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# Level Of Nurses Working In Bahir Dar Public Hospitals, Bahir Dar, Northwest, Ethiopia, 2023 Clinical Practice Autonomy And Associated Factors

Tesfaye (Bsc, Tasew

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**BAHIR DAR UNIVERSITY**  
**COLLEGE OF MEDICINE AND HEALTH SCIENCES**  
**SCHOOL OF HEALTH SCIENCES**  
**DEPARTMENT OF ADULT HEALTH NURSING**

**LEVEL OF CLINICAL PRACTICE AUTONOMY AND**  
**ASSOCIATED FACTORS AMONG NURSES WORKING**  
**IN BAHIR DAR PUBLIC HOSPITALS, BAHIR DAR,**  
**NORTHWEST, ETHIOPIA, 2023**

**PRINCIPAL INVESTIGATOR: TEFAYE TASEW (BSC)**

**A THESIS SUBMITTED TO DEPARTMENT OF ADULT**  
**HEALTH NURSING, COLLEGE OF MEDICINE AND**  
**HEALTH SCIENCES, BAHIR DAR UNIVERSITY, IN**  
**PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR**  
**THE MASTER OF SCIENCES DEGREE IN ADULT**  
**HEALTH NURSING**

**AUGUST, 2023**  
**BAHIR DAR, ETHIOPIA**

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**AUGUST, 2023  
BAHIR DAR, ETHIOPIA**


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**DECLARATION SHEET**

This is to certify that the thesis entitled “Level of clinical practice autonomy and associated factors among nurses working in Bahir Dar public hospitals, Bahir Dar, Northwest, Ethiopia, 2023” submitted in partial fulfillment of the requirements for the degree of masters of Science in adult health nursing, department of adult health nursing, Bahir Dar University. I prepare this work. Moreover, it has not been submitted, in whole or in part, in any previous application for a master’s degree.

Name of the candidate: Tesfaye Tasew (BSc)

Date 14/01/2016 E.C

Signature 


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**APPROVAL OF THE THESIS REPORT**

I hereby certify that we have supervised, read, and evaluated this thesis report titled "Level of clinical practice autonomy and associated factors among nurses working in Bahir Dar public hospitals, Bahir Dar, Northwest, Ethiopia, 2023" by Tesfaye Tasew, prepared under my guidance. We recommend and approve the thesis report for a degree of "Masters of science in Adult Health Nursing".

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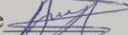
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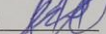
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## **ABBREVIATIONS/ACRONYM**

AAPH	Addis Alem Primary Hospital
AOR	Adjusted Odds Ratio
CI	Confidence Interval
COR	Crude Odds Ratio
DPBS	Dempster Behavioral Scale
ENA	Ethiopia Nurse Association
FHCSH	Felege Hiwot Comprehensive Specialized Hospital
ICU	Intensive Care Unit
SPSS	Statistical Package for the Social Sciences
TGCSH	Tibebe Ghion Comprehensive Specialized Hospital

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## ABSTRACT

**Background:** Higher level of autonomy of nurses' practices has a significant impact on patients, nurses, and hospitals in terms of improving the nurses' satisfaction, motivation, and decreases their turnover, which enhances the patient perception of nursing care and satisfaction. Even though, autonomy is one of the cornerstones of nursing practice, yet there is limited study in Ethiopia, particularly Bahir Dar city.

**Objectives:** This study aimed to assess level of nurses' clinical practice autonomy and associated factors among nurse working in public hospitals of Bahir Dar, Northwest, Ethiopia, 2023.

**Methods:** An institution-based cross-sectional study was conducted among 420 nurses working in Bahir Dar public hospitals from March 17 to April 10, 2023. Computer-generated random sampling technique was employed to select the study participants. Epi data version 4.6 and statistical package for the social sciences version 27 were used for data entry and analysis, respectively. Model fitness was checked by using the Hosmer-Lemshow goodness of fit test, and the overall p-value of the model was  $> 0.42$ . To identify the association, binary logistic regression was used and a p-value  $\leq 0.05$  was declared as statistically significant. The final findings were presented in tables, figures and a narrative description.

**Result:** Among 420 nurses approached who are working in public hospitals in Bahir Dar, 407 responded to the questionnaire, making the response rate 96.9%. The prevalence of clinical practice autonomy was 55.3%. Having a master's degree (AOR = 7.43, 95% CI: 1.10, 10.03), working in intensive care units (AOR = 4.96, 95% CI = 1.54, 15.94), not engage in the nursing association (AOR = 0.57, 95% CI: 0.32, 0.99), intention to stay in the nursing profession (AOR = 3.13, 95% CI: 2.46, 6.94) and having low normative commitment (AOR 0.28, 95% CI 0.15, 0.50) were significantly associated with clinical practice autonomy.

**Conclusion and Recommendation:** Nurses' autonomy at work is impacted by not engaging in nursing associations and low normative commitment. Having a master's degree, working in intensive care units, and having intent to stay in the nursing profession had a positive relationship with nurses' autonomy. In order to raise autonomy-related traits, nurses should update themselves, and hospitals and health care system employees should foster supportive settings.

**Key words:** autonomy, nursing, profession, Ethiopia

# **1. INTRODUCTION**

## **1.1. Background Information**

The word autonomy is widely used to describe freedom in decision-making. There is no consensus on a universal definition of autonomy, despite the fact that the term is commonly accepted in nursing literature. It's characterized as the capacity to without direct supervision, exercise situational accountability and deliberate independent decision based on knowledge and abilities (1). Clinical autonomy is one of the cornerstones of advanced nursing practice globally, yet there is limited synthesis of clinical autonomy in the literature (2,3). Being autonomous, the ability to make decisions and take action using professional knowledge and judgment is referred to as autonomy (4,5).

A nurse's autonomy is defined as their capacity to carry out responsibilities as needed without assistance from outside parties (6–8). In addition, it is the ability of the nurse to make decisions about the care of patients on their own. Clinical judgment and the flexibility to carry out nursing tasks as they see fit (7,9). It includes the nurse's flexibility and discretionary actions that are permitted under their scope of practice and that improve patient outcomes (10).

The nursing profession is a self-reliant and independent field (11). One of the most important aspects of the nursing profession is autonomy, which is critical to nursing practice. The concept of autonomy is crucial to the nursing profession, and it has been shown to improve patient outcomes. When nurses make their own decisions regarding patient care, patient satisfaction and treatment quality improve (12).

The autonomy of nurses in their field of work is constrained by the presence of physicians, according to the results of various studies. Every profession has its own autonomy that demonstrates its independence from others, yet the nursing profession typically does not uphold this autonomy (6). Even some nurses themselves feel that their professional autonomy is not always maintained and that it is switched on and off (10). The improvement of nurses' professional autonomy in their fields of practice is an essential concern (6). With autonomy, nurses can make decisions about specific aspects of patient care without first consulting managers or doctors (13). To develop the confidence to make independent patient decisions and forge a more mature professional identity, nurses needed education and training that put an emphasis on

autonomy. To recognize and handle patient circumstances and make independent decisions, nurses must be aware, competent, and capable (14).

Autonomy has the potential to alter service quality. During this challenging time in the history of the health-care system, when the entire world is battling an unidentified disease, such research is extremely important to consider the patient's result, care safety, and professional identity levels of burnout (15). As a result, the healthcare system needs to step up to the challenge and allow nurses the space they require to finish their tasks while retaining their autonomy with regard to clinical decision-making (16).

## **1.2. Statement of the problem**

Clinical autonomy is the right of nurses to make clinical decisions and use professional judgment based on their own clinical competence in order to promote a variety of nursing practices (17). The ability to apply professional expertise and experience to patient care and make clinical decisions about patient care is referred to as autonomy in nursing. It is limited by the dominant organizational culture in which nurses are practicing (18). Due to other healthcare professionals' lack of awareness of their tasks, nurses may run into difficulties that endanger their ability to practice clinically independently.

The effectiveness of nurse practitioners is compromised if clinical autonomy levels are not clearly defined (3). Low levels of autonomy at work might cause nurses to feel a number of negative emotional and professional emotions, such as deprivation and unhappiness (19). Additionally, autonomy can affect the overall quality of the service, the patient's outcome, the safety of the care, professional identity, degrees of burnout, and the recruitment and retention of nurses in the field (20).

A Study conducted in Turkey indicated that the level of nursing autonomy is low (21). Younger nurses exhibited higher levels of autonomy, according to studies done in Iran and Canada. Once more, these studies demonstrated that membership in a nursing organization increases a nurse's level of independence in their line of work (22).

According to a study done in the public hospital in Wollega, more than half of the nurses had little autonomy in their jobs. That is, (53.87%), and this further shows that older nurses had lower levels of autonomy, as well as lower levels of autonomy when they were not members of any nursing associations and did not intend to continue in the nursing profession (11).

Since nurses play a significant role in health care services, it is essential to grow the nursing profession. To make nursing a more advanced profession, it is better to know the level of nurses' autonomy. There are no effective ways to increase nursing professionalism until nurses' autonomy is improved (11).

The impact on the service level diminishes if there isn't clarity regarding the degrees of clinical autonomy held by nurses in clinical practice (3). This is done by giving nurses more freedom in their daily work (18). Moreover, recent studies have found

that giving nurses more autonomy results in improved patient outcomes, greater job satisfaction, and lower rates of burnout (23). Some findings showed that nursing autonomy in their field of work is limited that is there is a physician involvement. This showed that physician supervise every duty conducted by nurses, it is unclear whether and how there is room for development (11).

In Bahir Dar, the job satisfaction for nurses was 43.6%, and in some cases, nurses' autonomy may have even had an impact on job satisfaction (24). The lack of nursing autonomy negatively impacts nurses, patients, other members of the team, and the organization as a whole, but when nurses make autonomous decisions about care, it improves patient satisfaction and the quality of care (25).

There are insufficient studies on the autonomy of nurses in their profession, particularly in developing countries like Ethiopia (26). The aim of this study was to determine the autonomy of the clinical practice and the factors that influence the status of nursing autonomy.



### **1.3. Significance of the study**

The findings of this study will contribute to provide information on the level of autonomy in nursing and factors affecting it in Bahir Dar city public hospitals. It will help Public hospitals and guiding principles for nursing autonomy in Ethiopia. It also helps nursing professionals to approve their autonomy status.

This study also showed factors of nursing autonomy and will be used as input for improving nurse's decision-making freedom. In addition, it will give adequate information to the concerned responsible bodies and help policymakers, hospital managers, and decision-makers by indicating the most significant factors that affect nurse's autonomy. Managers will also have advantages by looking into various methods to encourage nurses to get ready to enhance their clinical practice autonomy in hospitals.

## **2. LITERATURE REVIEW**

### **2.1. Level of clinical practice autonomy**

Levels of nurses' clinical practice autonomy differ from country to country. Study conducted in Turkey indicated that the level of nursing autonomy was is low (21). Study done in Iraq, 64.2% (27), Iran 66.7% (28) of nurses have a higher level of professional autonomy.

Study conducted in Arsi zone (49.5%) of the nurses had high overall autonomy level (29). But Study conducted in Wollega public hospitals revealed that 53.87% of the nurses have a low level of autonomy regarding their work (11).

### **2.2. Factors associated with nurses' clinical practice autonomy**

As the study conducted in Iran indicated work experience and participation in training courses were positively associated with increment of level of autonomy in nursing. Also this study indicated that lack of team work, lack of training are negatively influence nursing professional autonomy and that younger nurses had higher levels of autonomy (30). In addition, there was a positively relationship between the mean score of autonomy in decision-making for patient care and the nurses' education level. Those nurses with master degree education had more autonomy for decision-making for patient care (28).

Research findings showed that nurses with higher education tended to have more professional autonomy in their work (31). But in Florida ,no statistically significant relationship was found between the variables of age, years worked as an registered nurse, years worked as an nurse practitioners, and level of autonomy (32).

Additionally, according to some research findings, factors affecting autonomy in the nursing profession include their age, level of experience, educational background, and failure to collaborate and operate as a team (21,22,24,30).

In Basra teaching hospitals of Iraq, the study's findings showed the lack of laws protecting professional duties (80%), hospital administration style (73.7%), unit manager (46.7), and the dominance or authority of physicians (53%), were the most frequent obstacles to professional autonomy. But no statistically significant relationship between the subjects' educational level, gender, age, years of experience,

membership of a nursing association, working place, professional roles nature and nurses' professional autonomy (33).

Other study conducted in Turkey indicated that lack of equipment at time of required and long duration on work is associated with decrement of level of nursing autonomy (21). According to previous research, there is relatively little intention in poor nations to stay in the nursing profession (34,35).

A study done in nations like Iran and Canada revealed that older nurses had lower degrees of autonomy. Similarly, these studies demonstrated that nurse autonomy is severely impacted by not being a member of any nursing associations, a lack of teamwork, and a lack of training (22,30).

A study conducted in Iraq showed a significant statistical association between participating in training program, experience development, source of knowledge development and subject's professional autonomy level (27). Studies indicated that working to improve expertise and involvement in training programs were found to be critical for achieving professional autonomy by promoting nurses capacity to perform and provide effective care (36,37).

Study conducted in Vietnam university hospital showed there were significant differences between autonomy with practice setting ,nurses who work in the neonatal intensive care and operation room had the highest score of autonomy (38). Another study reveal that acute care nurses had a high level of autonomy than other (20,39,40).

Greater levels of professional autonomy are available to nurses with master's or doctoral degrees than to those with less education. Less work autonomy is available to nurses with more experience in critical care units and to nurses with less experience in these settings (41). Study conducted by J. Hagan and DL Curtis Sr. discovered that nurses in acute care settings have a high degree of autonomy in duties like creating care plans, evaluating patients, and giving patient education (42).

According to survey of critical care nurses in mainland Greece , nurses rarely participate in decision-making in acute care settings (43). The patient's condition deteriorated as a result of the nurses in the intensive care unit who were caring for him or her on a ventilator and connected with an endotracheal tube suddenly dislocating

and shifting from the trachea into the esophagus because it's possible that the allocated nurse lacks the independence to handle the problem professionally (44)

According to studies conducted in Jeddah City (61.5%) (45), Jordan (60.9%) (46), Jimma zone (63.7%) (47), Amhara referral hospitals 64.9% (48) and East Gojjam zone (59.4%) (49), of nurses had the intention to leave their job. If there is no desire to continue in the field, there will be no desire to become more independent; which will result in having a low degree of autonomy (48).

A study on the factors influencing nurses' level of autonomy was undertaken at the public hospital in Wollega, and the results showed that younger nurses, being a member of any nursing association, wish to stay in the nursing profession, had higher levels of autonomy on their work (11).

In some published studies, age and years of experience have been found to have positive implications for nursing autonomy; yet, in other investigations, age and years of experience have been found to have negligible effects on autonomy (50,51). The study found that a variety of characteristics, including gender and area of practice, had an impact on nurses' autonomy in their actions and their ability to learn (52).

### 3. CONCEPTUAL FRAMEWORK

This conceptual framework was developed by reviewing different literature. It shows the relationships between dependent and independent variables (21,22,25,26,28,30).

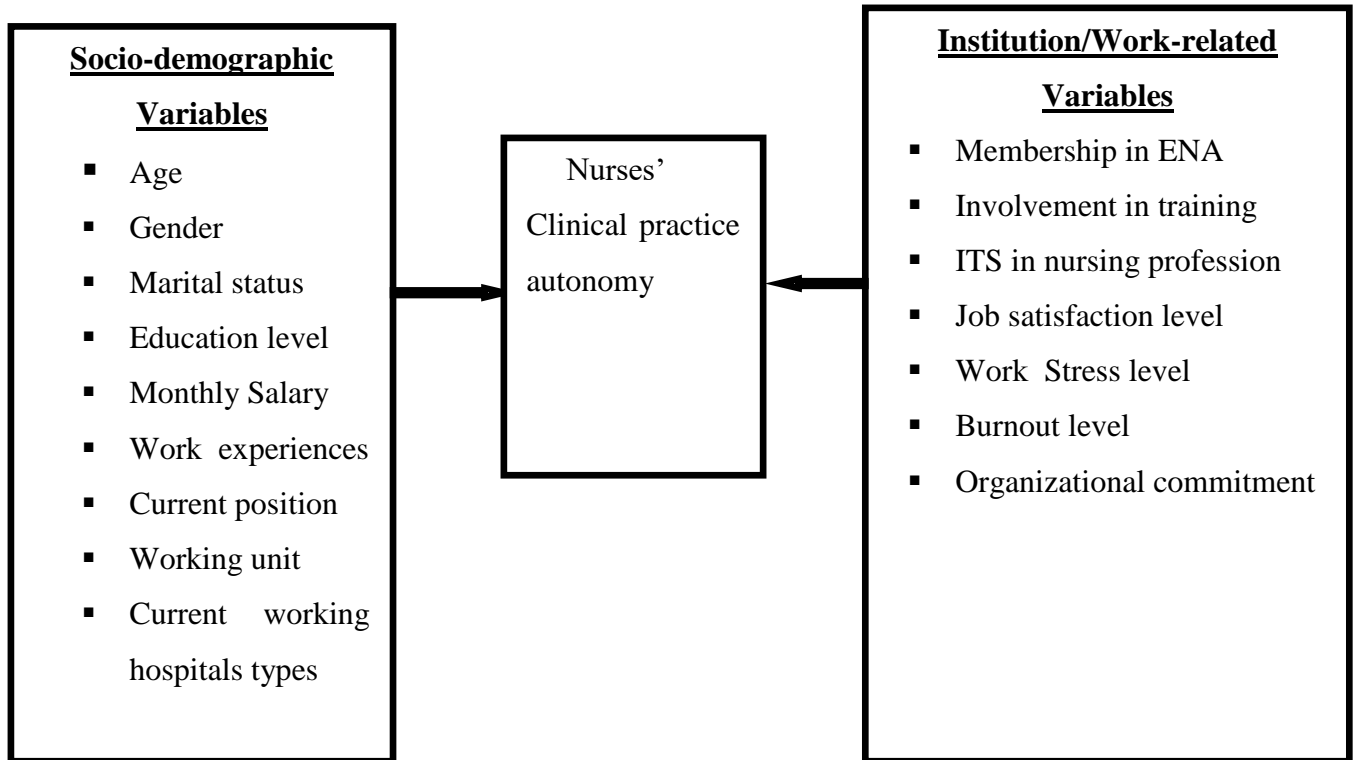


Figure 1 Schematic presentation of the conceptual framework to assess level of nurses' clinical practice autonomy in Bahir Dar public hospitals, 2023

## **4. OBJECTIVES**

### **4.1. General objective**

To assess level of clinical practice autonomy and associated factors among nurses working in Bahir Dar public hospitals, Bahir Dar, Northwest, Ethiopia, 2023.

### **4.2. Specific objectives**

To determine level of clinical practice autonomy among nurses working at the public hospitals of Bahir Dar, Northwest, Ethiopia, 2023.

To identify factors associated with level of clinical practice autonomy among nurses working at public hospitals in Bahir Dar, Northwest, Ethiopia, 2023.

## **5. METHODS**

### **5.1 Study area and period**

The study was conducted, in Bahir Dar city public hospitals, Bahir Dar, Northwest, Ethiopia. Bahir Dar is the capital of Amhara Regional State in Ethiopia, located approximately 565 kilometers Northwest of Addis Ababa. There are three hospitals in the city. Felege Hiwot comprehensive specialized hospital (FHCSH), Tibebe Ghion comprehensive specialized hospital (TGSH), and Addis Alem primary hospital (AAPH). The total number of nurses working in each hospitals were 414, 296 and 53 in FHCSH, TGSH, and AAPH respectively (24,53). The study was conducted from March 17 to April 10, 2023.

### **5.2. Study design**

An institutional-based cross-sectional study was conducted among nurses working in Bahir Dar city's public hospitals.

### **5.3 Source population**

All nurses working in Bahir Dar city public hospitals.

### **5.4. Study population**

Sampled nurses who were working in Bahir Dar city public hospitals.

### **5.5. Inclusion and Exclusion criteria**

#### **5.5.1. Inclusion criteria**

All nurses who were currently working in Bahir Dar city public hospitals.

#### **5.5.2 Exclusion criteria**

Nurses who were on maternity, annual and sick leave were excluded.

## 5.6. Sample size and sampling methods

### 5.6.1. Sample size determination

A single population proportion formula was used to get the sample size. The following assumptions were taken into account: a 95% confidence interval (CI), 5% margin of error (d), 10% non-response rate, and proportion (p = 53.87%) (11).

$$n = \frac{(Z_{\alpha/2})^2 \times p(1 - p)}{d^2}$$

Where: -

n= sample size

Z  $\alpha/2$ ) = 95% confidence interval

p = sample proportion (estimates prevalence of problem)

d= margin of error

$$n = \frac{(1.96)^2 \times 0.5387(1 - 0.5387)}{0.05^2} = 382$$

By adding 10% of non-response rate, the final sample size was 420.

### 5.6.2 Sampling procedure

All public hospitals in Bahir Dar were included in the study. In each public hospital, the number of nurses was gotten from monthly payrolls. Then, based on the number of nurses in each facility, the sample sizes were proportionally allocated. Then, the study participants were chosen at random from each hospital according to the number of nurses in each facility, using a computer-generated random sampling technique.



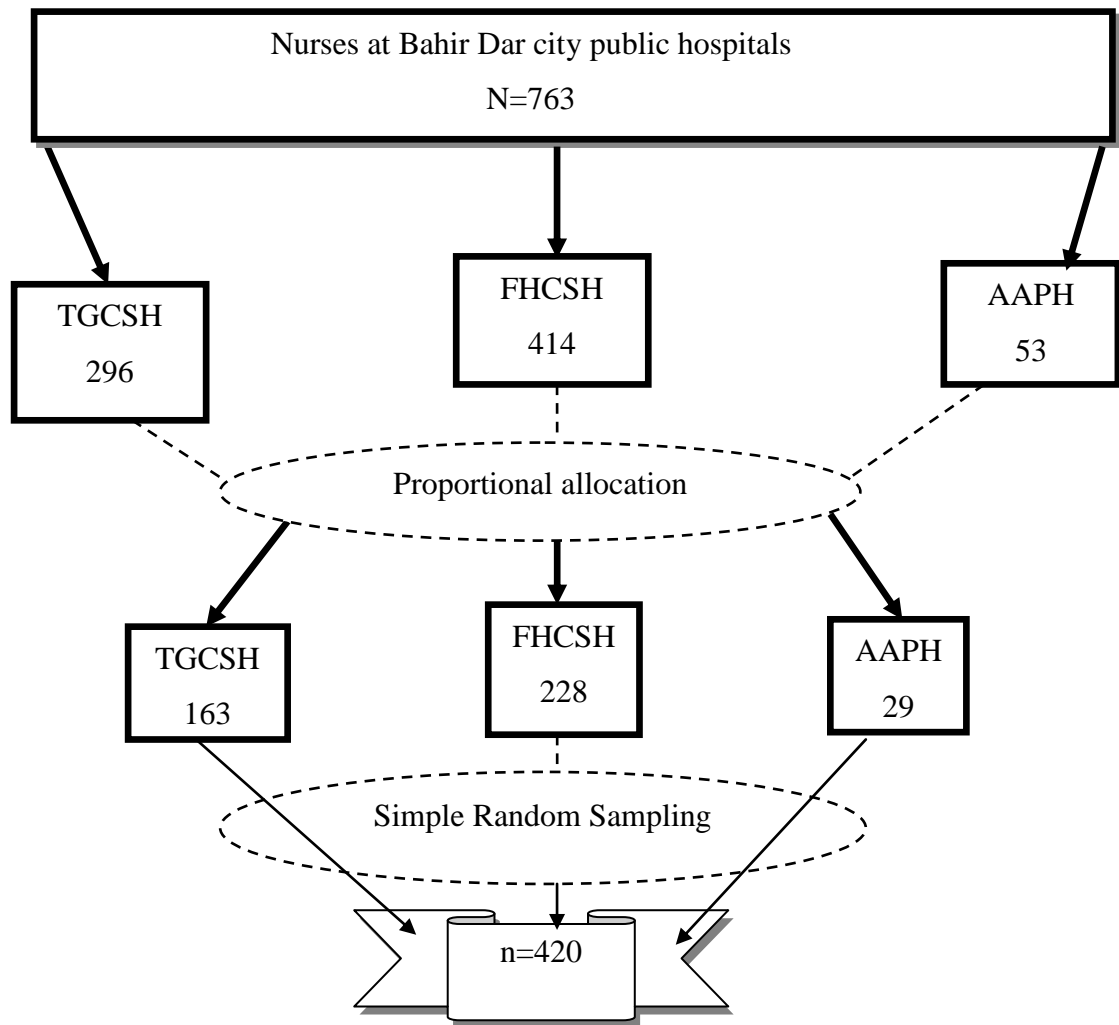


Figure 2: Sampling procedure to assess level of nurses’ clinical practice autonomy in Bahir Dar public hospitals, 2023

### 5.7. Study variables

The dependent variable of this study was level of nurses’ clinical practice autonomy. Age, gender, marital status, education level, work experience, monthly salary, current position, current working unit, current working hospitals, membership in ENA, participation in nursing training, intent to stay in the nursing profession, job satisfaction level, workplace stress level, burnout level, and organizational factors, were independent variables.

## **5.8. Operational definitions**

Good autonomy attributes level in nursing is  $\geq$  mean value and

Poor autonomy attributes level in nursing is  $<$  mean value.

Intent to stay: nurses are judged to have the intention to remain in the nursing profession if their score is greater than the mean value (54).

High commitment: Nurses who score  $\geq 60\%$  of the sum of the commitment scales

Satisfied: Nurses who scored  $\geq 60\%$  of the sum of the satisfaction scales (54).

Work stress: Respondents classified as "occupationally not stressful" had an average score below the mean value, while those with average scores of the mean value or higher were classified as suffering occupational stress (55,56).

## **5.9. Data Collection Tools**

A structured self-administered questionnaire was used to collect the data. The instrument used in this study to examine nurses' autonomy was the 30-item Dempster Practice Behavior Scale (57). The DPBS was designed to assess behaviors, actions, and conduct related to the individual's autonomy in a practice setting. The instrument uses a 5-point Likert scale with scores from each item ranging from 1 (NOT AT ALL TRUE) to 5 (EXTREMELY TRUE). Total average scores range from 30 to 150 and higher scores on the DPBS indicates a greater extent of autonomy. Negative items were reversed to positive before summing.

Nursing professionals' intentions to stick with their area of employment were evaluated using McCain's Behavioral Commitment Scale (58,59). On a Likert scale from 1 to 5, where 1 strongly disagrees and 5 strongly in agreement.

The Michigan Organizational Assessment Questionnaire was used to evaluate job satisfaction. Three scale items were evaluated on a scale of 1 (strongly disagree) to 5 (strongly agree) (60).

Workplace stress was measured using the Workplace Stress Scale (WSS), which was developed by the Marlin Company and the American Institute of Stress (61). The eight WSS components each explain how frequently a respondent has a particular feeling about a specific aspect of their employment. The Likert scale uses a five-point

scoring system, with 1 denoting never and 5 denoting very frequently (62,63). High scores indicated higher levels of work-related stress.

Maslach's Burnout Inventory Human Services Survey (MBIHSS), which consists of 22 items reorganized into three sub-scales: emotional fatigue (EE), depersonalization (DP), and personal accomplishment (PA), is a common question used to evaluate the levels of burnout. The responses to each question ranged from "never" (=0) to "everyday" (=6) on a 7-point Likert scale. Three distinct scores one for each element or subscales were the result of the survey. Measurements of Emotional exhaustion: low ( $\leq 16$ ), moderate (17–26), high ( $\geq 27$ ). Depersonalization: low ( $\leq 6$ ), moderate (7–12), high ( $\geq 13$ ). Personal accomplishment: low ( $\leq 31$ ) moderate (32–38), high ( $\geq 39$ ) (64–67). Therefore, the PA values were reversed so that greater scores indicate higher burnout across the three subscales in order to calculate the total burnout (68).

A 24-item scale with three subscales was used to measure organizational commitment. The items, which were answered on a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree), were affective, continuation, and normative commitment (54). And for negatively worded questions, reverse coding was done (69,70). Higher scores, which represent higher levels of organizational commitment (54).

### **5.10. Data Collection procedure and Quality assurance**

Data were collected by self-administer questionnaire. Three Data collector BSc nurses and one MSc nurse who served as supervisors for each hospital for three weeks. Data collectors and supervisor received training for a full day in order to ensure the quality of the data. Considering that, English is the nurses' official working language, the question was asked in the English version. To maintain the consistency of the questions and how to approach participants, a pretest was conducted on 5 % (21) of participants at Debre Tabor hospital before actual data collection. In the pretest, the question's internal consistency was assessed, and the Cronbach's alpha value was calculated ( $>0.714$ ). The supervisor and investigator were continuously monitoring the data collection.

### **5.11. Data Processing and Analysis**

Epi Data version 4.6 was used for data entry then checked for completeness, cleaned, edited, and coded, and exported to SPSS version 27 for analysis. According to the mean value, the questions on autonomy have been divided into two categories: good autonomy and poor autonomy. Bivariable and multivariable binary logistic regression analysis were used to identify factors associated with nurses clinical practice autonomy. Variables with a p value  $\leq 0.25$  in the bivariable analysis were transferred to the multivariable analysis. Multicollinearity was checked using the variance inflation factor (VIF), and the VIF of each variable was  $<5$ . Model fitness was checked for the models using the Hosmer-Lemshow goodness of fit test, and the overall p-value of the model was  $> 0.42$ . The COR and AOR with 95% CI were computed, and statistical significance variables were considered with a P-value  $<0.05$ . Then, the final findings were presented in tables, figure and a narrative description.

### **5.12. Ethical Considerations**

Ethical clearance was obtained from the Ethical review committee of Bahir Dar University, College of Medicine, and Health Science. A formal letter that explains the objectives, rationale, and expected outcomes of the study was written to the study area. Then, informed consent was obtained from the hospitals to allow the study in their hospitals. Again, verbal consent was obtained from all participating nurses, and confidentiality of the information was maintained by omitting the names and personal identification. The anonymity and confidentiality of the responses was protected. The questions were asked after the nurses' voluntary consent had been obtained. Any nurse who was not willing to participate in the study has not been forced to do so.

## 6. RESULTS

Among 420 nurses working in three public hospitals in Bahir Dar city, 407 participants were responded to the questionnaire, making the response rate 96.9%. Of all respondents 212 (52.1%) were female and 255 (62.7%) were married. The participants age ranged from 24-52 years, with a mean ( $\pm$ ) age of 31.44 ( $\pm$ 4.52 SD) years. Most of the respondents 395 (97.1%) were staff nurses, and 377 (92.6%) hold a BSc in nursing. The length of service year of participants ranged from one year to 30 years, with a mean ( $\pm$ ) of 8.31 ( $\pm$ 4.10 SD) service years. Their monthly salary ranges from 4607 to 11305, with a mean of EBR 7636.26  $\pm$  1057.66 SD (Table 1).

Table 1: Socio-demographic characteristics of nurses who were working in a public hospitals in Bahir Dar City, Northwest, Ethiopia, 2023 (n = 407)

Variables	Category	Frequency	Percent
Gender	Male	195	47.9
	Female	212	52.1
Age	20-29	162	39.8
	30-39	219	53.8
	$\geq$ 40	26	6.4
Marital status	Single	148	36.4
	Married	255	62.7
	Divorced	4	1.0
Current working hospitals	Tibebe Ghion	159	39.1
	Addis Alem	28	6.9
	Felege Hiwot	220	54.1
Current position	Director/Ward coordinator	12	2.9
	Staff	395	97.1
Education levels	Diploma	16	3.9
	Degree	377	92.6
	Master	14	3.4
Work experience in years	$\leq$ 5	112	27.5
	6-10	203	49.9
	11-15	76	18.7
	$>$ 15	16	3.9
Monthly salary in birr	$<$ 8017	311	76.4
	$\geq$ 8017	96	23.6
Current working department	Medical ward	45	11.1
	Surgical ward	64	15.7
	OPD	70	17.2
	Oncology ward	9	2.2
	Emergency room	53	13.0
	Operation room	51	12.5
	Pediatrics ward	32	7.9
	Critical Care unit	44	10.8
Neonatal intensive care unit	39	9.6	

## Characteristics of the participants concerning the nursing profession

Regarding self-updating by training, greater than half of the nurses had not participated in training 252 (61.9%). Less than half of the nurses, 190 (46.7%) had membership in the ENA. More than half of respondents 221 (54.3%) had intention to stay in the nursing profession. Around half of the participants 207 (50.9%) reported job satisfaction and 248 (60.9%) reported low organizational commitment. Of the nurses who participated in the study, 195 (47.9%) experienced burnout syndrome and 207 (50.9%) of nurses reported having stress on their job (Table 2).

Table 2: Descriptive statistical measures of the scales concerning nurses' profession in public hospitals of Bahir Dar city, 2023

Variables	Category	Frequency	Percent
Membership in ENA	Yes	190	46.7
	No	217	53.3
Participate in nursing training	Yes	155	38.1
	No	252	61.9
Intent to stay in nurse profession	Yes	221	54.3
	No	186	45.7
Job satisfaction	Satisfied	207	50.9
	Unsatisfied	200	49.1
Job Burnout	No Burnout	212	52.1
	Burnout	195	47.9
Work place stress	Yes	207	50.9
	No	200	49.1
Organizational commitment	Low	248	60.9
	High	159	39.1
Affective commitment	Low	254	62.4
	High	153	37.6
Continuance commitment	Low	259	63.6
	High	148	36.4
Normative commitment	Low	250	61.4
	High	157	38.6

### Level of nurse's clinical practice autonomy

Based on the DPBS, the higher the score have well the level of autonomy possible. Therefore, these findings show that on average, nurses within this sample perceive that more than half of them had a poor autonomy regarding their work in the field of nursing 225 (55.3%), (95% CI, 50.4, and 60.2) (Figure 3).

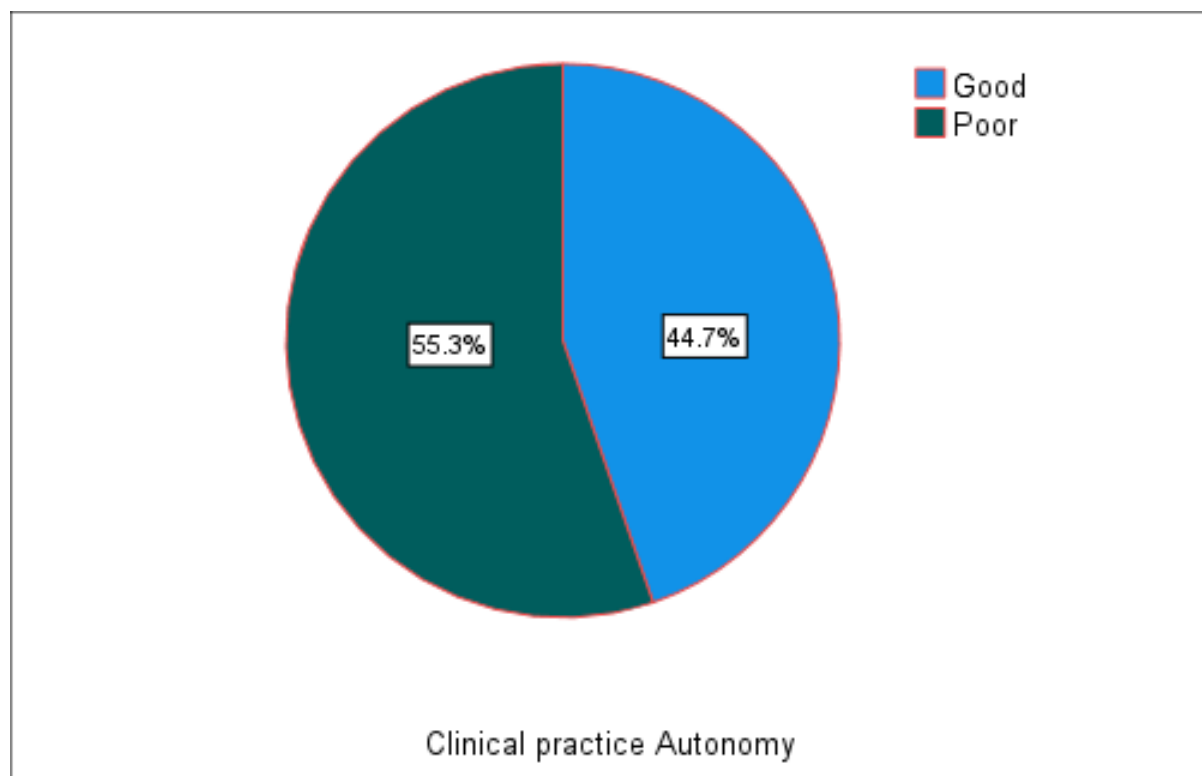


Figure 3: level of clinical practice autonomy of nurses working in public hospitals in Bahir Dar, Northwest, Ethiopia, 2023

### Factors associated with level of nurses' clinical practice autonomy

A bivariable analysis was done to assess any association between independent variables and nurses clinical practice autonomy. After controlling the effect of other variables; membership in the ENA, educational level and current working department and organizational commitments were found significantly associated with clinical practice autonomy (P-values < 0.05).

Nurses who had a master's degree were more than seven times (AOR = 7.43, 95% CI: 1.10, 10.03) more likely to had good clinical practice autonomy as compared with those who had a diploma. Nurses working in intensive care units were nearly five times (AOR = 4.96, 95% CI = 1.54, 15.94) more likely to had good clinical practice

autonomy as compared with those who were working in neonatal care units. Again, the results indicated that, compared to nurses who participated in the nursing association, those who did not participate in the nursing association were 42.7% (AOR = 0.57, (95% CI: 0.32, 0.99) less likely to had a high degree of clinical practice autonomy in their jobs. There was also nurses who want to stay in the nursing profession were nearly three folds (AOR = 3.13, 95% CI 2.46, 6.94) more likely to had good clinical practice autonomy than those who do not. Nurses who had low normative commitment were 71.8 % (AOR 0.28, 95% CI: 0.15, 0.50) less likely to had good clinical practice autonomy than those who had high commitment (Table 3).

Table 3: Multivariable analysis of factors associated with level of clinical practice autonomy among nurses working in the public hospitals of Bahir Dar city, Northwest, Ethiopia, 2023

Variables	Category	Autonomy		COR (95% CI)	AOR (95% CI)
		Good	Poor		
Current working hospitals	Tibebe	110	49	1.68	1.62
	Ghion	(27%)	(12.1%)	(1.31,6.80)	(0.58,4.51)
	Felege	56	164	0.25	0.70
	Hiwot	(13.8%)	(40.3%)	(0.14,0.75)	(0.27,1.79)
	Addis Alem	16(3.9%)	12(2.9%)	1	1
Education level	Diploma	5 (1.2%)	11 (2.7%)	1	1
	Degree	166	211	1.73	2.67
		(40.8%)	(51.8%)	(0.93,8.03)	(0.78,9.17)
	Master	11	3	8.06	7.43
		(2.7%)	(0.7%)	(1.53,12.31)	(1.10,10.03)*
Current working department (ward)	Medical	28	17	1.57	2.58
		(6.9%)	(4.2%)	(0.65, 3.73)	(1.21,10.54)
	Surgical	23	41	0.53	0.75
		(5.7%)	(10.1%)	(0.35,1.74)	(0.63, 4.34)
	OPD	26	44	0.56	0.41
		(6.4%)	(10.8%)	(0.51, 2.47)	(0.73,5.01)
	Oncology ward	3	6	1.90	1.15
		(0.74%)	(1.5%)	(0.10,2.17)	(0.20,6.37)
	Emergency	21	32	0.62	0.87
		(5.2%)	(7.9%)	(0.50,2.62)	(0.59,4.68)
	OR	16	35	0.43	0.33
		(3.9%)	(8.6%)	(0.26,1.42)	(0.36, 2.77)
	Pediatric	11	21	0.50	2.62
		(2.7%)	(5.2%)	(0.69,4.74)	(0.82, 8.34)
	ICU	34	10	3.23	4.96
		(8.4%)	(2.5%)	(1.80,13.96)	(1.54,15.94)**
	NICU	20(4.9%)	19(4.7%)	1	1
Work	=<5	51(12.5%)	61(15%)	1	1



experience of participants in year	6-10	87 (21.4%)	116 (28.5%)	0.90 (0.79,2.01)	1.43 (0.79, 2.58)
	11-15	35 (8.6%)	41 (10.1%)	1.02 (0.39,1.28)	0.95 (0.46,1.98)
	>15	9 (2.2%)	7 (1.7%)	1.54 (0.22,1.86)	1.32 (0.17,3.15)
Monthly salary in birr	<8017	137 (33.7%)	174 (42.8%)	0.89 (0.56, 1.41)	0.88 (0.52,1.48)
	>=8017	45(11.1%)	51 (12.5%)	1	1
Membership in ENA	Yes	101(24.8%)	89 (21.9%)	1	1
	No	81 (19.9%)	136 (33.4%)	0.52 (0.43, 0.95)	0.57 (0.32,0.99) *
Intent to stay	Yes	124 (30.5%)	97 (23.8%)	2.82 (1.34, 7.81)	3.13 (2.46, 6.94)**
	No	58 (14.3%)	128 (31.5%)	1	1
Overall job satisfaction	Satisfied	119 (29.2%)	88 (21.6%)	1	1
	Unsatisfied	63 (15.5%)	137 (33.7%)	0.34 (0.14, 0.75)	0.68 (0.41,1.14)
Work place stress	Yes	82 (20.1%)	125 (30.7%)	0.65 (0.44, 0.97)	0.80 (0.48,1.34)
	No	100 (24.6%)	100 (24.6%)	1	1
Burnout	No burnout	110 (27.0%)	102 (25.1%)	1.84 (0.88, 1.94)	1.39 (0.83,2.32)
	Burnout	72 (17.7%)	123 (30.2%)	1	1
Affective commitment	Low	48 (11.8%)	134 (32.9%)	0.40 (0.26, 0.62)	0.96 (0.53,1.72)
	High	105 (25.8%)	120 (29.5%)	1	1
Continuance commitment	Low	115 (28.3%)	110 (27.0%)	0.27 (0.17,0.43)	0.68 (0.37, 1.24)
	High	144 (35.4%)	38 (9.3%)	1	1
Normative commitment	Low	32 (7.9%)	100 (24.6%)	0.26 (0.10,0.27)	0.28 (0.15,0 .50)**
	High	150 (36.9%)	125 (30.7%)	1	1

**Notes;** \*indicates statistically significant ( $p < 0.05$ ), \*\*highly statistically significant ( $P < 0.01$ ).

## 7. DISCUSSION

The demand for healthcare improvement is currently great, yet there is no longer worry regarding the autonomy of nurses in their work. The nurses under nursing clinical autonomy make the choice regarding a patient's specific care. A nurse ought to grow into an individual who thinks, makes judgments, and accepts responsibility for those decisions rather than merely following directions (71).

The findings showed that more than half of nurse's, 55.3% have low autonomy over their jobs. This is consistent with studies done in Wollega public hospitals (53.87%) (11) and Turkey (21).

In contrast, a survey done on Iranian nurses revealed that the majority of nurses (66.7%) (28) and in Iraq, 64.2% (27), of nurses enjoy a high level of autonomy in their work, and once more high in America, Florida, and in New York (32).

The study participants' differing levels of autonomy may be attributable to a variety of factors, including differences in economic status, education level, salary, and social acceptance of the nursing profession. That instance, in Iran and other wealthy nations, nurses may receive a sufficient wage and the supplies they need. Once again, wealthy nations have generally provided nursing students with suitable knowledge during their studies.

According to the findings of this study, factors influencing the degree of nurses clinical practice autonomy were membership in the ENA, educational level, current working department and organizational commitments.

Being a member of nursing association was substantially connected with increasing the autonomy of nurses in their work. This might be due to a consequence of entering the association and supporting its members might increase self-confidence in their job, which results in a high level of autonomy. As a result, these individuals have more nursing autonomy at work than who do not belong to any nursing organizations (11).

This finding is consistent with studies done in Iran, Canada, and US. Because of this, their nursing staff members have a high degree of professional autonomy (22,72). Thus, it is preferable for nurses to join a nursing association to promote their

professional autonomy. Nursing association help nurses by offering fellowships, reviewing their rights in the case of a change, and actively advocating for them.

Nurses with a master's degree had a higher level of clinical practice autonomy than having diploma. This is consistent with prior studies done in (73), Iran (28), Philippines (31) and compared to nurses with less education, those with a master's and above degree have higher degrees of clinical practice autonomy (31,41,74)

This may be due to those nurses with master's degrees having learned with the recent modern curriculum and modern resources for learning materials. In addition, the master nurses update themselves more frequently than diploma, which give them an advantage for their autonomy. The higher level of education might enhance skills and knowledge of nurses. Furthermore, it can increase level of confidence, and expertise, which could be increased the extent of nursing autonomy (31).

The autonomy of nurses' clinical practice was related to their intention to stay in the nursing profession. According to this study, nurses who intended to continue in their field had a three times more likely having good nursing clinical practice autonomy than those who wanted to change careers. This findings are consistent with previous studies conducted in Wollega and other underdeveloped nations (11,34,35,48).

Nurses leave the field and transition to other occupations in large numbers in Ethiopia. The lack of desire to stay in the profession; might lead nurses less self-competent, low level of autonomy which can cause poor patient care and outcome.

In this study, the nurses working in the Intensive care units had significantly higher levels of autonomy than those in other units. The specific requirements of these units, the various types, and natures of the labor division, relationships, and working conditions could contribute to this variance. This finding is consistent with studies conducted in Finland and Iran (20,39,40,75). In a comparable fashion, another study conducted by J. Hagan and DL Curtis Sr. discovered that nurses in acute care settings have a high degree of autonomy in their duties (42).

This might be due to ICU nurses have received specialized training in dealing with seriously ill patients. Additionally, because of the low staff-to-patient ratio in this unit, nurses only ever spend time with one or two patients at a time could enhance

their autonomy. But it was inconsistent with the study done by KK Iliopoulou, nurses rarely participate in decision-making in acute care settings (43).

There was a significant association between organizational commitment and nurses' autonomy. Nurses who have a low normative commitment have low nursing autonomy than those who have a high commitment. This study is inconsistent with the idea that improved organizational commitment affects new nurses' competence (23).

## **8. STRENGTH AND LIMITATION OF THE STUDY**

### **8.1. STRENGTH**

This study was done in different of hospitals and used different tools to measure the variables.

### **8.2. LIMITATION**

The limitations of this study was asking the respondents to determine their perceived autonomy by self-report, which might have response and social desirability bias. In addition, since this study is quantitative, it is better to compile a qualitative study design.

## **9. CONCLUSION**

In this, the level of nurses' clinical practice autonomy was low. Level of clinical practice autonomy was decreased by not engaging in nursing associations and low normative commitment. However, having a master's degree, working in ICU, and having the intent to stay in the nursing profession have a positive relationship with nurses' autonomy. To increase nurses' clinical practice autonomy, such factors must be recognized and enhanced by stakeholders in the healthcare system.

## **10. RECOMMENDATION**

**Nurses** It is preferable if the nurses are members of any organization that advocates for the clinical practice autonomy of nurses. Again, they must be able to learn more and be completely willing to do so.

**Hospitals:** Hospital Chief Executive Officer's and human resources staff should create a variety of commitment for nurses and create supportive conditions to help them build stronger clinical practice autonomy-related personalities.

**Amhara Region Health Bureau:** should work to encourage and strengthen professional development of nurses.

**The Ethiopian Nursing Association:** offers support to its members in a number of ways, such as raising educational standards, creating possibilities for members to get scholarships, fighting for members' rights, and include more nurses in the association.

**Researchers** are recommended that do further study on Ethiopian nurses' clinical practice autonomy and related issues in comparison to the state of the global nursing. A large sample size should be employed in further research and by including qualitative method.

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## APPENDIXES

### Annex-I Information sheet

**Title of the Research:** level of clinical practice autonomy and associated factors among nurses working in Bahir dar public hospitals, Bahir dar, Northwest, Ethiopia, 2023

**Institution:** Bahir Dar University, College of Medicine and Health Sciences, School of Health Sciences, Department of Adult Health Nursing.

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**Background Information:** Higher autonomy of nurses' practices has a significant positive impact on patients, nurses, and hospitals in terms of improving the nurses' satisfaction and motivation and decreasing their turnover, which enhances the patient's perception of the quality of nursing care and satisfaction. Even though clinical practice autonomy is one of the cornerstones of nursing practice, there is limited study in Ethiopia.

**Objective of the study:** The aim of this study was to assess the clinical practice autonomy and associated factors among nurses working in Bahir Dar public hospitals, Bahir Dar, Northwest Ethiopia, in 2023.

**Benefit of the study:** There is no direct short-term benefit for participants. However, this study will in fact help to improve the level of nurses clinical practice autonomy.

**Risk of the study:** Answering the questions may consume valuable time in your busy Schedules.

**Right of the participants:** Respondents had the full right not to participate and were free to withdraw their consent if they want to do so. However, participation has an impact on the study, so we appreciate your participation.

**Confidentiality:** Participating in the study was purely voluntary. Names and other identifying characteristics were not written on the questionnaire. The collected information was kept confidential, and no one except the research team members had access to the raw data. The information received from respondents was used only for the purposes of the study.

## Annex-II Consent form in English Version

Greetings!

How are you? My name is...

We are going to take a few minutes to assess Clinical practice autonomy and associated factors among nurses under the Bahir Dar University College of Medicine and Health Sciences School of Health Sciences Department of Adult Health Nursing. This questionnaire is presented to you to obtain relevant information about nurses' clinical practice autonomy and associated factors among nurses for a better understanding. All information you give will be kept confidential, and you are not going to be mentioned by name. Filling out the questions is totally dependent on your willingness, and you have the right to stop at any point during the course of administering the question. If you need more clarification, you can ask the supervisor.

Yes, continue \_\_\_\_\_

No, skip and write the reasons. \_\_\_\_\_

### Part 1. Socio-demographic-related questions

Please circle or fill in the appropriate response below.

s/n	Question	Responses			
101	Gender	1.Male	2. Female		
102	Age in year	-----			
103	Marital status	1.Single	2. Married	3.Divorced	4.Widowd
10	Current working hospital	1.Tibebe Ghion	2.Felege-Hiwot	3.AdisAlem	
105	Current position	1. Director/Ward coordinator			2.Staff
106	Current working department	1.Medical ward	2.Surgical ward	3.OPD	
		4.Oncology ward	5.Emergency Room	6.OR	
		7.Pediatrics ward	8.Intesive Care unit	9.NICU	
107	Education level	1.Diploma	2.Degree	3.Master	
108	Work experience in years	-----			
109	Monthly salary in birr	-----			

**Note:** OPD – Out patient department, OR-Operation room, and NICU-Neonatal intensive care unit



## Part 2: Characteristics of the Nurses

Please circle or fill in the appropriate response below.

s/n	Question	Responses
110	Membership in the Ethiopian Nursing Association?	1. Yes 2. Not
111	Participated in nursing training in the previous year?	1. Yes 2. Not

### Intent to Stay and Job-Related Questionnaire

**Instructions:** Please circle only one number among the given alternatives (1–5) and mark the answer if the statement reflects your attention. Each number stands for: 1 = strongly disagree, 2 = disagree, 3 = Neutral, 4 = Agree and 5 = strongly agree.

Intent to stay						
s/n	Items	Responses				
IS201	Even if this job does not meet all my expectations, I will not quit	1	2	3	4	5
IS202	I plan to work at my present job as long as possible.					
IS203	I will probably spend the rest of my career in this job.					
IS204	I plan to keep this job for at least two or three years.					
IS205	Under no circumstances would I leave my present job.					
Job Satisfaction						
How do you feel about your job?						
JS206	In general, I do not like my job.					
JS207	Overall, I am satisfied with my job.					
JS208	In general, I like working here.					
Workplace Stress Scale						
<b>Instructions:</b> Please circle only one number among the given alternatives (1–5) and mark the answer if the statement reflects your attention. Each number stands for: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often and 5 = very often.						
S. N	Items	Responses				
WS209	Conditions at work are unpleasant or sometimes even unsafe	1	2	3	4	5
WS210	I feel that my job is negatively affecting my physical or emotional well-being.					
WS211	I have too much work to do and/or too many unreasonable deadlines.					
WS212	I find it difficult to express my opinions or feelings about my job conditions to my superiors					
WS213	I feel that job pressures interfere with my family or personal life.					
WS214	I have adequate control or input over my work duties(R)					
WS215	I receive appropriate recognition or rewards for good performance. (R)					
WS216	I am able to utilize my skills and talents fully at work. (R)					

## Burnout Inventory (MBI)

**Instruction:** Please circle only one number among the given alternatives (0–6) and mark the answer if the statement reflects your attention. Each number stands for: 0= Never, 1 = A few times a year; 2 = Once a month; 3 = A few times a month; 4 = Once a week; 5 = A few times a week; 6 = every day.

Items		Responses						
<b>Exhaustion</b>								
BQ217	I feel emotionally drained by my work.	0	1	2	3	4	5	6
BQ218	Working with people all day long requires a great deal of effort.							
BQ219	I feel like my work is breaking me down.							
BQ220	I feel frustrated by my work.							
BQ221	I feel I work too hard at my job.							
BQ222	It stresses me too much to work in direct contact with people.							
BQ223	I feel like I am at the end of my rope.							
<b>Depersonalization</b>								
BQ224	I feel I look after certain patients/clients impersonally, as if they are objects.							
BQ225	I feel tired when I get up in the morning and have to face another day at work.							
BQ226	I have the impression that my patients/clients make me responsible for some of their problems.							
BQ227	I am at the end of my patience at the end of my workday.							
BQ228	I really do not care about what happens to some of my patients/clients.							
BQ229	I have become more insensitive to people since I have been working.							
BQ230	I am afraid that this job is making me uncaring.							
<b>Personal achievement</b>								
BQ231	I accomplish many worthwhile things in this job.							
BQ232	I feel full of energy.							
BQ233	I am easily able to understand what my patients/clients feel							
BQ234	I look after my patients/clients' problems very effectively.							
BQ235	In my work, I handle emotional problems very calmly.							
BQ236	Through my work, I feel that I have a positive influence on people							
BQ237	I am easily able to create a relaxed atmosphere with my patients/clients.							
BQ238	I feel refreshed when I have been closed to my patients/clients at work.							

## Organizational commitment scale

**Instruction:** Please circle only one number among the given alternatives (1–5) and mark the answer if the statement reflects your attention. Each number stands for: 1 = strongly disagree, 2 = disagree, 3 = Neutral, 4 = Agree and 5 = strongly agree.

Items		Responses				
<b>Affective commitment scales items</b>						
OC239	I would be very happy to spend the rest of my career with this organization	1	2	3	4	5
OC240	I enjoy discussing about my organization with people outside it					
OC241	I really feel as if this organization's problems are my own					
OC242	I think that I could easily attach myself to another organization as I am to this one (R)					
OC243	I do not feel like "part of the family" at my organization (R)					
OC244	I do not feel "emotionally attached" to this organization (R)					
OC245	This organization has a great deal of personal meaning for me					
OC246	I do not feel a "strong" sense of belonging to my organization (R).					
<b>Continuance commitment scale items</b>						
OC247	I am not afraid of what might happen if I quit my job without having another one lined up (R)					
OC248	It would be very hard for me to leave my organization right now, even if I wanted to					
OC249	Too much in my life would be disrupted if I decided to leave my organization now					
OC250	It would not be too costly for me to leave my organization now (R)					
OC251	Right now, staying with my organization is a matter of necessity as much as desire					
OC252	I feel that I have very few options to consider leaving this organization					
OC253	One of few serious consequences of leaving this organization would be scarcity of available alternatives					
OC254	One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice and besides this, another organization may not match the overall benefits I have here					
<b>Normative commitment scale items</b>						
OC255	I think that people these days move from company to company too often					
OC256	I do not believe that a person must always be loyal to his or her organization. (R)					
OC257	Jumping from organization to organization does not seem at all unethical to me (R)					
OC258	One of the major reasons I continue to work in this organization is that I believe loyalty is important and therefore feel a sense of moral obligation to remain					
OC259	If I got another offer for a better job elsewhere, I would not feel it was right to leave my organization					

OC260	I was taught to believe in the value of remaining loyal to one organization					
OC261	Things were better in the days when people stayed in one organization for most of their careers					
OC262	I do not think that to be a "company man" or "company woman" is sensible anymore (R)					

### Part 3 autonomy item question

**Instruction:** Please circle only one number among the given alternatives (1–5) in the statement that reflects your attention. Each number stands for: 1 = Not at all true, 2 = slightly true, 3 = moderately true, 4 = Very true and 5 = extremely true.

S. N	Autonomy item question	Responses				
		1	2	3	4	5
AQ401	Take responsibility and am accountable for my actions.					
AQ402	Have developed the image of myself as an independent professional.					
AQ403	Base my actions on the full scope of my knowledge and ability.					
AQ404	Self-determine my role and activities.					
AQ405	Derive satisfaction from what I do.					
AQ406	Take control over my environment and situations I confront					
AQ407	Am valued for my independent actions.					
AQ408	Am constrained by bureaucratic limitations. (R)					
AQ409	Provide quality services through my actions.					
AQ410	Am confident in my abilities to perform my role independently.					
AQ411	Have been professionally socialized to take independent action.					
AQ412	Function with the authority to do what I know should be done.					
AQ413	Have too many routine tasks to exercise independent action. (R)					
AQ414	Have a sense of professionalism.					
AQ415	Have the rights and privileges I deserve.					
AQ416	Have the professional experience needed for independent action.					
AQ417	Am restrained in what I can do because I am powerless. (R)					
AQ418	Collaborate with others outside my field when I feel there is a need.					
AQ419	Derive feelings of self-respect and esteem from what I do.					
AQ420	Make my own decisions related to what I do.					
AQ421	Possess ownership of my practice; that is, my role belongs to me.					
AQ422	Have the power to influence decisions and actions of others.					
AQ423	Have a sense of self-achievement.					
AQ424	Am provided with a legal basis for independent functioning.					
AQ425	Demonstrate mastery of skills essential for freedom of action.					
AQ426	I always advocate patients' rights. (R)					
AQ427	Have the respect of those in other disciplines.					
AQ428	Cannot optimally function because I do not have legal status.(R)					
AQ429	Establish the parameters and limits of my practice activities.					
AQ430	Accept the consequences for the choices I make.					

**Note:** R -Reverse question