስለሆነም ከላይ የተዘረዘሩት የጥናቱ ዓላማዎች ይሳኩ ዘንድ በእናንተ በኩል በእውነታ ላይ የተመሠረተና ትክክለኛ የሆነ መረጃ እንድትሰጡኝ እየጠየኩ ለቃለ መጠይቁ የምትሰጡኝ መልስ ግላዊ እና ስማችሁን ያላካተተ በመሆኑ በከፍተኛ ሚስጥራዊነት የሚጠበቅ ይሆናል። ከዚህም በተጨማሪ በጥናቱ ላይ የምትሳተፉት በፍቃደኝነት ስለሆነ ካልተመቻችሁ ባስፈለጋችሁ ጊዜ ማቆም/ማቋረጥ መብታችሁ ነው። እርስዎ ጥያቄ በመመለስ ብትተባበሩኝ ለጥናቱ መሳካት የራስዎን ጉልህ ድርሻ ተወጡ ማለት ነው። መጠይቁን ለመመለስ ፍቃደኛ ነሽ/ነዎት?

- 1. አዎ 2. አይደለሁም

መልስዎ አዎ ከሆነ ወደቀጣይ ገጽ ይሻገሩ

ጥናቱን የሚሰራው: ደርበዉ አወቀ እባላለሁ

ስልክ ቁጥር: (+251)929268617

ኢ-ሜል: dervata@gmail.com

ጥናቱን የሚሰበስበዉ ስም _____ ፊርማ _____

ጥናቱ መሰብሰብ የተጀመረበት ቀን _____ /2017 ዓ/ም

ጥናቱ መሰብሰብ የተጀመረበት _____ ሰዓት _____ ደቂቃ

ጥናቱ ተሰብስቦ ያለቀበት _____ ሰዓት _____ ደቂቃ

የተጣራበት ቀን _____ ወር _____ 2017ዓ/ም

የጥናቱ ተሳታፊዎች ፍቃደኝነት ቅፅ

እኔ የጥናቱ ተሳታፊ የሆንኩኝ ወላጅ ይህ ጥናት በአዲስ አበባ ከተማ ውስጥ በሚገኙ በተመረጡ የመንግሥት ሆስፒታሎች ስለሚሰጥ የጨቅላ ህጻናት ህክምና/ እንክብካቤ እርካታ ለመዳሰስ የቀረበ ጥናት መሆኑን አውቂያለሁ። የምሰጠውም ግላዊ መረጃዬ በሚስጥራዊነት እንደሚጠበቅ እና ለዚህ ጥናት አላማ ብቻ እንደሚውል ተነግሮኛል። ጥናቱ ውስጥ ያለፍላጎት ተሳታፊ ሆኜ መቀጠል እንደላለብኝ እና መቀጠል ባልፈለግሁ ጊዜ ማቆም እንደምችል ተረድቻለሁ። በአጠቃላይ ከላይ የተዘረዘሩትን መብቶቼን በማወቅና የእኔ በዚህ ጥናት ላይ መሳተፍ ጥቅም አለው ብዬ በማመን በሙሉ ፍቃደኝነት ለመሳተፍ ተስማምቻለሁ።

ፊርማ _____

ቀን _____

Annex VI: Amharic version of interview guides

በአዲስ አበባ ከተማ ውስጥ በሚገኙ በተመረጡ የመንግሥት ሆስፒታሎች ስለሚሰጥ የጨቅላ ህጻናት ህክምና/ እንክብካቤ እርካታ ለመዳሰስ የቀረበ የቃለ መጠይቅ መመሪያ

ክፍል 1. መሠረታዊና ማህበራዊ ጥያቄዎች

ተቁ	መሠረታዊና ማህበራዊ ጥያቄዎች	መልስ
1.	ዕድሜህ/ሽ ስንት ነው	ሀ. ≤24 ለ. >24-39 ሐ. >39
2.	ጾታ	ሀ. ወንድ ለ. ሴት
3.	የጋብቻ ሁኔታ	ሀ. ያላገባ/ች ለ. ያገባ/ች ሐ. የፈታች መ. እመበለት
4.	የትምህርት ደረጃ	ሀ. ማንበብ እና መጻፍ እማይችል ለ. ማንበብ እና መጻፍ እሚችል ሐ. ዲፕሎማ መ. ድግሪ እና ከዚያ በላይ
5.	መኖሪያ	ሀ. ገጠር ለ. ከተማ
6.	የርስዎ የስራ ድርሻ	ሀ. የቤት እመቤት ለ. የመንግስት ሰራተኛ ሐ. የግል ተቀጣሪ መ. ነጋዴ ሠ. አርሶ አደር ረ. የቀን ሰራተኛ ሰ. ሌላ-----
7.	የወር ገቢ በ አማካይ (ኢቲቢ)	ሀ. ≤ 1000 ለ. 1001-5000 ሐ. ≥ 5001
8.	ልጅዎ በስንት ሳምንቱ ነው የተወለደ	ሀ. ≤ 37 ሳምንት ለ. ≥ 37 ሳምንት

ክፍል 2: በከፊል የተዋቀረ ጥልቀት ያለው የቃለ መጠይቅ መመሪያ

<p>1. የጨቅላ ህጻናት ህክምና አገልግሎት አሰጣጥ ጥራት እንዴት ይገመገሙታል?</p> <p>ጥልቅ ጥያቄ</p> <p>I. የ ጨቅላ ህጻናት አገልግሎት አሰጣጥ ላይ ያለዎት ተሞክሮ ምን ነው?(ዉሳኔ ላይ መሳተፍ፣ህጻኑን ማየት፣ የእርካታዎ ደረጃ,በ ጨቅላ ህጻናት ህክምና ክፍል ዉስጥ ስንት ቀን ቆይተዋል)</p> <p>II. በ ጨቅላ ህጻናት ህክምና አገልግሎት አሰጣጥ ዙሪያ ምን ተሰማዎት?(የነርሶች ብቃት፣የሀኪሞች ብቃት፣የ ጨቅላ ህጻናት አልጋ፣ የ ጨቅላ ህጻናት ክፍል)</p> <p>III. ልጅዎ ጥራት ያለው ህክምና እንደተደረገለት ተሰምቶዎታል?(በትክክለኛ ሰው፣ትክክለኛ መድሀኒት፣ በትክክለኛ ሰዓት፣ትክክለኛ ህክምና)</p>
<p>2. በጨቅላ ሕፃናት ህክምና ክፍል ቆይታዎ ምን ችግር አጋጠመዎት?</p> <p>ጥልቅ ጥያቄ</p> <p>I. በሆስፒታሉ ውስጥ ላብራቶሪ፣ መድኃኒትና ኤክስሬይ ያሉትን ሁሉንም አገልግሎቶች አቅርበታቸዉ ምን ይመስላል?</p> <p>II. አስታማሚ/ወላጆች ስለሚያርፉበት ቦታ ምን ትላለህ?(በቂ ቦታ፣ንጹህ፣ደህንነቱ የተጠበቀ)</p> <p>III. ጥሩ ያልሆኑ ስሜታዊ ፈተናዎች አጋጥመውዎታል? (ፍርሃት, ጭንቀት, ሀዘን, ወይም ተስፋ መቁረጥ).</p>
<p>3. በጤና ባለሙያዎች ስለተሰጡዎት መረጃዎች ና ድጋፍ ምን ይሰማዎታል?</p> <p>ጥልቅ ጥያቄ</p> <p>I. በጨቅላ ሕፃናት ህክምና ክፍል ውስጥ በጤና ባለሙያዎች ስለሚሰጡዉ መረጃ ሊነግሩኝ ይችላሉ? (ግልጽ፣ ቀላል፣ በእርስዎ ቋንቋ፣ ወቅታዊ)።</p> <p>II. የጤና ባለሙያዎች ለጥያቄዎችዎ እና ስጋቶችዎ ምላሽ እንደሰጡ ተሰምቷችኋል?(የነርሶች፣የሀኪሞች)</p> <p>III. ጤና ባለሙያዎች እንደተረዳዎት እና እንዳይገዙዎት ይሰማዎታል? (ለጥያቄዎ ተገቢ መልስ እሚሰጡ ፣ ሩህሩህ)</p> <p>IV. ለእርስዎ የምክር ወይም የድጋፍ አገልግሎቶች ነበሩ?</p>
<p>4. የጨቅላ ህጻናት ህክምና አገልግሎቶችን ለማግኘት እና ለመጠቀም የሚያጋጥሙዎት መሰናክሎች ምንድን ናቸው? (ለምሳሌ የገንዘብ ፣ የመኖሪያ ቦታ እርቀት፣ የግንዛቤ ማነስ፣የቤተሰብ ድጋፍ)</p>
<p>5. በሕፃናት ክፍል ውስጥ በነበሩበት ጊዜ በጣም አዎንታዊው ገጽታ ምን ነበር?</p>
<p>6. አጠቃላይ ስለ ጨቅላ ህጻናት እንክብካቤ ምን ምን ነገሮች መሻሻል አለባቸው ብለዉ ያስባሉ?</p>

ለተሳትፎዎ በጣም አመሰግናለሁ !!!

PARENTAL SATISFACTION AND BARRIERS WITH THEIR NEONATES CARE SERVICES IN THE NEONATAL INTENSIVE CARE UNIT AT SELECTED PUBLIC HOSPITALS IN ADDIS ABABA, ETHIOPIA 2025. BY: - DERIBEW AWEKE

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the Neonatal Intensive Care Unit", Journal of College of Medical Sciences-Nepal, 2017
Publication

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*% detected as AI

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

Caution: Review required.

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

Disclaimer

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

Frequently Asked Questions

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

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

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

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

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

What does 'qualifying text' mean?

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

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



PARENTAL SATISFACTION AND BARRIERS WITH THEIR NEONATES CARE SERVICES IN THE NEONATAL INTENSIVE CARE UNIT AT SELECTED PUBLIC HOSPITALS IN ADDIS ABABA, ETHIOPIA 2025. By DERIBEW AWOKE (BSC)