

Nursing Students' Perception of Stress and Resilience during Their Clinical Training

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Abstract:

Background: Clinical training is integral to any nursing education program. The nature of clinical education presents challenges that may cause students to experience stress. The ability to overcome adversity and learn to be stronger from the experience is regarded as resilience. **Aim** of the current study was to assess nursing students' perception of stress and resilience during their clinical training. **Design:** Descriptive correlational design was used to achieve the study aim. **Setting** The study was conducted in Faculty of Nursing, Minia University. **Subjects:** A random sample drawn from the number of students in each of the four academic levels enrolled at Faculty of Nursing - Minia University during the academic year 2022-2023. **Data Collection Tools:** Data collected through the utilization of two tools namely: Tool (I): The Perceived Stress Scale and Tool (II): Nicholson McBride Resilience Questionnaire (NMRQ). **Results:** Nearly two thirds of the studied nursing students at the four academic levels have moderate level of total stress, and, more than half have an "established level of resilience". In addition, there was high statistically significant negative correlation exists between the total level of stress and the total level of resilience. **Conclusion:** Increasing students stress management skills and abilities is an important target for helping to overcome the stress and perform well in the studies. **Recommendations:** Stress management and coping skills workshops should be provided to empower nursing students to control their academic stress and stressors.

Keywords: Clinical Training, Perception, Stress, Resilience, Nursing Students

Introduction

Nurses are one of the main healthcare providers in all healthcare systems around the world. In different health care systems, nurses provide the largest volume of healthcare services to patients who visit primary, secondary, and tertiary healthcare centers (Alkaissi et al., 2022). The constantly changing and increasingly specialized healthcare system, more knowledgeable patients as well as the tension between demands and resources means that both nurses and students struggle to maintain a professional standard with which they can identify (Nolte et al., 2017).

Therefore, nursing faculties are under continuous pressure to provide quality education to nursing students who are the future workforce of nurses. Nurses as well as future nurses are hardly pressed to maintain professional standards with increasing specializations in healthcare delivery, more involvement of patients in their own healthcare, and tensions between demand and available resources (Amsrud et al., 2019). Globally, there is a large number of nursing students who experience struggles to complete their nursing education (Amsrud et al., 2019).

Clinical training play an important role in helping nursing students to achieve clinical competence, and to develop elements of professional practice in real world scenarios. Clinical training help students to gain practical experience in taking care of patients and to attain a gradual sense of belonging to the nursing profession, whilst improving their socialization skills and professional role confidence (Wu et al., 2021). The clinical training is considered to be of paramount importance within nursing students' educational and professional journey. While the merits of clinical practice for healthcare students is well established in general, these placements can also be highly challenging and stressful (Abdelsalam et al., 2016) and for some nursing students, the perceptions and experiences are markedly inconsistent with the desired outcome (Levet et al., 2015).

It has been reported that the most common sources of stress were associated with academic success and the educational program such as academic workload and interactions with the staff and teachers. Other sources of stress include clinical sources such as fear of unknown situations, mistakes with patients or handling of technical equipment and communications with patients (Byron, 2018).

Studies have shown that most students experienced stress due to reasons such as their inability to put clinical theory into practice; fear of making the wrong decisions; unfamiliarity with applying professional knowledge; lack of confidence in implementing clinical skills; poor communication between patients, family members, and professional team members; distrust of patients and their families; pressure during acute medical situations, and poor time management (Rajeswaran et al., 2016).

Stress during clinical training may lead to physical and psychological symptoms such as frequent headaches, anxiety, nervousness, poor sleep, and lack of attention, cognitive decline, and learning difficulties that reduce the ability to provide clinical care and may even affect their willingness to work as a nurse in future (Demiray et al., 2017). One factor that has been recognized as protective and that improves the adaptation and management of stress and thus enhances student nurses' academic performance and ability to cope is resilience. Resilience has theoretically been described as an aggregation of individual attributes that determines the ability to cope with demanding life circumstances (Aloba et al., 2016).

Resilience is the ability of someone to overcome adversity, retaining a sense of control over their environments, maintaining equilibrium, and continuing to move on in a positive manner. Additionally, resilience entails learning and growing stronger from accumulating experiences. Resilience has emerged as a concept that could explain and predict good academic and well-being of students in stressful and traumatic

situations (Alkaissi et al., 2022). Also, the impact of nursing students' personal resilience on issues such as attrition, managing stress in the clinical environment and developing coping skills to overcome adversity has resulted in increased interest in this area (Rice & Liu, 2016).

Significance of the study

Nursing education can be a stressful experience. Stress affects satisfaction, well-being, and performance in university students. Nursing students in particular are under stress during the various stages of their education, they have higher stress levels than students studying in the other health departments (Onan et al., 2019).

Resilience is imperative for nursing students to survive adversity and prepare them for undertaking their professional role once they have graduated (Byron, 2018). Resilience may be described in many different ways, but, in a nutshell, it is being able to bounce back, to protect oneself against the negative effects of stressors and to have the ability to be able to cope with challenging situations and move on positively (Chow et al., 2018).

The study performed by (Porter, 2019) found that first year nursing students experienced an increase in levels of perceived stress during their initial clinical training. Another study conducted by (García-León et al., 2019) who showed that resilience seems to be determinant in perceived stress, the number of current life events, the intensity of stressful events, chronic stress, obsession, and compulsions. Also, a study of (sun et al., 2021) concluded that stress level is an important factor affecting the expression of resilience. Therefore, the researcher proposed the current study to assess the perception and relation of stress and resilience among nursing students during their clinical training.

Aim of the Study:

The aim of the current study is to assess nursing students' perception of stress and resilience during their clinical training

Research Questions:

- 1) What is the level of stress perceived by nursing students during their clinical training?
- 2) What is the level of resilience perceived by nursing students during their clinical training?
- 3) Is there a relation between the levels of stress and resilience perceived by nursing students during their clinical training?

SUBJECT and METHODS

Research design:

The descriptive research design was used to achieve the aim of the current study.

Setting:

The study was conducted in Faculty of Nursing, at Minia University.

Subjects:

The study subjects included a random sample representing 35% of students in each of the four academic levels enrolled at Faculty of Nursing - Minia University during the academic year 2022-2023. The sample size calculated using the following formula:

$$N = n \times 35 / 100$$

N= sample size

n = number of students in each academic level.

The total sample calculated by adding the number of the students selected from each of the four academic levels as shown in the following table:

Table (1): the study sample distribution:

Academic levels	Total no. of students	No. of students selected for the study sample
First year	845	296
Second year	1056	370
Third year	1027	360
Fourth year	591	207
Total	3519	1233

Sampling Technique:

Based on the aim and nature of the current study, the study sample will be chosen using stratified sampling technique according to students' distribution groups for clinical training as follows:

- Dividing the number of selected students from each academic level on the number of groups distributed for clinical training to that academic level,
- The obtained numbers of students were randomly selected by the researcher from each clinical group.

Data Collection Tools:

Data collected through the utilization of two tools namely: Stress Scale and Resilience Questionnaire

Tool (I): The Perceived Stress Scale:

This scale was divided into two parts:

Part 1: Socio demographic data; including information about nursing students as gender, academic level, and residence.

Part 2: This tool is adopted from (Porter, 2019) to assess the extent and type of stress as perceived by nursing students. The Scale consisted of 29 items to measure perceived stress, grouped into six domains including: the stress of providing nursing care to patients (8 items); stress from clinical instructors and the nursing staff (5 items); stress of dealing with paper work and the workload of clinical nursing (5 items); stress of dealing with peers and others (4 items); stress of demonstrating the mastery of professional knowledge and skills (4 items), and stress of the clinical training environment (3 items).

Scoring system:

It is a 29 items scales; Each item was graded on a 5-point Likert scale 0 = "never," 1 = "rare," 2 = "sometimes," 3 = "frequent," and 4 = "always." Total scores of the scale range from (0 - 116) the higher score, the higher the perceived stress level.

Tool (II) –Nicholson McBride Resilience Questionnaire (NMRQ):

This tool is developed by (Clarke & Nicholson, 2010) and adopted by the researcher to assess the extent of resilience perceived by nursing students. It includes a 12-items .

Scoring system: Responses were measured on a five-point Likert scale, ranging from 1 = Never" to 5 = Always". Total scores range from (12-60); further classified as

- Scores (12-28) considered as a developing level of resilience,
- scores (29-44) indicate an established level of resilience, and
- scores (45-60) indicate a strong level of resilience.

Validity of tools:

The scales were tested for the face validity by a jury of 5 experts in the field of nursing administration and education, the jury composed of one Professor and four Assistant Professors from Faculty of Nursing, Minia University. Each of the expert panel was asked to examine the instruments for content coverage, clarity, wording, length, format and overall appearance. Necessary modifications were done as recommended by jury panel.

Reliability of tools:

Using data collected for pilot study, reliability of the study tools was performed to confirm its consistency by using Cronbach alpha test which revealed good internal reliability for the scales as shown in the following table (2):

Table (2): Reliability analysis of the study tools:

The Study Tools	No. of sample students	No of scale items	Cronbach alpha
The perceived stress scale	124	29	0.891
Resilience questionnaire		12	0.817

Pilot study:

Pilot study was carried out before starting data collection and after the development of the scales on 10% of nursing students (124 students) randomly selected from the four academic levels. The main purposes of the pilot study were to: test the data collection scales regarding the phrasing, the order, and the need for adding or omitting questions or items, to test the clarity, comprehensiveness, accessibility, and applicability of the study scales, and to estimate time needed to fill the scales, it was about 20 min. for the perceived stress scale; and 10 min. for resilience questionnaire, in addition it helped in identifying any obstacles and problems that might interfere with data collection. Results of the pilot study indicated that; the scales were applicable without changes.

Data collection procedure:

- An official letter was granted from the Nursing Faculty Dean at Minia University, Ethical Committee, and Nursing Faculty at Minia University.
- The tools were adopted and translated into Arabic; then collect the jury approval for the scales to collect data of the study.
- Written approvals were obtained from the Nursing Faculty Dean at Minia University after explaining the purpose of the study.
- An interview was arranged by the researcher with the head of the different departments of the faculty to explain the nature and objective of the study as well to get their permission to collect the required data from the students.
- The researcher approached the nursing students during clinical training at hospitals and at Nursing

Faculty at Minia University.

- The researcher distributed the scales through intervals from the first-year nursing student during their clinical training, between and after the break at lab at Nursing Faculty at Minia University.
- The researcher filled checklist through intervals from the second-year nursing student during their clinical training in medical surgical departments at Minia University hospitals.
- The researcher distributed the scales through intervals from the third-year nursing student during their clinical training in paediatric and obstetric departments at Minia University hospitals.
- The researcher distributed the scales through intervals from the fourth-year nursing student during their clinical training with psychiatric department at Nursing Faculty at Minia University
- The actual field work lasted for three months during the second semester started from the 1st of March to end of May 2023 for collecting data.
- The researcher scheduled the visits to each group of nursing students of each four academic levels based on nursing students 'clinical training schedules.

Ethical Considerations:

- A written approval was obtained from the Research Ethics Committee at the Faculty of Nursing, Minia University.
- An official letter was granted from Faculty Dean to conduct the study.
- The participants were informed that their participation in the study will be completely voluntary and there were no harm if they not participate in the study.
- Consent was obtained from nursing students after explaining the nature and benefits of the study.
- Each assessment sheet was coded, and participants' names would not appear on the sheets for the purpose of anonymity and confidentiality.

Data statistical analysis

Upon completion of data collection, the data were scored, tabulated, and analyzed through data entry and analysis by computer using the "Statistical Package for Social Science" (SPSS) (IBM 28). Data were presented using descriptive statistics in percentages, frequency mean, and standard deviation. Inferential statistical tests of significance such as chi-square test and Pearson correlation were used to identify group differences and the relations among the study variables. The p -value > 0.05 indicates a non-significant result, while the p -value < 0.05 is significant, and the p -value ≤ 0.01 is highly significant.

Spearman's Correlation is used to test the nature and strength of the relation between the study variables. The sign of the coefficient indicates the nature of relation (positive/negative) while the value indicates the strength of relation as follows: no correlation for rho value less than 0.19, a weak correlation for rho of value between 0.20 - 0.29, a fair correlation for rho of value between 0.30-0.39, a strong correlation for rho of value between 0.4-0.69, and very strong correlation for values between 0.7-0.99.

Results

Table (1): Distribution of the studied nursing Students at the four academic levels according to their Socio demographic data (n= 1233).

Socio demographic data		No.	%
Gender	Females	856	69.4
	Males	377	30.6
Residence	Rural	363	29.4
	Urban	870	70.6
Academic level	1 st year	296	24
	2 nd year	362	29.4
	3 rd year	368	29.8
	4 th year	207	16.8

Table (1) shows that (69.4%) of nursing students at the four academic levels are females. In relation to residence, (70.6%) of the studied nursing students live in urban areas. As regard to the academic level as shown in the table that, 3rd year students represent (29.8%) of the study sample; (29.4%) are 2nd year; (24%) are 1st year and (16.8%) are 4th year students

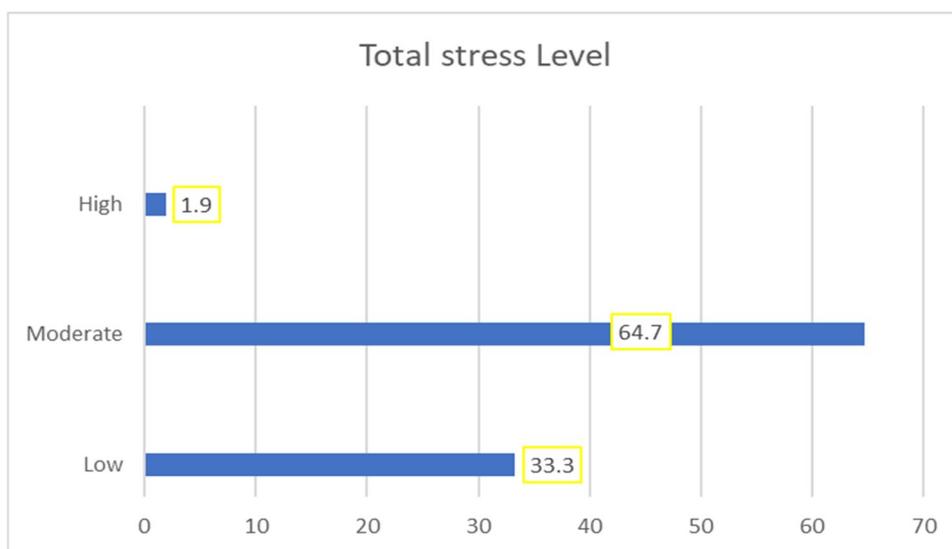


Figure (1): Distribution of total stress level among the studied nursing Students (n = 1233).

Figure (10) presents that (64.7%) of the studied nursing students have moderate level of total stress, While (33.3%) of them possess low level of total stress, and only (1.9) of them have high level of total stress.

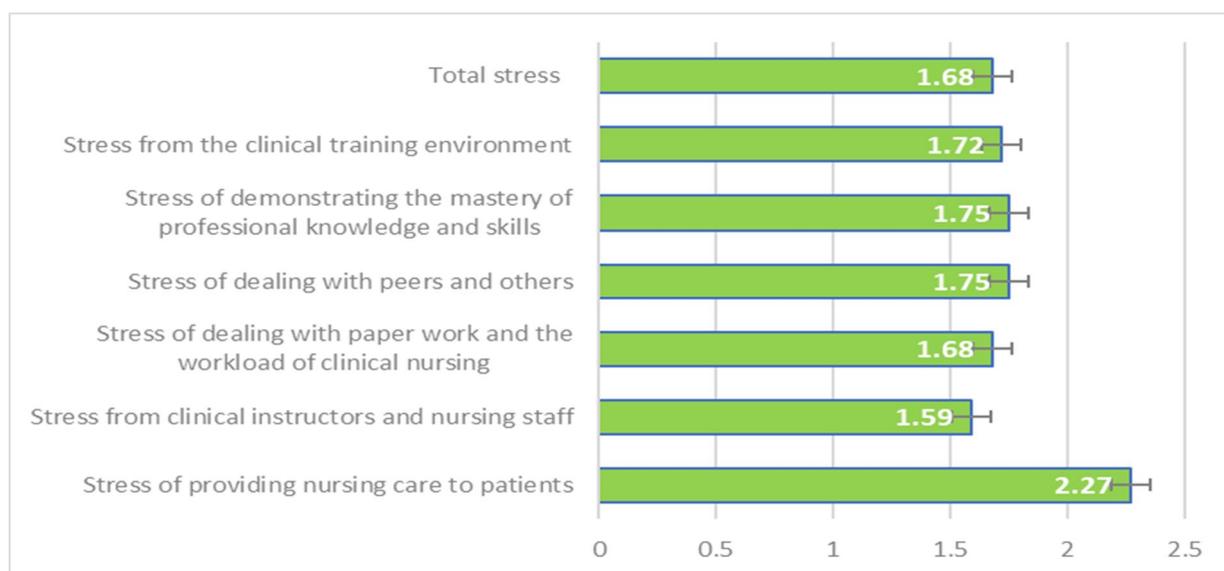


Figure (2): Mean scores of total stress level and its domains among the studied nursing Students (n = 1233).

Figure (2): illustrates that, the mean score of total stress level among the studied nursing students from the four academic levels is (1.68) with average mean scores for stress of providing nursing care to patients domain have the highest mean score (2.27). While the lowest mean score is for the Stress from clinical instructors and nursing staff domain (1.59)

Table (2): Comparison of the total stress level and its domains among the studied nursing students at the four academic levels (n = 1233).

Academic Level	Domains of stress	Stress of providing nursing care to patients	Stress from clinical instructors and nursing staff	Stress of dealing with paper work and the workload of clinical nursing	Stress of dealing with peers and others	Stress of demonstrating the mastery of professional knowledge and skills	Stress from the clinical training environment	Total stress
1 st year	Mean	1.50	1.69	1.75	1.77	1.75	1.80	1.71
	STD. DEVIATION	0.521	0.551	0.564	0.627	0.638	0.674	0.492
2 nd year	Mean	1.61	1.70	1.74	1.75	1.71	1.63	1.68
	STD. DEVIATION	0.511	0.551	0.556	0.629	0.588	0.632	0.503
3 rd year	Mean	1.52	1.60	1.68	1.67	1.60	1.56	1.58
	STD. DEVIATION	0.542	0.573	0.587	0.647	0.610	0.641	0.531
4 th year	Mean	1.80	1.81	1.90	1.86	1.93	1.84	1.86
	STD. DEVIATION	0.467	0.513	0.473	0.584	0.512	0.576	0.428
Total	Mean	1.59	1.68	1.75	1.75	1.72	1.68	1.69
	STD. DEVIATION	0.526	0.556	0.559	0.629	0.604	0.645	0.504
Test of significance	ANOVA	17.067	6.732	7.462	4.538	13.811	12.528	13.327
	(P- value)	0.000	0.000	0.000	0.004	0.000	0.000	0.000

Table (2): proves that there is high statistically significant differences in the total stress level and its domains among the studied nursing students at the four academic levels in the favor to 4th year students having the highest mean score (1.80; 1.81; 1.90;1.86; 1.93 1.84 &1.86) in all domains and in the total stress level respectively at (p- value= 0.004) for domain 4 ” **Stress of dealing with peers and others**” and (p- value= 0.000) for the total stress level and the other domains respectively

Table (3): Distribution of resilience level among the studied nursing students at the four academic levels (n = 1233).

Levels of Resilience	Academic levels									
	1 st year		2 nd year		3 rd year		4 th year		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Developing level of resilience	20	6.8	33	8.9	29	8.1	11	5.3	93	7.5
Established level of resilience	144	48.6	220	59.5	193	53.6	156	75.4	713	57.8
Strong level of resilience	132	44.6	117	31.6	138	38.3	40	19.3	427	34.6
Total Resilience level	Mean	2.38	2.23	2.30	2.14	2.27				
	STD. DEVIATION	.610	.596	.611	.477	.590				
	Min- Max	1-3	1-3	1-3	1-3	1-3				

Table (3): presents (57.8%) of the studied nursing students at the four academic levels have an “**Established level of resilience**”, and (34.6%) of the students have “**Strong level of resilience**”, While only (7.5%) of the students have a “**Developing level of resilience**”. The same table also shows that, 1st year students have mean score of the total resilience level (2.38) higher than mean scores of the students in the other academic levels

Table (4): Correlations among the total level of stress and its domains and the level of resilience among the studied nursing students (n= 1233)

Domains of Stress	Total level of Resilience	
	R	P- Value
Stress of providing nursing care to patients	R	-.263**
	P- Value	.000
Stress from clinical instructors and nursing staff	R	-.169**
	P- Value	.000
Stress of dealing with paper work and the workload of clinical nursing	R	-.195**
	P- Value	.000
Stress of dealing with peers and others	R	.004
	P- Value	.895
Stress of demonstrating the mastery of professional knowledge and skills	R	-.146**
	P- Value	.000
Stress from the clinical training environment	R	-.177**
	P- Value	.000
Total Stress Level	R	-.219**
	P- Value	.000

*Correlation is significant at the 0.05 level **Correlation is highly significant at the 0.001 level

Table (4): presents that there is weak negative correlation exists between the total level of stress and the total level of resilience(r=-.219), however this relation is high statistically significant at (p-value = .000). As well, there is weak but high statistically significant negative correlation exists between all domains of stress and the total level of resilience among the studied nursing students at (p-value =0.000), except in domain 4 “**Stress of dealing with peers and others**” there is no statistically significant correlation exists as the (P – Value=.895).

Discussion

Nursing students need extensive training since the 1st day of nursing college to be a proficient nurse. During this training, nursing students are often subjected to varied stressors that cause perceived stress such as academic expectations and adjustment to college that can affect health and could lead to psychological distress and psychosomatic illness. In addition to this, the perception of stress and ability to handle it is largely determined by the resilience capacity of the students as the individual with good resilience tends to perceive less stress in a difficult environment and overcome the stressful situation easier than the one with less resilience (Nebhinani, 2020).

The current study aimed to assess nursing students' perception of stress and resilience during their clinical training. The study findings revealed that more than two thirds of nursing students at the four academic levels are females. And about three quarters of them live in urban areas. As regard to the academic level the study sample included about thirty percent represented students from each of the 2nd and 3rd year academic level; while about one quarter of the sample students were from 1st academic level and less than twenty percent were 4th year students according to the total number of students in each academic level.

Concerning the total stress level among the studied nursing students at the four academic levels, results of the present study demonstrated that nearly two thirds of the students have moderate level of total stress, while one third of them possess low level of total stress, and small proportion of them have high level of total stress. This result confirmed by Kumar et al., (2020) who stated that most of the nursing students had moderate level of academic stress.

From the researcher perspective the behind reasons could be as follows. First, clinical nursing practice plays a major role in patient health care and requires both theoretical knowledge and practical skills from the nursing students. However, prior to clinical training, nursing students had only short simulation exercises in the laboratory and no clinical practicum experience, which resulted in a lack of clinical skills. Second, the theoretical knowledge that students acquired on campus was not enough to meet the requirements in clinical training as the nursing discipline had developed rapidly. Finally, as stated in Lazarus's stress theory, the stress experienced by nursing students during clinical training may be due to the perceived gap between the needs of a specific clinical situation and the resources or abilities that are available for performing the task or meeting those needs.

Regarding distribution of mean scores of total stress and its domains among the studied nursing Students, the present study demonstrates that average mean scores of nursing students stress level regarded to stress of providing nursing care to patients have the highest mean score. While the lowest mean score is stress from clinical instructors and nursing staff.

A possible explanation for why taking care of patients was the highest ranked stressor is that nursing students might meet a wide range of patients with complex bio-psychosocial problems and needs, which requires nursing students to be competent in developing and sustaining therapeutic relationship and equipped with adequate knowledge and skills in order to provide effective nursing care to such patients. Moreover, in the clinical rotations, nursing students have to carry a high level of responsibility and accountability while dealing with patients. Sometimes, nursing students deal with

seriously ill or dying patients which cause an increase in stress for them.

Another explanation is that in the clinical areas, the head nurse may assign the students a substantial amount of clinical work due to heavy workload and shortage of staff, so the students could be distracted from the goals that were set for their clinical experience and forced to take on tasks that they were not prepared for.

This result supported by Chen et al., (2014) who noticed higher patient care stress among nursing students. These findings also come in line with the results of Ali and El-Sherbini, (2018) who reported that more than three quarters of the students had high academic stress which is mainly related to patients' care, assignments and work load.

Concerning comparison of the total stress level and its domains among the studied nursing students, the current study illustrated that there were high statistically significant differences in the total stress level and its domains among the studied nursing students at the four academic levels in the favor to 4th year students having the highest mean score in all domains and in the total stress level than that of other academic levels.

This result confirmed by John and Al-Sawad (2015) stated that fourth year students experienced highest levels of stress in terms of assignments and workload than second year and third year students. Whereas environmental factors, frequent exams and assignments, and unfair clinical evaluations are reported to be most negative and stress inducing in the clinical practicum in other studies.

While this result comes inconsistent with Al Zayyat and Al- Gamal, (2014) stated that senior students' nurses present lower levels of stress compared to junior students. In addition, this result differs with Admi et al, (2018) reported that the level of stress and satisfaction of second year students in the preclinical stage was significantly higher compared to peers in their third and fourth year. Also, this result disagrees with (King, 2019) who suggested that nursing students, both the sophomore and senior cohorts, at the University of Maine experience high amounts of stress, with the sophomore student cohort experiencing higher levels of stress. The Author explained the reasons could be that, in junior students, the imbalance in the perceived and actual complexity of the nursing education as they were novice to nursing education. Additionally, the academic expectations in college can be abrupt change from those in the secondary schools causing the highest percentages of them to be stressed as in the present study finding where academic stress was more experienced by first year students.

Considering the level of resilience among the studied nursing students, the current study showed that more than half of the studied nursing students at the four academic levels have an "established level of resilience", and more than one third of the students have "strong level of resilience", While only less than ten percent of the students have a "developing level of resilience". As well, 1st year students have mean score of the total resilience level higher than mean scores of the students in the other academic levels.

From the researcher viewpoint, this result could be attributable to that resilience is more in the first grade than in the fourth grade because first-year students believed that high school was their last stage of stress in life and the university stage is the stage of fun and growing up, while fourth stage students are less flexible and their stress rate is higher, due to fear of the coming future, the profession, and assuming

responsibility, especially since this batch is the batch that went through the Corona virus pandemic, where three years have passed of studying, without practical training, and not interacting with patients at all for fear of infection because they do not have any skill to deal with them, which led to increased stress in them and lack of flexibility.

As regard the correlations among the level of stress and the level of resilience among the studied nursing students, the current study proves that there was high statistically significant weak negative correlation exists between the total level of stress and the total level of resilience. The study finding congruent with *Shilpa and Srimathi, (2015)* who and found a negative correlation between stress and resilience, and The current study result in this regard come in the line with *Smith and Yang, (2017)* found that resilience was weakly and negatively correlated with stress, where an increase in resilience score resulted in a decrease in total perceived stress scores.

In the same line, this result confirmed with *Sam& Lee, (2020)* who reported that a negative correlation between resilience and stress among nursing students. Also this result comes in accordance with *Wie & Choi (2020)* who revealed that an increase in stress levels correlates with a decrease in resilience. Conversely, a decrease in stress levels correlates with an increase in resilience. In addition this result comes in accordance with *Berdida & Grande, (2023)* who reported that Academic stress and COVID-19 anxiety negatively correlated with quality of life and resilience.

Otherwise, this result comes inconsistent with *Ozaban et al (2019)* who revealed no significant correlation between resilience and stress among nursing students, Also this result contraindicated with *oliveira et al ., (2020)* who revealed no significant correlation between resilience and stress among nursing students.

Conclusion:

Academic stress becomes a pervasive problem among nursing students across their educational and professional journey as many of the nursing students at the four academic levels studied in the context of the current study have moderate level of stress during their clinical training while, more than half of them have an “established level of resilience”. 4th year students demonstrated having the highest mean score of total stress level, while 1st year students have mean score of the total resilience level higher than mean scores of the students in the other academic levels. These findings shed the light that academic stress still continues to be a destructive problem affecting the students’ academic performance, mental health and wellbeing. And increasing students stress management skills and abilities is an important target for change.

Recommendations:

In the light of the results of current study, following recommendations are proposed:

For nursing educators:

- A constructive contribution to reducing student nurses' stress levels should come from curriculum planners and nurse educators.
- Nursing instructors ought to elucidate college policies and assessment procedures to their students.
- It is important for curriculum designers to think about optimizing their materials to provide students with a less stressful learning environment.

- Establish a setting in which nursing students are at ease to voice their worries and ask for assistance. Facilitating transparent channels of communication among students, instructors, and healthcare professionals can promote a team-based approach to stress management.
- Reward and commemorate nursing students for their achievements, no matter how minor. Recognizing their accomplishments might help them feel more motivated and confident, which enhances their view of their resilience and ability.
- Instructors can help students feel less stressed by behaving in a welcoming, courteous, and kind way; showing that they enjoy working with students; selecting assignments that require patience; and having faith in them.

For nursing students:

- It is important for nursing students to recognize difficulties in a practical way, have faith in the answers to problems, and have assurance in getting the tools they need to handle problems.
- It is advisable for nursing students to concentrate on the present moment and not anticipate issues in advance. In this way, redefining stress as positive by relabeling it is a method of transforming students' perceptions from negative to positive.
- Students should learn to defend their rights without infringing on those of others in order to become more forceful. People should not be allowed to walk all over them because this causes tension, annoyance, and aggravation.
- At the level of Nursing Educational Institutions, it should:
- Offer frequent training that center around stress reduction methods including mindfulness, deep breathing exercises, and effective time management. These classes can give nursing students useful coping mechanisms to handle pressures in the workplace and during their clinical rotations.
- It is recommended that students receive training on stress management and coping techniques, particularly during orientation week, to ensure they are capable of adjusting to new coping mechanisms. As a result, the pupils will be able to develop coping mechanisms for stress management and excel academically.
- Institutions must to schedule regular yoga, meditation, counselling, and other stress-relieving therapy sessions in addition to regular meetings.
- Create peer assistance programs, such mentorship programs that connect advanced nursing students with less experienced ones. Peer support facilitates the development of a sense of community by enabling students to exchange experiences and coping mechanisms.
- Plan frequent feedback meetings with clinical teachers to talk about the development, strong points, and areas that need work for the students. When given in a supportive environment, constructive criticism can reduce stress and aid students' professional growth.
- Incorporate authentic clinical simulations within the educational program. By providing a safe and

controlled setting for practice, simulations help students gain confidence and lessen the anxiety that comes with being unprepared when they enter real patient care situations.

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