ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCE

SCHOOL OF NURSING AND MIDWIFERY

DEPARTMENT OF NURSING

PERCEIVED ANXIETY AND SELF-CONFIDENCE AMONG UNDERGRADUATE NURSING STUDENTS DURING CLINICAL PRACTICE IN SELECTED COLLEGES PROVIDING NURSING STUDIES IN ADDIS ABABA, ETHIOPIA, 2023.

BY: AYUSH GEBREEGZIABHER (MSc CANDIDATE)

A THESIS TO BE SUBMITTED TO ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCE, DEPARTMENT OF NURSING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF SCIENCE IN PEDIATRICS AND CHILD HEALTH NURSING

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Acronyms and abbreviations

ACHA- American College Health Association

AAU- Addis Ababa University

AOR- Adjusted Odds Ratio

CDM- Clinical Decision-Making

COR- Crude Odds Ratio

CT- Critical Thinking

CI- Confidence Interval

ETB- Ethiopian Birr

MOH- Ministry of Health

NASC-CDM- Nursing Anxiety and Self-confidence with Clinical Decision-Making Scale

SPSS- Statistical Package for Social Science

PI- Principal Investigator

PPE- Personal Protective Equipment

QI- Quality Investigator

WHO- World Health Organization

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Abstract

Background:.Anxiety is described as a sensation of impending dread and a connection of emotions in circumstances that cause anxiety because a bad thing could happen, while also taking into account one's perception of one's abilities. Self-confidence is the belief and feeling of confidence in one's abilities and capabilities to plan and carry out the courses of action necessary to achieve goals.

Objective: To assess perceived anxiety and self-confidence among undergraduate nursing students during clinical practice in selected colleges providing nursing studies in Addis Ababa, Ethiopia 2023.

Methods: A institutional-based cross-sectional study design was employed to assess perecived anxiety and self-confidence among undergraduate nursing students during clinical practice. 293 students were enrolled. Six nursing colleges were selected by simple random sampling technique. The students were chosen by a simple random sampling method from each college proportionally. Data was collected using a self-administered semi-structured questionnaire through NASC-CDM. It was entered into Epidata 4.6 and then exported to SPSS version 26.0 for final analysis. Bivariate analysis at a P-value of 0.25 and multivariate analysis at a P-value of 0.05 was applied.

Result: A total of 275 students participated in this study. The proportion of perceived good self-confidence of nursing students during clinical practice was 49.1% and for perceived anxiety was 46.9%. The sex of the students, the thinking of clinical instructors were prepared well during clinical attachments, think of the shortage of staff in the hospital affect clinical learning, and the perceived self-confidence of nursing students were significant predictors of the perceived anxiety of the students. The students who had poor perceived self-confidence were 5 times more likely to be more anxious than those having good perceived self-confidence

Conclusion and recommendation:. This research strongly recommends that students should be motivated and evaluated regularly for anxiety and self-confidence during clinical practice.

Keywords: Perceived anxiety, Perceived self-confidence, Nursing students, Clinical practice, Addis Ababa, Ethiopia.

1. Introduction

1.1. Background

Two emotional factors that have an impact on how well people learn and use clinical decision-making are self-confidence and anxiousness. Anxiety is described as a sensation of impending dread and a connection of emotions in circumstances that cause anxiety because a bad thing could happen, while also taking into account one's perception of one's abilities. Self-confidence is the belief and feeling of confidence in one's abilities and capabilities to plan and carry out the courses of action necessary to achieve goals. This requires having high self-esteem and exercising restraint with one's emotions (2).

Anxiety is highly prevalent among college students. Some of the concerns among students are academic performance and pressure to succeed (3). Nursing education has consistently been associated with anxiety among students. Heavy course loads, stringent examinations, continued pressure to attain a high grade point average (4), complex interpersonal relationships, challenges of the clinical environment (5), and caring for chronic and terminally ill patients (6) result in greater anxiety among nursing students than among students from any of the other healthcare disciplines. Furthermore, it has been found that the clinical training taking place during nursing education is more stressful than the theoretical aspect (7,8). Anxiety hurts the quality of students' life, their education, and clinical practice and may cause drop out of the nursing program.

Self-confidence has been divided into inner and external confidence for easier understanding. The former is associated with self-love, self-awareness, and optimistic thinking. The latter has to do with emotional regulation and communication. These characteristics enable self-confidence to be distinguished from self-efficacy (9,10). Confidence is essential for a nurse to feel confident while carrying out a task. However, it develops because of repeated experiences that solidify one's view of success and failure (9). Additionally, it has been demonstrated that self-confidence is also multifactorial because it is connected to interactions between cognition and behavior as well as environmental influences (10).

Nursing is the largest segment of the healthcare profession and is responsible for providing the majority of direct care to patients in acute, ambulatory, and long-term care settings (13). To solve patients' difficulties, clinical decision-making is described as making the best options available (14). According to the factors affecting clinical decision-making for nurses, the complexity of healthcare services has increased the need for caring. Good clinical decision-making abilities, when properly used, improve care, lower medical error rates, lower costs of care and treatment by making more efficient use of available resources, and consequently boost nurse and patient motivation (15).

1.2. **Statement of the problem**

According to WHO, an estimated 275 million people suffer from anxiety disorders which are around 4% of the world population, with a spread of 2.5% to 6.5% of the population per country. About 170 million females suffer from anxiety compared with 105 million male sufferers. The prevalence of anxiety among the general population in Africa showed that Eastern Africa is the highest in anxiety with 49% (16). A study done last year in Ethiopia, among undergraduate medical students of Haramaya University reported a 48.9% prevalence of anxiety (17).

Stress among college students is higher now than in the past. Anxiety and lack of self-confidence are emotional responses that may emerge when individuals anticipate threats. Undergraduate nursing students may experience feelings of hopelessness and anguish in the clinical learning experience, directly affecting their academic performance. Human beings are social entities, and the impact of the social environment in which they live is important to the individual, especially in societies like Ethiopia. The demands of the family, expectations, life, attitude, and the number of siblings are considered some of the important factors in the formation of anxiety in the student. Most of the anxiety in the students consists of the anxiety of failing to meet the high expectations of the parents in their school success (18,19). Clinical applications form an important part of Nursing Education. Clinical training enables students to integrate theoretical knowledge with practice and learn by doing and living in a real environment.

Nursing students' stress and anxiety hindered their ability to learn in a clinical setting (20). Regrettably, clinical nursing faculty have not made much of an effort to lessen student anxiety in clinical settings despite the abundance of information about the demanding and stressful demands placed on nursing students. The clinical environment for nursing students is even more demanding as medical technology advances year after year. Due to the paucity of nurses, the fact that students lack prior healthcare expertise, and the increased number of seriously ill-hospitalized patients, clinical experiences are also more difficult. The pandemic also challenged the meaning of nursing as nursing is a caring profession rooted in the close relationship with the patient, touch, and body proximity to deliver effective nursing care (21). This study aims to reflect upon the anxiety and lack of self-confidence faced by nursing students during clinical practice in Addis Ababa-based nursing colleges, in Ethiopia.

1.3. **Significance of the study**

The clinical nursing curriculum seeks to give students hands-on experience applying a nursing course to patients attending, and what is most stressful in the process is precise clinical practice, critical thinking, and acquiring clinical competence. In academic environments, self-confidence is essential and required. However, unexpectedly little thought has been paid to the relevance, caliber, and degrees of nursing students' self-confidence as well as their own unique learning needs, interests, and capabilities.

Even though many types of research have identified the variables influencing CDM in nursing students, only a small number of these studies have been carried out in Ethiopia, and the majority of them have concentrated specifically on the variables influencing nursing students' performance as a whole. A study like this is necessary to fill this knowledge gap because there are not many studies out there that explain the causes of the observed variation in nurses' performance in clinical settings. For nursing students, the findings of the study will assess the prevalence and associated factors of anxiety and self-confidence during clinical practice. For clinical instructors, the findings of the study will motivate them to evaluate regularly students for anxiety and self-confidence during CDM and provide a pleasant clinical experience. For policymakers, to adopt a strategy to screen students regularly for anxiety and self-confidence during CDM and intervene accordingly plus create an "Ethiopian" suitable nursing curriculum. For a researcher, the result will be used as baseline data for future research.

2. Literature review:

The current professional nursing practice requires nurses to develop skills that will allow them to fulfill health needs in increasingly diverse complex scenarios, increasing anxiety in nurses and nevertheless in students. These scenarios demand nurses to constantly make effective, timely, scientifically supported decisions that involve the individual, to provide holistic care that will result in the maximum benefit for the patient. The available resources, assessment of possible risks, and especially taking into consideration the patient´s opinion about treatment and care to be provided. Due to its importance, CDM is considered "the cornerstone of the profession" (2), since the nursing student acquires and develops knowledge, skills, and dexterities from a holistic perspective and through applying the scientific method.

2.1 Anxiety of nursing students during clinical practice

Nursing students represent a population at increased risk of anxiety (22). A fair level of stress is motivating, whereas high levels of anxiety undermine learning and clinical practice. Students who perceive their learning environment negatively employ a surface approach to learning. It is, therefore, crucial to create a positive educational environment that promotes a deep approach to learning(23). Among university and college students in Hong Kong, the prevalence of moderate anxiety was 12.2% and severe anxiety was 5.8%; in Portugal, 15.6% suffered from moderate anxiety while 8.3% suffered from severe anxiety, and in Australia 17.5% suffered from moderate anxiety. Among medical students prevalence of moderate anxiety was 25% in the UK, 20% in North America, 13.7% in New Zealand, and 23% in Lebanon (22).

In a study done to predict the metacognitive awareness of students on anxiety in CDM, 76.3% were female, the mean age was 21.97 and 61.3% of the students were in the fourth year. It concluded that students' metacognitive awareness substantially predicted their score on anxiety with the clinical decision-making scale's "using resources to obtain information and listening fully" sub-dimension. Metacognitive awareness significantly influenced the sub-dimension of anxiety with a clinical decision-making scale that measures "using the information to understand the broad picture". Finally, it is discovered that there was a large impact on the sub-dimension of "knowing and acting" (24). A systematic review done in Saudi Arabia revealed moderate to high levels of stress among Saudi student nurses, which was mainly brought on by their demanding workloads and patient care. Although some research suggested that higher-level students experienced more

stress, results were mixed when the demographic characteristics of the students were taken into account (25).

In a study to assess the nurse educators' experiences of fostering undergraduate students' ability to manage stress and demanding situations, 13 nurse educators participated in the interviews. To create a nursing workforce that is better able to handle stress and difficult situations and is, therefore, better prepared to negotiate the intricacies connected with patient care, it is essential to assist nursing students in managing their stress. Nurse educators should continue to contribute by fostering a culture of stress sharing, sharing personal experiences, and improving student stress management skills by teaching through demonstration and giving them the confidence to stand up for themselves (27). A study done in Mexico, showed that only 34 percent of the respondents had high level of anxiety (46) while a study done in Minofya, Egypt in which only 20.6 percent of the participants were more anxious (44)

2.2 Self-confidence of nursing students during clinical practice

Confident students involve in challenging outcomes, committed to utilizing their clinical skills, and handle difficult tasks with less anxiety. Clinical confidence learning takes place in a clinical setting through practicing nursing skills and experiencing success. Consequently, clinical instructors are responsible to promote student's confidence by building a confidence-rich learning environment. Clinical instructors should be able to identify students with low confidence and develop suitable teaching practices that help promote self-confidence. The clinical nurse educator is an essential component of an effective clinical nursing education. They facilitate students to apply knowledge and skills in a practical environment. The necessity for an additional thorough inquiry of students' perceptions of the features and instructional behaviors that much better help their understanding and learning will assist educators to enhance learning practices in the clinical environment (28,29).

For nursing students to perform their obligations in the clinical setting competently, the confidence level is a crucial aspect. Nursing students frequently lacked faith in their clinical competence. The degree to which students are confident in the clinical setting may alter because of changes in the nursing curriculum that promote more student-centered learning activities (30). The "using resources to obtain information and listening fully" subdimension of the self-confidence with clinical decision-making scale was found to be explained by metacognitive awareness in 26.7% of cases. Metacognitive awareness was also found to strongly predict students' scores on the "knowing and doing" sub-dimension (= 0.518). The self-confidence in the clinical decision-making scale's "knowing and acting" sub-dimension was shown to be 26.4% explained by metacognitive awareness (24).

Successful performance in the clinical setting depends on student self-efficacy concerning clinical skills. The results show that seniors had higher levels of self-efficacy than juniors did and that different groups of students had different backgrounds and levels of confidence when it came to using particular clinical abilities. Strategies to enhance students' clinical skill learning that is specific to the laboratory and clinical contexts are discussed (31). Higher self-confidence in nursing students will come as a result of constant testing of their knowledge and capacity to select assertive interventions to be executed on patients. Another study conducted in Mexico City to

assess self-confidence and anxiety as intervening factors in clinical practice revealed that 69 percent of the nursing graduates had high level of self-confidence (43). Once proven successful, the level of self-confidence will increase, reinforcing every time assurance about their clinical performance, while reducing the possibility of an error (9). A study conducted in Minia University, Egypt showed that 79.9% of the participants had good perceived self-confidence (44). In the case that students have previous working experience, self-confidence is enhanced, as the student perceives himself as a competent professional to treat people (10). However, the fact that students' training normally occurs in the clinical scenario prevents self-confidence to develop adequately, since the actions taken by students are usually carried out while presenting high levels of anxiety (32). Because of this, nursing teachers should be aware of the students' emotions, so that negative outcomes and demotivation can be avoided.

2.3 Associated Factors with Anxiety and Self-confidence of nursing students during clinical practice

Recent studies revealed that among the many factors affecting the anxiety and self-confidence of nursing students during clinical practice, the prominent ones have been personal, sociodemographic, hospital, and nursing school factors.

2.3.1 Personal factors

The research set out to determine the clinical experiences that caused anxiety in nursing students. Data from 61 nursing students shows that 36% of the students had moderate levels of anxiety. The clinical situations that caused these students the most anxiety were those involving being late, being observed by teachers, responding to initial experiences, being afraid of making mistakes, and speaking with doctors (33). Supervision, lack of resources, and anxiety are reported also in other studies, like the study done on the attitudes of student nurses toward clinical work. This linked to late reporting time and absenteeism from duty leads to poor performance in clinical practice; too many patients may lead to exhaustion in clinical areas. The lack of basic equipment and supplies for nursing care procedures makes students ignore clinical practice. The students felt that clinical practice provides better opportunities and a favorable setting to apply theory to practice (34).

A study done in southern Israel showed gender, lack of PPE, and fear of infection were significantly associated with a higher anxiety score. The anxiety score of students who reported intense fear of infection was found to be significantly higher. (22). In higher years, there was a drop in confidence in what they were learning about working in teams, controlling adverse events, and responding to bad events in the clinical context. The majority of students were reluctant to voice their concerns regarding patient safety. Confidence in learning about adverse events, managing safety risks, and developing fundamental clinical skills all increased, while confidence in managing safety risks decreased in higher years. According to these findings, nursing students are confident in the clinical patient safety concepts they are learning, but as they become more accustomed to the clinical setting, their confidence in their understanding of sociocultural concepts decreases. This indicates that there is a need to address how the practice environment affects nursing students' belief in the patient safety lessons they are learning (35).

2.3.2. Sociodemographic factors

Anxiety was reported by the majority of the students as one of the factors that affect performance in clinical practice. A study done in southern Israel showed the prevalence of moderate and severe anxiety was 42.8% and 13.1% respectively. Males had significantly lower anxiety scores in comparison with females (22). Similarly, a study done in Johannesburg, South Africa found that anxiety contributed to poor clinical practice and affected up to 94% of female students at the beginning of placements (36). In the previous study done in Tanzania, it was found that anxiety affected female students more than males. The identified reason was fear of making mistake and lack of experience. The study concluded that effective clinical supervision and proper patient assignment to students and case presentation could help to reduce anxiety(37). In another study, including five men and four women between the ages of 22 and 24. The learner's lack of preparation, poor clinical supervision, and an unsupportive clinical atmosphere were the three main themes that emerged. The study's results showed that the obstacles faced by nursing students in the clinical learning environment at Addis Ababa University's nursing department are learner uneasiness, a lack of clinical supervision, and an unsupportive clinical setting (38). In a study to learn about patient safety in the classroom and clinical settings, nursing students had a good level of confidence in their understanding of the clinical components of patient safety, but they lacked it when it came to the sociocultural facets (35).

2.3.3 Hospital-based factors

Hospital-based factors like shortage of staff, lack of learning materials, and too many patients were important barriers to clinical practice. The issue is that the students are compelled to cover the shortage of staff instead of achieving their clinical practice objective (37). This finding was close to the study, which concluded that the students were placed to cover the shortage as a substitute. It was recommended that to ensure quality clinical practice the health facility must have adequate staff and resources. There is a relationship between facilitators and barriers to clinical practice and preparing students in the skills laboratory and orientation before placement (39).

2.3.4 Nursing school factors

A study carried out to examine aspects that affect learning by students in nursing education revealed that the curriculum and practical learning setting with self-efficacy had a broad influence on practical competencies and learning in the nursing profession (40). Moreover, another study done to determine the criteria and instructional methods of good clinical educators revealed that clinical educators played a significant role in preparation of the nursing students to become qualified nurses in the clinical environment (28).

A study done at Urmia University about the Impact of clinical supervision on field training of nursing students revealed that effective supervision, which is a facilitator of effective clinical practice, is also reported by previous studies (41). Another study on effective clinical practice promoted learning and helped students to achieve learning outcomes and competencies through the diversity of learning opportunities. The number of tutors and clinical instructors that match student numbers could facilitate effective supportive supervision (42). Existence of barriers to effective clinical practice such as self-confidence, absenteeism, and inadequate supervision. A study conducted in northern Tanzania to identify the factors affecting performance in clinical practice among nursing students revealed that there did exist several facilitators and barriers to effective performance in clinical practice. The facilitating factors were effective supervision, an adequate number of tutors, and clinical instructors. But, barriers to effective clinical practice included lack of self-confidence, absenteeism, inadequate supervision, lack of resources, and anxiety(37). A study done in University of Gonder, Ethiopia on test anxiety and associated factors in health science students revealed 54.7% of the students were more anxious (45).

2.4 **Conceptual framework**

This conceptual framework shows how the independent variables sociodemographic, student factors, hospital-based factors, and nursing school factors affect the dependent variables (anxiety, self-confidence). The source for the development of this framework is from different literature.

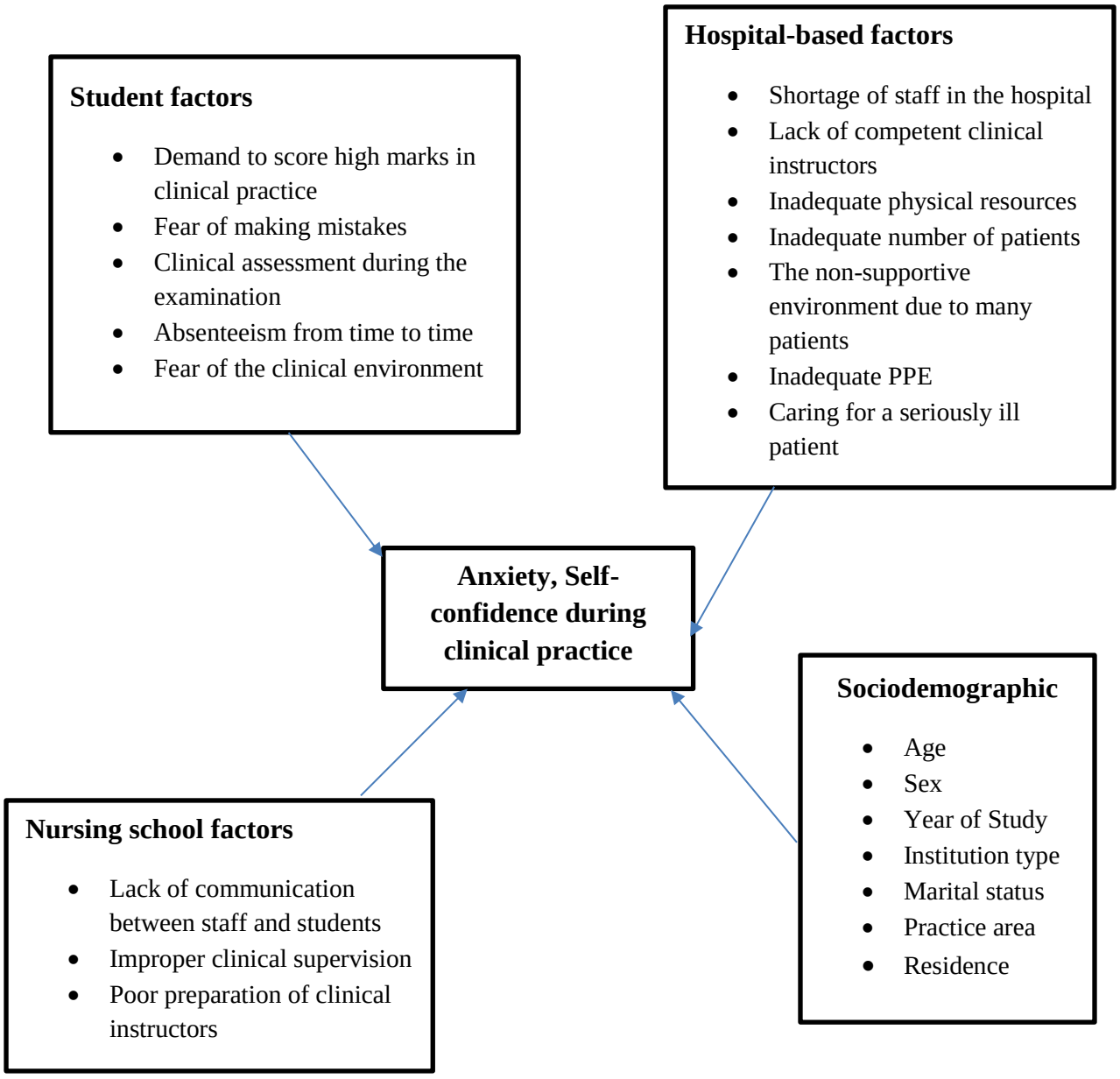


Figure 1: Conceptual framework

3. Objectives:

3.1. **General objective:**

- To assess the perceived anxiety and self-confidence among undergraduate nursing students during clinical practice in selected colleges providing nursing studies in Addis Ababa, Ethiopia 2023.

3.2. **Specific objectives**:

- To determine perceived anxiety among undergraduate nursing students during clinical practice in selected colleges providing nursing studies in Addis Ababa, Ethiopia 2023.
- To determine perceived self-confidence among undergraduate nursing students during clinical practice in selected colleges providing nursing studies in Addis Ababa, Ethiopia 2023.
- To identify the associated factors of anxiety among undergraduate nursing students during clinical practice in selected colleges providing nursing studies in Addis Ababa, Ethiopia 2023.
- To identify the associated factors of self-confidence among undergraduate nursing students during clinical practice in selected colleges providing nursing studies in Addis Ababa, Ethiopia 2023.

4. Methodology:

4.1. Study setting: This study was done in Addis Ababa, which is the capital and largest city of Ethiopia. It is a highly developed and important cultural, artistic, educational, financial, and administrative center of Ethiopia. This study was conducted in six colleges namely Tikur Anbessa College of Health Science, Menelik II Health Science College, Addis Ababa Medical and Business College, Kea-Med Medical College, Alkan Health Science and Business College, and Africa Medical College. There are around 607 nursing students in the third and fourth year, 254 and 353 respectively. The nursing colleges send their students to different health facilities inside the city for clinical attachment like Tikur Anbesa Hospital, Paulos Hospital, Petros Hospital, Yekatit 12 Hospital, Menelik Hospital, Ghandi Hospital, Zewditu Hospital, and different health centers.

4.2. Study period: This study was conducted from April to May 2023.

4.3. Study design**:** An institutional-based cross-sectional study was conducted among undergraduate nursing students in the specified study period.

4.4. Population:

4.4.1 Source population: Undergraduate nursing students in the six selected colleges in Addis Ababa.

4.4.2 Study population**:** Year 3 and 4 nursing students in the selected six colleges present during the data collection period.

4.5 Eligibility criteria:

4.5.1 Inclusion criteria**:** Nursing students who were in their third and fourth year, aged above 18 years.

4.5.2 Exclusion criteria**:** Nursing students critically ill and absent during the data collection period.

4.6 Sample size calculation and sampling procedure:

4.6.1 Sample size

A single population proportion formula was used to estimate the sample size and the following assumptions have been made: assumed proportion 50%, level of significance to be 5% (α = 0.05), 95 % confidence level (Zα/2 = 1.96) and absolute precision or margin of error to be 5% (d = 0.05).

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

Where, n = sample size

p = proportion of anxiety and self-confidence (50%)

Z = standard normal distribution curve value for the 95% confidence interval (1.96)

d = the margin of error or accepted error

$$n = \frac{(1.96)^2 * 0.5(1\text{-}0.5)}{(0.05)^2}$$

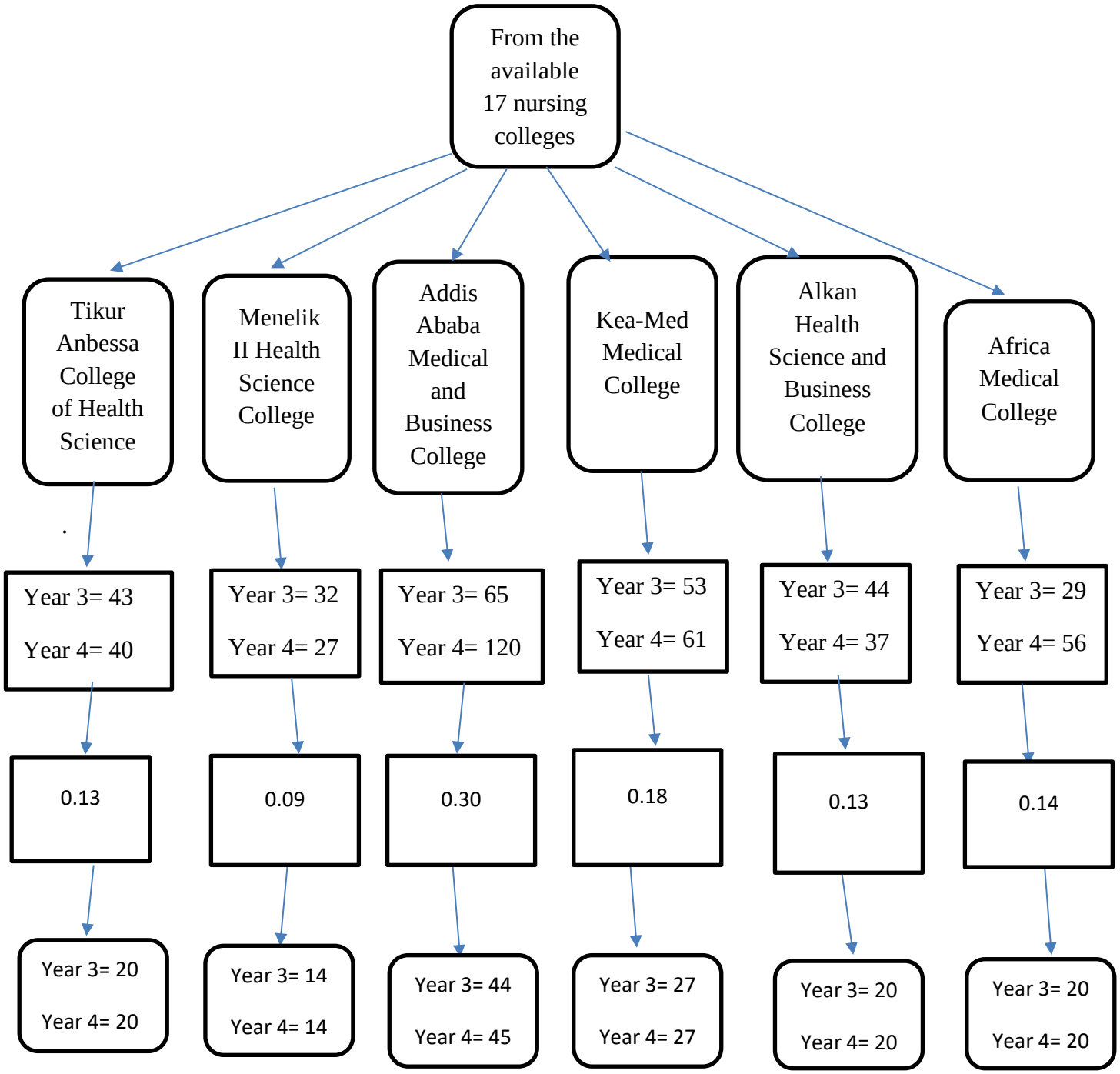
n = 384 students

Using the correction formula, the sample size is 264 students.

Adding a 10% non-responsive rate, the sample size required for this study is 293 students.

4.6.2 Sampling Technique and Procedure:

From the available colleges in Addis Ababa, purposively nursing studies providing colleges were chosen. There were 3 government owned and 14 privately-owned colleges providing nursing studies. From the 17 nursing studies providing colleges, 2 government and 4 private colleges were selected through simple random sampling. Then purposively third and fourth-year students were selected because they had completed at least one clinical attachment. The number of students was proportionally allocated over the six selected colleges. Then the third and fourth-year students were selected systematically.



Total sample size is 293

Figure 2: Schematic Representation of the sampling procedure

4.7 Instruments and data collection procedure:

4.7.1 Data collection tool

The Nursing Anxiety and Self-confidence with Clinical Decision-Making Scale (NASC-CDM): Dr. Krista A. White (White, 2014) developed NASC-CDM. This scale evaluates the self-confidence and anxiety levels of nursing students in clinical practice and is in the English language. The scale provides separate scores for self-confidence and anxiety. This is a 6- point Likert scale; 1 = Not at all, 2 = Just a little, 3 = somewhat, 4 = Mostly, 5 = Almost totally, 6 = totally. For anxiety, 1 point indicates no anxiety while 6 points indicate severe anxiety; the same applies to the self-confidence scale.

4.7.2 Data collection procedure

Data were collected by five BSc nurses, who were trained for two days to meet the objective, purpose, and ethical considerations of the study. It was collected in a quiet and comfortable environment. The data was collected by using a self-administered questionnaire, on the third and fourth-year nursing students in the 6 colleges. A day was scheduled for each college to collect the data.

4.8 Data quality assurance:

Before data collection, to assure data quality two days of training were given to the data collectors by the principal investigator. During data collection, the collected data was reviewed and checked for completeness and consistency by the supervisor, and data collectors were immediately informed if the survey forms were incomplete and inaccurately filled in.

4.9 Study variables:

4.9.1 Dependent variables/Outcome variables:

- Perceived anxiety, perceived self-confidence

4.9.2 Independent variables:

- Socio-demographic factors (Age, sex, year of study, institution type, marital status, practice area, residence)

- Student factors (Demand to score high marks in clinical practice, fear of making mistakes, clinical assessment during examination, absenteeism from time to time, fear of clinical environment)
- Hospital-based factors (Shortage of staff in the hospital, lack of competent clinical instructors, inadequate physical resources, inadequate number of patients, non-supportive environment due to many patients, inadequate PPE, caring for seriously ill patients)
- Nursing school factors (Lack of communication between staff and students, improper clinical supervision, poor preparation of clinical instructors)

4.10 Statistical analysis:

The collected data were checked manually for completeness, then coded and entered into Epi Data version 4.6 and exported to SPSS version 27. After data exploration and cleaning, a univariate analysis was displayed using frequency and percent. Using bivariate analysis candidate variables were identified for multiple regressions at p -value of < 0.5. Again, those variables showing significant association on bivariate analyses were entered into multiple logistic analyses to control (adjust) possible confounding variables and to identify independent predictors variables. Finally, multivariate analysis was used to declare the presence of an association between dependent variables and independent variables at p-value less than 0.05, or AOR, 95% CI. Eventually, results were presented in text, tables, charts, and graphs.

4.11 Operational definition:

- **Anxiety**- Anxiety is a sensation of impending dread and a connection of emotions in circumstances that cause anxiety because a bad thing could happen, while also taking into account one's perception of one's abilities. The scores obtained on the anxiety subscale of the NASC-CDM measurement tool (2).
- **Less anxious**: below the median scores obtained on the anxiety subscale of the NASC-CDM measurement tool (2).
- **More anxious:** above the median scores obtained on the anxiety subscale of the NASC-CDM measurement tool (2).

- **Self-confidence**- Self-confidence is the belief and feeling of confidence in one's abilities and capabilities to plan and carry out the courses of action necessary to achieve goals. The scores obtained on the self-confidence subscale of the NASC-CDM measurement tool (2).
- **Good confidence:** above the median scores obtained on the self-confidence subscale of the NASC-CDM measurement tool (2).
- **Poor confidence:** below the median scores obtained on the self-confidence subscale of the NASC-CDM measurement tool (2).
- **Clinical practice:** Students who had completed at least one clinical attachment.

4.12 Ethical consideration:

Ethical clearance was obtained from the departmental research and ethical review committee of the Department of Pediatrics and child health, school of Nursing, and Midwife Addis Ababa University. An official letter of permission from the department was submitted to the six nursing colleges involved in the study. Respondents were informed about the purpose of the study then the information was collected after obtaining verbal informed consent from each participant. Respondents were allowed to refuse or discontinue participation at any time they want. Information was recorded anonymously and confidentiality and beneficence were assured throughout the study period. All the collected data was kept confidential and no one except the members of the research team had access to the collected information. All paper and computer records of the study were kept in a secured place under lock and the name and/or other personal information was not notified in any report.

4.13 Dissemination of the result:

The result of this study will be disseminated to Addis Ababa University, the Ethiopian nursing association, the Ministry of Education, the Ministry of Health, and relevant stakeholders. Efforts will be made to publish this paper and present it at different national and international conferences.

5. Results

5.1. Sociodemographic factors

Out of eligible 293 nursing students found in the selected nursing colleges in Addis Ababa, 275 students participated in the study making a response rate of 94%. Most of the nurses' students (84.4%) were aged between ≤ 23 years old, with a mean of 22.4 (± 1.717). One hundred eighty (65.5%) of them were females, 129 (46.9%) of them were third year, only 68 (24.7%) of the students were from the government institution, 20 (7.3%) were rural residents and 6 (2.2%) were married **(Table 1).**

Table 1: Socio-demographic factors of students at the six selected nursing colleges found in Addis Ababa, Ethiopia, in 2023 (n = 275).

Characteristics	Frequency	Percent
Age category		
≤ 23 years	232	84.4
>23 years	43	15.6
Sex		
Female	180	65.5
Male	95	34.5
Residence		
Rural	20	7.3
Urban	255	92.7
Marital status		
Married	6	2.2
Single	269	97.8
Year of Study		
Fourth	146	53.1
Third	129	46.9
Institution type		
Government	68	24.7
Private	207	75.3

5.2. **The Magnitude of Factors in nursing students during clinical practice**

The majority of the students (91.3%) felt the demand to score high marks in clinical practice, and 176 (64%) of them fear making mistakes, but only 29.1% of them were absent from the clinical area from time to time. Above half (61.1%) of the students think they lack communication between the nursing staff and students, 155 (56.4%) of them stated the presence of adequate clinical supervision, and below half (42.9%) of the students think clinical instructors were prepared well during clinical attachments. One hundred seventy-three (62.9%) of the students stated the shortage of staff in the hospital affects clinical learning, the majority of them (86.9%) perceived that inadequate physical resources (skills laboratory, library, and classrooms) affect clinical practice, and only (30.5%) of them were not getting anxious while caring for seriously ill patients **(Table 2).**

Table 2: Magnitude of factors in nursing students during clinical practice at the six selected nursing colleges found in Addis Ababa, Ethiopia, in 2023 (n = 275).

Factors	Frequency	Percent
The feeling of demand to score high marks in clinical practice	251	91.3
Fear of making mistakes	176	64
Experience of fear during clinical assessment examination	183	66.5
Absenteeism from the clinical area from time to time	80	29.1
Fear of the clinical environment	124	45.1
Think of the lack of communication between the nursing staff and students	168	61.1
Presence of adequate clinical supervision	155	56.4
Think of clinical instructors who were prepared well during clinical attachments	157	57.1
Think of shortage of staff in the hospital affect clinical learning	173	62.9
Think of the clinical staff as competent	180	65.5
Think of inadequate physical resources (skills laboratory, library, and classrooms) affect clinical practice	239	86.9
Think of the inadequate number of patients in the hospital affects clinical practice	195	70.9
Think of too many patients in the hospital provide a supportive environment for learning	151	54.9
Getting anxious about the unavailability of adequate personal protective equipment in the hospital	232	84.4
Getting anxious while caring for seriously ill patients	191	69.5

5.3. **Perceived Self-confidence of nursing students during clinical practice**

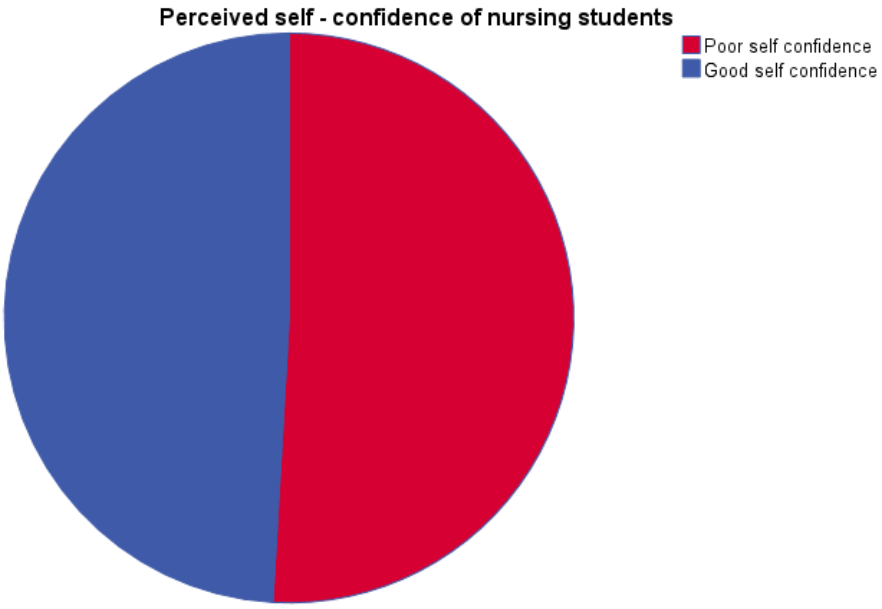


Figure 3: Perceived self-confidence of nursing students at the six selected nursing colleges found in Addis Ababa, Ethiopia, in 2023 (n = 275).

The perceived self-confidence was categorized based on the overall median and its percentage. The proportion of those who scored greater than or equal to the median of 113 (84%) or viewed self-confidence as good in this study was 49.1%, with a 95% CI of (43.2, 55). **(Figure 3).**

5.4. **Perceived Anxiety of nursing students during clinical practice**

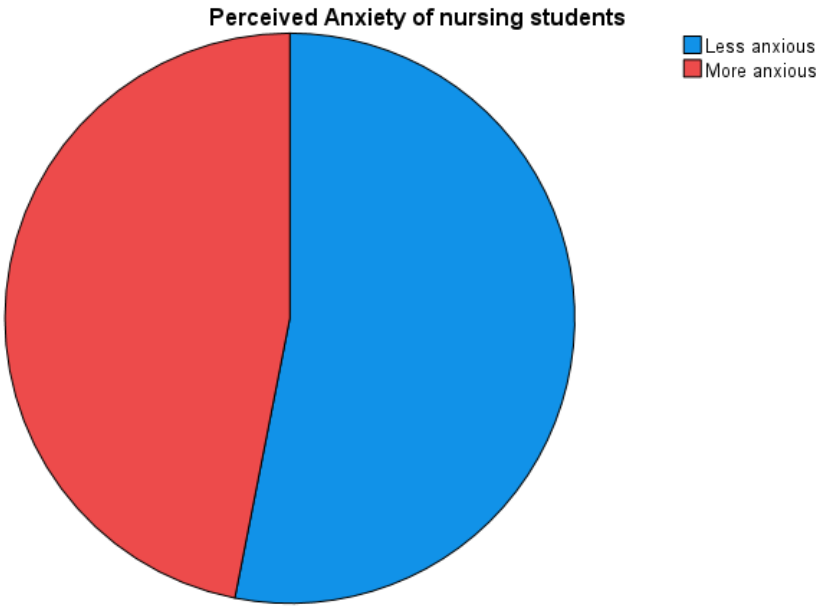


Figure 4: Perceived anxiety of nursing students at the six selected nursing colleges found in Addis Ababa, Ethiopia, in 2023 (n = 275).

The perceived anxiety was categorized based on the overall median and its percentage. The proportion of those who scored greater than or equal to the median of 61 (45%) or viewed anxiety as more anxious in this study was 46.9%, with a 95% CI of (41, 53) **(Figure 4).**

5.5. **Factors Associated with perceived self-confidence of nursing students during clinical practice**

After being filtered for multi-co-linearity by the variance inflation factor (VIF), which had a mean of 1.36. Socio-demographic characteristics such as age category of students and institution type, student factors like fear of making mistakes, and absenteeism from the clinical area. Nursing school factors like lack of communication between the nursing staff and students, presence of adequate clinical supervision, and clinical instructors' preparedness well during clinical attachments. Hospital-based factors such as think of a shortage of staff in the hospital affect clinical learning, inadequate physical resources (skills laboratory, library, and classrooms), affect clinical practice, inadequate number of patients in the hospital affect clinical practice, too many patients in the hospital provide a supportive environment for learning, getting anxious for the unavailability of adequate personal protective equipment in the hospital, getting anxious while caring for seriously ill patients, as well as perceived anxiety of nursing students were candidates for multivariable analysis at a P-value less than 0.25.

However, in a multivariable analysis, factors such as institution type, fear of making mistakes, presence of adequate clinical supervision, and shortage of staff in the hospital affect clinical learning, too many patients in the hospital provide a supportive environment for learning and perceived anxiety of nursing students were significant predictors of the perceived self-confidence of nursing students during clinical practice at a P-value of <0.05. Those students who had a fear of making mistakes had less likely to have good self-confidence than those who did not fear (AOR = 0.178; 95% CI: 0.068 – 0.466).

On the other hand, those who were in government nursing colleges were 4 times more likely to have well-perceived self-confidence than those who were in private ones (AOR = 4.474; 95% CI: 1.538 – 13.013), and those who stated there was a presence of adequate clinical supervision were with 3 times higher likelihood of having good self-confidence as compared with those stated as inadequate clinical supervision (AOR = 3.378; 95% CI: 1.451 – 7.863), and those who perceived as a shortage of staff in the hospital affect clinical learning had 5 times higher likelihood of having good self-confidence than those who stated as did not have an effect (AOR = 5.077; 95% CI: 1.995 – 12.923), as well as those students who were stated as the presence of too many patients in the hospital, provide a supportive environment for learning were with 2.5 times more likely to have good self-confidence as compared with those stated as did not provide (AOR = 2.517; 95% CI: 1.213 – 5.222).

The level of anxiety was also one of the most important predictors of self-confidence; students who were less anxious during their clinical practice had 14 times higher likelihood of having well-perceived self-confidence than those who were more anxious during clinical practice (AOR = 14.415; 95% CI: 6.343 – 32.765) **(Table 3).**

Table 3: Factors associated with perceived self-confidence of participants at the six selected nursing colleges found in Addis Ababa, Ethiopia, in 2023 (n = 275).

Factors	Perceived self-confidence		COR (95% CI)	AOR (95CI)	P-value
	Good	Poor			
Age category					
≤ 23 years	119	113	1.777(0.910,3.472)	0.787(0.284,2.182)	0.645
>23 years	16	27	1	1	
Institution type					
Governmental	54	14	6(3.130,11.502)	4.474(1.538,13.013)	**0.006***
Private	81	126	1	1	
Fear of making mistakes					
Yes	111	65	0.187(0.108,0.326)	0.178(0.068,0.466)	**< 0.001***
No	24	75	1	1	
Absent from clinical area					
Yes	48	32	0.537(0.316,0.911)	0.684(0.288,1.625)	0.389
No	87	108	1	1	
lack of communication between nursing staff and student					
Yes	92	76	0.555(0.339,0.907)	0.507(0.231,1.115)	0.091
No	43	64	1	1	
adequate clinical supervision					
Yes	57	98	3.193(1.942,5.250)	3.378(1.451,7.863)	**0.005***
No	78	42	1	1	
Clinical instructors prepared well for clinical attachment					
Yes	67	90	1.827(1.127,2.961)	1.013(0.463,2.219)	0.974
No	68	50	1	1	
Hospital staff shortage affects clinical learning					
Yes	76	97	1.751(1.068,2.872)	5.077(1.995,12.923)	**< 0.001***
No	59	43	1	1	
Inadequate physical resources affect clinical practice					
Yes	123	116	0.472(0.225,0.986)	0.372(0.113,1.220)	0.103
No	12	24	1	1	
An inadequate number of patients affected clinical practice					
Yes	102	93	0.640(0.378,1.084)	1.623(0.677,3.889)	0.277
No	33	47	1	1	
Too many patients support learning					
Yes	52	99	3.854(2.331,6.371)	2.517(1.213,5.222)	**0.013***
No	83	41	1	1	

Anxious about the unavailability of PPE					
Yes	123	109	0.343(0.168,0.701)	2.320(0.769,7.00)	0.135
No	12	31	1	1	
Anxious while caring for seriously ill Patients					
Yes	106	85	0.423(0.248,0.720)	0.519(0.217,1.244)	0.142
No	29	55	1	1	
Perceived anxiety					
Less anxious	99	47	5.441(3.241,9.136)	14.415(6.343,32.763)	< **0.001***
More anxious	36	93	1	1	

5.6. **Factors Associated with perceived anxiety of nursing students during clinical practice**

After being filtered for multi-co-linearity by the variance inflation factor (VIF), which had a mean of 1.14, socio-demographic factors like sex of participants, student factors like the feel of demand to score high marks in clinical practice, nursing school factors as the presence of adequate clinical supervision and think of clinical instructors were prepared well during clinical attachments, and hospital-based factors like think of a shortage of staff in the hospital affect clinical learning and think of too many patients in the hospital provide a supportive environment for learning, as well as perceived self-confidence of nursing students were candidates for multivariable analysis at a P-value less than 0.25.

However, in a multivariable analysis, only the sex of students, thinking of clinical instructors were prepared well during clinical attachments, thinking of a shortage of staff in the hospital affect clinical learning, and perceived self-confidence of nursing students were significant predictors of the perceived anxiety of nursing students during clinical practice at a P-value of <0.05. Male students were 63% less likely to get anxious in comparison to female students. (AOR = 0.370; 95% CI: 0.206 – 0.665), and those who perceived of clinical instructors were prepared well during clinical attachments were with a lower likelihood of being more anxious than those who did not perceive (AOR = 0.448; 95% CI: 0.249 – 0.806). Those students who stated as the shortage of staff in the hospital affected clinical learning were 55% more likely to be less anxious than those who stated as did not have an effect (AOR = 0.552; 95% CI: 0.308 – 0.991). On the other hand, those who had poor perceived self-confidence were 5 times more likely to be more anxious than those of having well-perceived self-confidence (AOR = 5.179; 95% CI: 2.817 – 9.522) **(Table 4)**.

Table 4: Factors associated with perceived anxiety of participants at the six selected nursing colleges found in Addis Ababa, Ethiopia, in 2023 (n = 275).

Factors	Perceived anxiety		COR (95% CI)	AOR (95CI)	P-value
	Less	More			
Sex					
Male	37	58	0.416(0.250,0.692)	0.370(0.206,0.665)	< **0.001***
Female	109	71	1	1	
Demand to score high mark					
Yes	138	113	2.442(1.009,5.914)	1.922(0.676,5.466)	0.220
No	8	16	1	1	
adequate clinical supervision					
Yes	76	79	0.687(0.425,1.111)	1.285(0.704,2.343)	0.414
No	70	50	1	1	
Clinical instructors prepared well for clinical attachment					
Yes	70	87	0.445(0.272,0.726)	0.448(0.249,0.806)	**0.007***
No	76	42	1	1	
Hospital staff shortage affects clinical learning					
Yes	83	90	0.571(0.347,0.940)	0.552(0.308,0.991)	**0.046***
No	63	39	1	1	
Too many patients support learning					
Yes	72	79	0.616(0.381,0.996)	1.049(0.585,1.880)	0.873
No	74	50	1	1	
Perceived self-confidence					
Poor	47	93	0.184(0.109,0.309)	5.179(2.817,9.522)	< **0.001***
Good	99	36	1	1	

6. Discussion

This study assessed the perceived anxiety and self-confidence among undergraduate nursing students during clinical practice in the selected colleges providing nursing studies in Addis Ababa, Ethiopia 2023. There have been a significant increase in anxiety and a decrease in self-confidence in college students especially in nursing students.

6.1. **Perceived Self-confidence of nursing students during clinical practice**

The proportion of perceived good self-confidence of nursing students during clinical practice was 49.1%, with a 95% CI of (43.2, 55). This is lower than in a study done in Las Vegas, United States of America on self-confidence and anxiety in nursing students in which 69.51 percent of the participants were self-confident during clinical decision-making (2) and another study conducted in Mexico City to assess self-confidence and anxiety as intervening factors in clinical practice revealed that 69 percent of the nursing graduates had a high level of self-confidence (43).

This result is also lower than a study done in Northern Tanzania on factors affecting performance in clinical practice among diploma nursing students in which 60.4% of them had good self-confidence (37) and a study conducted at Minia University, Egypt showed that 79.9% of the participants had good perceived self-confidence (44).

This discrepancy might be due to the real differences in confidence level, differences in national guidelines and assessment methods; their culture and values, study setting, and sample size (small sample size versus large sample size). It might be also due to the difference in study participants, for instance in Tanzania it included both students and instructors.

6.2. **Perceived Anxiety of nursing students during clinical practice**

The proportion of perception of more anxious nursing students during clinical practice was 46.9%, with a 95% CI of (41, 53). This finding is lower than a study done University of Gonder, Ethiopia on test anxiety and associated factors in health science students in which 54.7% of the students were more anxious (45). This disparity could be due to the different data collection tools (meaning that it used a test anxiety questionnaire, while my study used NASC-CDM. It might be also due to the difference in sample size (small sample size versus large sample size).

It is however, higher than the study done in Mexico, which showed that only 34 percent of the respondents had a high level of anxiety (46), and a study conducted in northern Tanzania stated that 36.5 percent of the students were more anxious (37), as well as a study done in Minofya, Egypt in which only 20.6 percent of the participants were more anxious (44).

This discrepancy might be due to the differences in national guidelines and assessment methods; their culture and values, year of study, study population, study setting, sample size, and data collection tool ((NASC-CDM versus Hamilton Anxiety Rating Scale (HAM-A)). It could also be due to the difference in study design, for example, the study in Egypt used a quasi-experimental study design, while this study was a cross-sectional study.

6.3 **Associated Factors of perceived anxiety and Self-confidence of nursing students during clinical practice**

In this study, factors such as institution type, fear of making mistakes, presence of adequate clinical supervision, think of a shortage of staff in the hospital affect clinical learning, think of too many patients in the hospital providing a supportive environment for learning, perceived anxiety of nursing students were significant predictors of the perceived self-confidence of nursing students during clinical practice.

Those students from a government institution, think of adequate clinical supervision, think of a shortage of staff in the hospital affecting clinical learning, think of too many patients in the hospital providing a supportive environment for learning and those who were less anxious students were more likely to have perceived good self-confidence. On the other hand, those who feared making mistakes had a lower likelihood of having perceived good self-confidence.

This is consistent with a study in Tanzania, in which think of a shortage of staff in the hospital affects clinical learning, and think of too many patients in the hospital providing a supportive environment for learning were significant determinants of perceived self-confidence (37). It might relate to nursing students being substituted as staff nurses when the health facility is understaffed causing the students to underachieve their objectives in practice. Many patients flow in a hospital is a good opportunity for the students to experience different cases, try new procedures, and exercise what they learned in theory.

Regarding perceived anxiety, factors such as the sex of students, thinking of clinical instructors who were prepared well during clinical attachments, thinking of a shortage of staff in the hospital affect clinical learning, and perceived self-confidence of nursing students were significant predictors of the perceived anxiety of nursing students during clinical practice. Those male nursing students, who think of clinical instructors were prepared well during clinical attachments and those who stated as the shortage of staff in the hospital affected clinical learning were less likely to be more anxious. While those who were perceived as having poor self-confidence were more anxious.

This is in line with a study conducted in California, United States of America revealed that fear of making mistakes was associated with anxiety (33). Similarly, a study done in southern Israel showed that male students were less anxious than females (22) and in a study conducted in Johannesburg, South Africa female students were more anxious than males. This also agreed with the study done in northern Tanzania, in which those female students, as well as who was fear of making mistake were more anxious (37). The reason why almost all anxiety-related studies showed females more anxious than men may be of biological differences, cultural upbringing, and pressure on females by society.

7. Strengths and Limitations of the Study

7.1. Strengths of the study

- This study tried to assess the perceived anxiety and self-confidence of the nursing students using a tool developed specifically for this objective.
- This study revealed the possible factors affecting students during clinical practice.
- This study was multi-centered, which increases the representativeness of the findings.
- It is for the first time this data collection tool is used in Ethiopia.

7.2. Limitations of the study

- This study, like other cross-sectional studies, has its own set of design limitations.
- Utilizing only a quantitative approach to assess anxiety and self-confidence may not be sufficient to understand the different factors in depth.

8. Conclusion and Recommendations

8.1. Conclusion

This research assessed anxiety and self-confidence among undergraduate nursing students during clinical practice. It revealed that 46.9 percent of the students were more anxious and 49.1 percent of them had good self-confidence during clinical practice. This study shown student, school, hospital-based and sociodemographic factors are associated with the prevalence of anxiety and self- confidence.

Those students from a government institution, think of adequate clinical supervision, think of a shortage of staff in the hospital affecting clinical learning, think of too many patients in the hospital providing a supportive environment for learning and those who were less anxious students were more likely to have perceived good self-confidence. Those who feared making mistakes had a lower likelihood of having perceived good self-confidence.

Regarding perceived anxiety, factors such as the sex of students, thinking of clinical instructors who were prepared well during clinical attachments, thinking of a shortage of staff in the hospital affect clinical learning, and perceived self-confidence of nursing students were significant predictors of the perceived anxiety of nursing students during clinical practice..

8.2. **Recommendations**

- For nursing students, the findings of the study assessed the prevalence and associated factors of anxiety and self-confidence during clinical practice, which helps the students to seek support and guidance from their supervisor regularly.
- For clinical instructors, the findings of the study will motivate them to evaluate regularly students for anxiety and self-confidence during clinical practice and provide a pleasant clinical experience.
- For policymakers, to adopt a strategy to assess students regularly for anxiety and self-confidence during clinical practice and intervene accordingly plus revise the nursing curriculum.
- Researchers should do further research by using another approach, such as a qualitative or mixed approach, using this study as baseline data.
- This study has some limitations, and the assessment of anxiety and self-confidence during clinical practice is a crucial step in improving the quality of nursing student experience during clinical attachments.

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Annexes- 1: Information sheet

Name of the investigator: Ayush Gebreegziabher (MSc Candidate)

Thesis Title: Perceived anxiety and self-confidence among undergraduate nursing students during clinical practice in selected colleges providing nursing studies in Addis Ababa, Ethiopia, 2023.

Thesis Objective: To assess perceived anxiety and self-confidence among undergraduate nursing students during clinical practice in selected colleges providing nursing studies in Addis Ababa, Ethiopia 2023.

Study Techniques: To achieve the planned objective of the study, a structured questionnaire was used to assess anxiety and self-confidence among undergraduate nursing students during clinical practice.

Confidentiality: The collected information was kept confidential and was used only for research purposes. No one except the investigator of the research had access to the information collected. The name and/or other personal information of the student was not notified in any report. All paper and computer record of the study was kept in a secured place under a lock when not in use.

Person to contact: If the data collectors, supervisors, or other administrative staff had any questions regarding the study they were free to contact me in person or by the following addresses.

Cell phone: 0924989200

Email: ayush.gere@gmail.com

Annex- 2: Nursing Colleges Consent

This study was carried out at the selected nursing college in Addis Ababa. The main purpose of this study was to assess anxiety and self-confidence among undergraduate nursing students during clinical practice in selected colleges providing nursing studies in Addis Ababa, Ethiopia 2023. The result of this was used to provide information about the prevalence of anxiety and self-confidence among nursing students during clinical practice in selected nursing colleges in Addis Ababa, Ethiopia, and other concerned bodies, which helped to give future direction on ways of reducing anxiety and increasing self-confidence.

Any student's personal information such as the name or any private details was kept confidential throughout the study period and the generated information was disclosed in full. Nursing colleges have the full right to accept or refuse study whenever it needs. Whenever there is a need for more information/explanation on the proposed study, the principal investigator could be contacted in person or by phone number: **+251924989200 (Ayush Gebreegziabher, main investigator).** Finally, if you agreed whether the study was conducted at your institution, please confirm it by putting your sign.

The participant nursing college: Principal investigator:

Annex- 3: A checklist for data collection tool

Data was collected using a semi-structured questionnaire, which was developed from a similar study conducted in the United States by Krista Alaine White and from different literature. Then adapted according to the study's objectives and study design to collect data on anxiety and self-confidence among undergraduate students during clinical practice in selected nursing colleges in Addis Ababa, Ethiopia, 2023 G.C.

Consent form

Good morning/Good afternoon!

My name is Ayush Gebreegziabher. I am attending my MSc. in child health and pediatrics nursing at Addis Ababa University. This questionnaire is presented to you to assess anxiety and self-confidence among undergraduate nursing students during clinical practice. The questionnaire will take about 20-30 minutes to fill. Therefore, your honest and genuine participation in responding to the questions prepared is highly appreciated and helpful to attain the objective of the study. Your name will not be written on this form and no individual response will be reported to anybody. Hence, your answers are completely confidential. You do not have to answer any question that you don't want to answer and you may refuse to answer all of the questions.

Would you be willing to answer?

☐ Yes, then put your signature below and proceed to the next page

☐ No, please stop here.

Participant's signature_____ Date_____

Data collector's signature_____ Date _____

Thank You!

Part I: Socio demographics: please answer the following

S.No	Variable	Response (encircle or fill the blank space)	Remark
1	Gender	1. Male 2. Female 3. Prefer not to say	
2	Age (years)		
3	Year of Study	1. 3rd year 2. 4th year	
4	Institution type	1. Government 2. Private	
5	Marital status	1. Single 2. Married 3. Divorced 4. Widowed	
6	Residence	1. Urban 2. Rural	
7	Practical area	1. Medical Surgical 2. Pediatric 3. Gyn/Obs 4. Psychiatry 5. Internship	

Part II: self-confidence and anxiety questionnaire

This is a scale to measure your confidence and anxiety when making clinical decisions. Reflect thoughtfully upon each item and answer it as accurately as possible. There is no right or wrong answer to questions in the survey. Read each of the 27 statements and choose the option that reflects how you usually feel. Answer both the self-confidence and anxiety portion for each item.

Please score your level of self-confidence and anxiety during clinical decision-making on a scale of 1 – 6:

Self-Confident	1 = Not at all	2 = Just a little	3 = Somewhat;	4 = Mostly	5 = Almost totally	6 = Totally
Anxious	1 = Not at all	2 = Just a little	3 = Somewhat;	4 = Mostly	5 = Almost totally	6 = Totally

1.	I am ___ self-confident and ___ anxious in my ability to easily see important patterns in the information I gathered from the client.
. 2.	I am ___ self-confident and ___ anxious in my ability to identify which pieces of clinical information I gathered are related to the client's current problem.
. 3.	I am ___ self-confident and ___ anxious in my ability to see the full clinical picture of the client's problem rather than focusing on one part of it.
. . 4.	I am ___ self-confident and ___ anxious in my ability to recall knowledge I learned in the past that relates to the client's current problem.
. 5.	I am ___ self-confident and ___ anxious in my ability to implement the 'best' priority decision option for the client's problem.
6.	I am ___ self-confident and ___ anxious in my ability to interpret the meaning of a specific assessment finding related to the client's problem.
7.	. I am ___ self-confident and ___ anxious in my ability to evaluate if my clinical decision improved the client's laboratory findings.
8.	I am ___ self-confident and ___ anxious in my ability to recognize the need to talk with my senior colleague to help sort-out client assessment findings.
9.	I am ___ self-confident and ___ anxious in my ability to use active listening skills when gathering information about the client's current problem.
10.	10. I am ___ self-confident and ___ anxious in my ability to assess the client's nonverbal cues.
11.	I am ___ self-confident and ___ anxious in my ability to recognize the need to review a protocol, procedure, or nursing literature to help me make a clinical decision.
12.	I am ___ self-confident and ___ anxious in my ability to decide if the information given by significant other/family is important to the client's current problem.
13.	I am ___ self-confident and ___ anxious in my ability to use my knowledge of anatomy and physiology to interpret the information I gathered about the client's current problem.
14.	I am ___ self-confident and ___ anxious in my ability to act on at least one intervention I considered based on my gut feeling or intuition.

15.	I am ___ self-confident and ___ anxious in my ability to analyze the risks of the interventions I am considering for the client's current problem.
16.	I am ___ self-confident and ___ anxious in my ability to recognize important information about a client's problem from the information I received during the shift-change report.
17.	I am ___ self-confident and ___ anxious in my ability to INDEPENDENTLY make a clinical decision to solve the client's problem.
18.	I am ___ self-confident and ___ anxious in my ability to ask the client additional questions to get more specific information about the current problem.
19.	I am ___ self-confident and ___ anxious in my ability to correlate physical assessment findings with the client's nonverbal cues to see if they match or do not match.
20.	I am ___ self-confident and ___ anxious in my ability to implement one accurate intervention if the client is having an urgent problem
21.	I am ___ self-confident and ___ anxious in my ability to use my knowledge of diagnostic tests, like lab results or x-ray findings, to help create a possible list of decisions I could implement.
22.	I am ___ self-confident and ___ anxious in my ability to realize the need to talk with my clinical nursing instructor or the staff nurse about interventions I am considering.
23.	I am ___ self-confident and ___ anxious in my ability to remain open to different reasons for the client's problem even though the information I gathered may point to only one reason.
24.	I am ___ self-confident and ___ anxious in my ability to ask the client's significant other/family questions to gather information about the current problem.
25.	I am ___ self-confident and ___ anxious in my ability to evaluate if the clinical decision I made influenced client satisfaction.
26.	I am ___ self-confident and ___ anxious in my ability to incorporate personal things I know about the client to make decisions in his or her best interest.
27.	I am ___ self-confident and ___ anxious in my ability to consider a possible intervention for the client's problem just because it 'seems' right.

Part III: Student factors

S.No	Variable	Encircle your response	Remark
1.	Do you feel the demand to score high marks in clinical practice?	1. Yes 2. No	
2.	Do you fear making mistakes?	1. Yes 2. No	
3.	Do you experience fear during clinical assessment examinations?	1. Yes 2. No	
4.	Are you absent from the clinical area from time to time?	1. Yes 2. No	
5.	Do you fear the clinical environment?	1. Yes 2. No	

Part IV: Nursing school factors

S.No.	Variable	Encircle your response	Remark
1.	Do you think there is a lack of communication between the nursing staff and students?	1. Yes 2. No	
2.	Is there adequate clinical supervision?	1. Yes 2. No	
3.	Do you think your clinical instructors are prepared well during your clinical attachments?	1. Yes 2. No	

Part V: Hospital-based factors

S.No.	Variable	Encircle your response	Remark
1.	Do you think the shortage of staff in the hospital affects your clinical learning?	1. Yes 2. No	
2.	Do you think the clinical staff is competent?	1. Yes 2. No	

3.	Do you think inadequate physical resources (skills laboratory, library, and classrooms) affect your clinical practice?	1. Yes 2. No	
4.	Do you think an inadequate number of patients in the hospital affect your clinical practice?	1. Yes 2. No	
5.	Do you think too many patients in the hospital provide a supportive environment for learning?	1. Yes 2. No	
6.	Do you get anxious about the unavailability of adequate personal protective equipment in the hospital?	1. Yes 2. No	
7.	Do you get anxious while caring for seriously ill patients?	1. Yes 2. No	