

ASSOCIATION BETWEEN LEVEL OF STRESS AND COPING STRATEGIES AMONG UNDERGRADUATE NURSING STUDENTS

Lalchand¹, Dr. Hussan Bano Channar², Ashok Kumar³, Mr. Hasan Raza⁴, Kailash Kumar⁵, Parkash⁶

¹MSN Scholar Liaquat University Medical and Health Science Jamshoro

²Associate professor at PNS Lumhs Jamshoro

³Clinical Instructor Con (f) Sanghar

⁴MSN Scholar Liaquat University Medical and Health Science Jamshoro

^{5,6}MSN Scholar, PNS Lumhs Jamshoro

¹lalchandgandhair@gmail.com, ³kumarsojani@gmail.com, ⁴hasan9299raza@gmail.com, ⁵kalashaswani39@gmail.com, ⁶parkash4kumar@gmail.com

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Keywords

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Corresponding Author: *

Lalchand

Abstract

Background: Stress is a common concern among undergraduate nursing students due to academic workload, examinations, clinical practice, assignments, interpersonal challenges, and other educational responsibilities. Excessive stress may negatively affect students' academic performance, mental health, and overall well-being. Coping strategies play an important role in helping students manage stressful academic and clinical situations.

Objective: The present study aimed to identify the association between the level of stress and coping strategies among undergraduate nursing students. Specifically, the study assessed the level of stress, identified the coping strategies used by students, and determined the relationship between stress levels and coping strategies.

Methods: A descriptive cross-sectional study design was used among undergraduate BS Nursing students enrolled in 1st to 4th year at public and private nursing institutions. A convenience sampling technique was used. Data were collected through a structured questionnaire using the Perceived Stress Scale (PSS) to assess stress levels and the Brief COPE Scale to assess coping strategies. Informed consent was obtained from all participants before data collection. The study was planned for completion within 2–4 months, including data collection, data entry, analysis, and report writing.

Results: A total of 119 undergraduate nursing students participated in the study. The majority of participants were aged 21–23 years, and most were unmarried. The findings showed that the majority of students experienced a **moderate level of stress**. Academic workload was identified as a common source of stress, with many students reporting stress related to studying, examinations, assignments, deadlines, and nursing workload. Students reported using various coping strategies, including hard work, seeking support from friends, family, colleagues, teachers and seniors, problem-solving, positive self-motivation, relaxation techniques, and time management. The findings indicated a **significant association between stress levels and coping strategies**, suggesting that students experiencing higher levels of stress tended to modify or intensify their coping strategies.

Conclusion: Undergraduate nursing students experience varying levels of

stress, with moderate stress being the most commonly reported level. Academic workload was identified as an important contributor to stress. The study also demonstrated a significant association between stress levels and coping strategies. Effective coping strategies, including problem-solving, social support, positive self-motivation, relaxation, and time management, may help students manage stress and promote their academic success and overall well-being.

Introduction

Stress as the experience a person has, when the demands placed on the body exceed his ability to them successfully. Eustress is positive stress and distress is negative stress, physiologically under normal, low stress condition, the parasympathetic part of autonomic nervous tends to lower the heart rate and blood pressure while increasing the movements of muscles in the stomach and intestine this helps to conserve energy, absorb nutrients and maintain normal functioning (4)

During the stressful conditions the sympathetic part of autonomic nervous system takes control. It increases the heart rate and blood pressure and decrease the peristaltic movements in the gastrointestinal system. In addition, it causes the release of several hormones into the bloodstream in order to deal with the stress successfully. Although the exact role of stress in human disease is not known .it is clear that stress can lead to particular disease by temporarily inhibiting certain components of the immune system. Stress related disorder include gastritis, ulcerative colitis irritable bowel syndrome, hypertension, asthma, rheumatoid arthritis, migraine headache, anxiety, and depression people under stress are at a greater risk of developing chronic disease or dying prematurely. Interleukin-1 a substance secreted by macrophage of the immune system is an important link between stress and immunity, one action of interleukin-1 is to stimulate the secretion of ACTH, which in turn stimulate production of cortisol. Note only does cortisol provide resistance to stress and inflammation, but it also suppresses further production of interleukin-1. Thus, the immune system turns on the stress response, and the resulting cortisol then turns off one immune system mediator. this negative feedback system keeps the immune response in check once it has accomplished its goal, the body's response to stress is a self-preserving mechanism which is

automatically activated during stressful situation, in response of stress individual use different type coping strategies involve health and energy, positive beliefs, problem solving skills social skill, social support, material resource, vital influence on the ability of the person to cope effectively.

If an individual does not cope effectively he or she create frustration , tension that may leads health issue or illness , Stress is a physical or emotional factor to which an individual fails to make satisfactory adaptation, and which leads to tension worry that may be contributory cause of a disease, number of study revealed that although nursing students face various challenges in under resourced environments, teachers and clinical staff highly contribute towards stress(1)

Nursing students mostly persistent high level stress as result of academic needs, personal life pressure, cultural stereotype, stress and coping during nursing education, confess as significant research article(2)Academic related disquiet appeared as source of stress(2) number of studies shows stressor included interaction with the staff and faculty

,(3) there is different yearly experienced identified stresses first year is momentary as compared 2 and 3rd year in 2nd year academic is more stress then the first and 3rd year(4) , coping mechanism is a type defense mechanism used by individuals to overcome their stress in response of distress(5) students used different of coping strategies such as hard work ,The aim of this study to examine stress level and coping strategies among nursing students.

Problem Statement

Among undergraduate nursing students stress is a common due to the academic and clinical workload and examination, interpersonal challenge. Excessive stress can negatively affect students' academic performance mental health and over all wellbeing

Although nursing students adopt various coping strategies to manage stress the effectiveness of these strategies varies from individual to individual some students may use adaptive coping mechanism such as problem solving and seeking social support while others may rely maladaptive strategies such as avoidance or denial

Understanding the association between level of stress and coping strategies among nursing students is essential to identify whether students are using the effective coping methods to manage their stress, limited studies evidence is available the association level of stress and coping strategies.

AIM

To identify the association between level of stress and coping strategies among undergraduate nursing students.

Objects,

- 1 To assess the level of stress among undergraduate students.
- 2 To identify the types of coping strategies used by undergraduate students.
- 3 To determine the relationship between level of stress and coping strategies among undergraduate students.

Literature review:

Stress is a common problem among undergraduate nursing students due to academic workload, clinical practice, assignments, examination and negative interaction more studies have shown that nursing students experience moderate to high level stress during their education(6)

According research, stress in nursing students is mainly caused by academic workload, assignments, anxiety, and fear of mistakes, lack of confidence and heavy study load. These stressors can negatively affects students' academic performance and mental health(7)

Coping strategies are the methods used by students to manage stress. These strategies include problem focused coping, time management, planning, seeking help relaxation, talks to friend's avoidance. Studies show that effectiveness strategies help reduce stress level and improve academic performance(8)

More studies have found a significant

association between stress levels and coping strategies among nursing students. Students who use positive coping strategies such as problem solving and social support tend to experience lower stress level, while those who use avoidance experience high stress

Rationale of study

Nursing students are frequently exposed to high levels due to academic workload, clinical practice, examination, responsibility. Excessive stress can negatively affect their learning, performance mental health, and overall wellbeing. Different students use different coping strategies, but not all strategies are effective or healthy.

Therefore, it is important to identify the association between the level of stress and coping strategies among undergraduate nursing students. This study will help in understanding which coping methods are most commonly used and how effective they managing stress the finding can guide educators and institutions to develop supportive programs, stress management training, and counseling service to improve student's wellbeing and academic success.

Operational definition Level of stress

Refers to the degree of psychological stress experienced by undergraduate nursing students, measured using a standardized questionnaire (e.g perceived stress scale pss) it will be categorized into low, moderate, and high stress levels based on the total score obtained.

Coping strategies

Refer to the methods or techniques used by students to manage stress, measured through a structured (cope scale) these strategies may include problem focused coping, emotional focused coping, and avoidance coping, categorized according to the scoring system the tool.

Undergraduate Nursing Students

Undergraduate nursing students are individuals currently enrolled in a Bachelor of Science in Nursing (BSN) program (e.g 1st year to 4th year) in a recognized nursing institution

Association

Association refers to the frequency rate between the level of stress and coping strategies, descriptive analysis

There is study conduct among undergraduate nursing at college of nursing (F) Sanghar under the topic of identify association level of stress and coping strategies among nursing students.

Research Hypothesis

There is significant association between the level of stress and coping strategies among undergraduate nursing students.

Null Hypothesis

There is no significant association between the level of stress and coping strategies among undergraduate nursing students.

Study Design

A descriptive cross-sectional study design is used to assess the association between the level of stress and coping strategies among undergraduate nursing students.

Study setting

The study was conducting in the undergraduate nursing students (BSN) at public and private colleges/institutes. Data is collected from students enrolled in BS Nursing program (1st to 4th year)

Study Duration

The study is completed within 2 to 4 months including data collection, data entry, analysis and report writing.

Study population

The study population was undergraduate nursing (generic BSN) students at public and private colleges.

Sample size

The sample size of the study is 150 undergraduate nursing students selected from different year (1st to 4th year)

Sample technique

A convenience sampling technique is used to select undergraduate nursing students who are easily available and willing to participate in the

study.

Data Collection procedure

Data is collected after obtaining permission from the concerned nursing institution. The purpose of the study was explained to the participants, and informed consent is obtained from each students.

A structured questionnaire was distributed to the participate, which is include Perceived Stress Scale (PSS) to measure the level of stress. Brief COPE Scale to assess coping strategies.

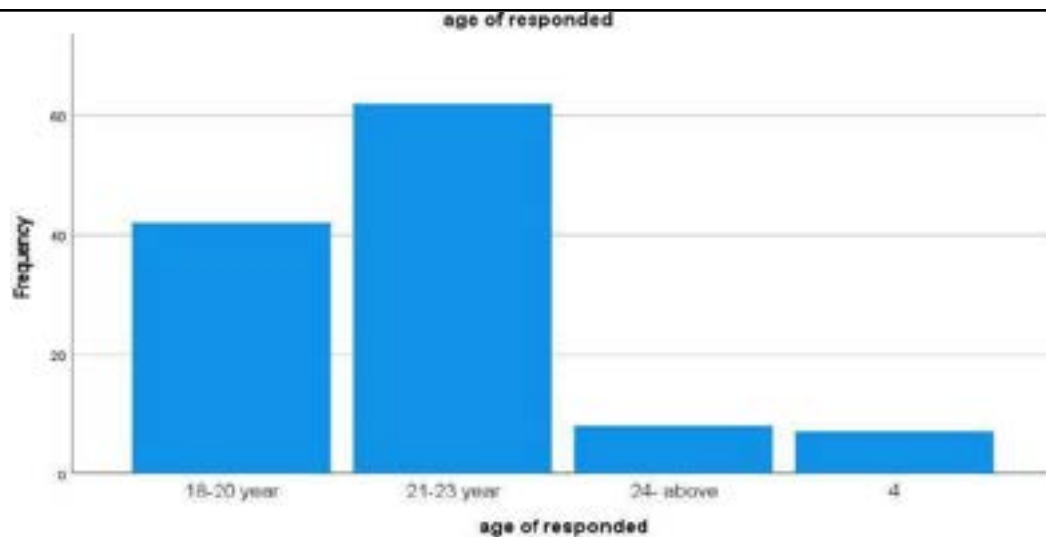
Results

Of 119 participants, 59% participants belong to age of 21 to 23 year of age group the mean age of the participate was 20 to 24 year almost equal number almost equal number of subjects were enrolled from the 1st, 2nd, 3rd and 4th study years. Most of the participants (98%) were homes, there is (90%) reported no family related to health professionals, the age was participant 62% 21_23 years, 90 percentage participant was unmarried the finding of this study revealed that the majority of students experienced a moderate level of stress. academic workload was identified as common source of stress, most reporting that they sometimes feel stressed due to their studied.

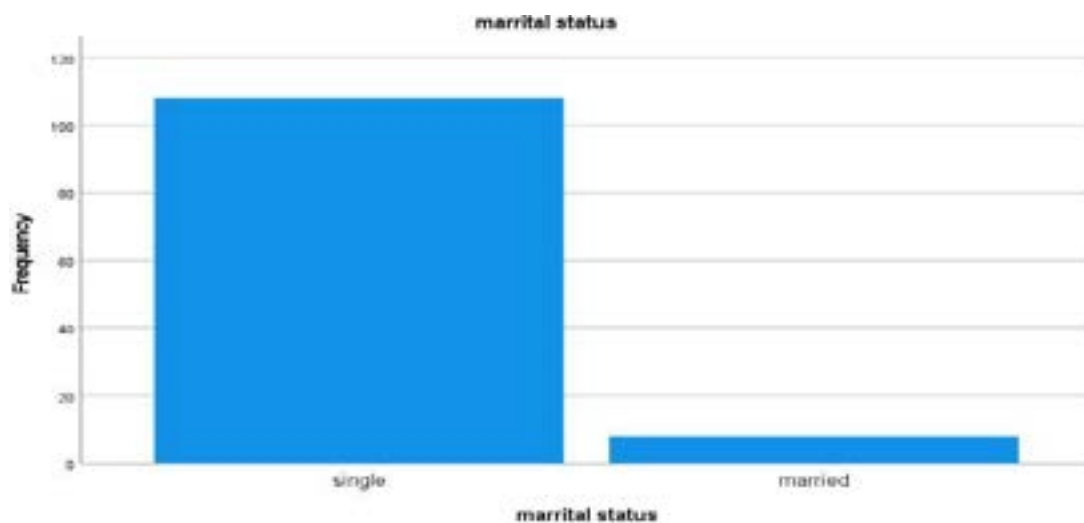
Furthermore, the response indicated a significant relationship between stress level and coping strategies. Students who experienced higher levels of stress tended to adopt different coping strategies compare to those with lower stress level. This suggest that as stress increase, students are more likely to modify or intensify their coping strategies to manage academic and clinical challenges,

The finding is consistent with previous studies, which reported that nursing students often experience moderate to high level stress due to academic level pressure, clinical responsibilities and time management issues effective coping strategies such as problem solving, seeking teacher, colleagues supports self-motivated reducing stress level.

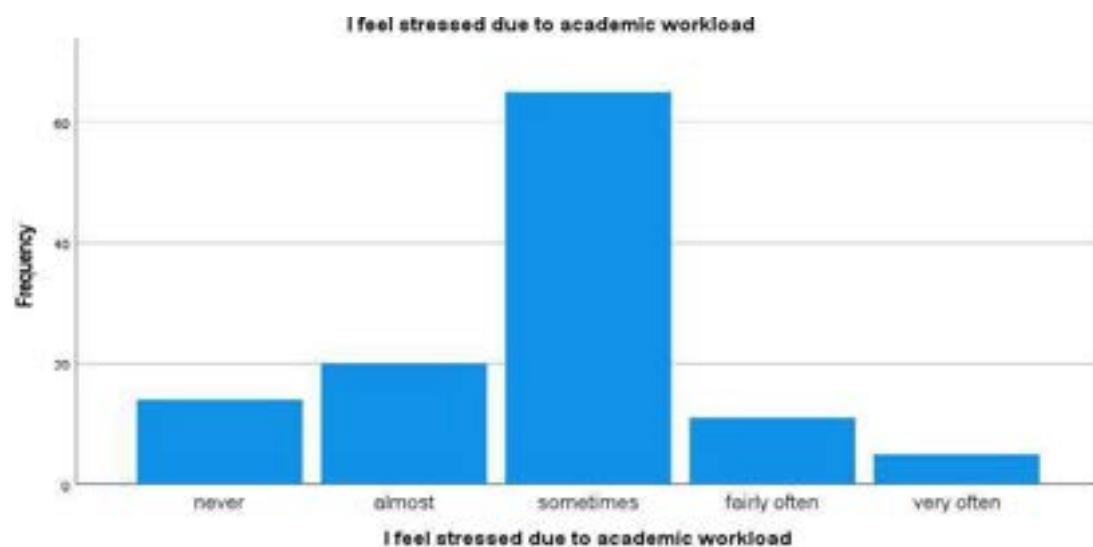
However, some students may adopt less effective coping strategies, which can negatively affect their academic performance and mental wellbeing.



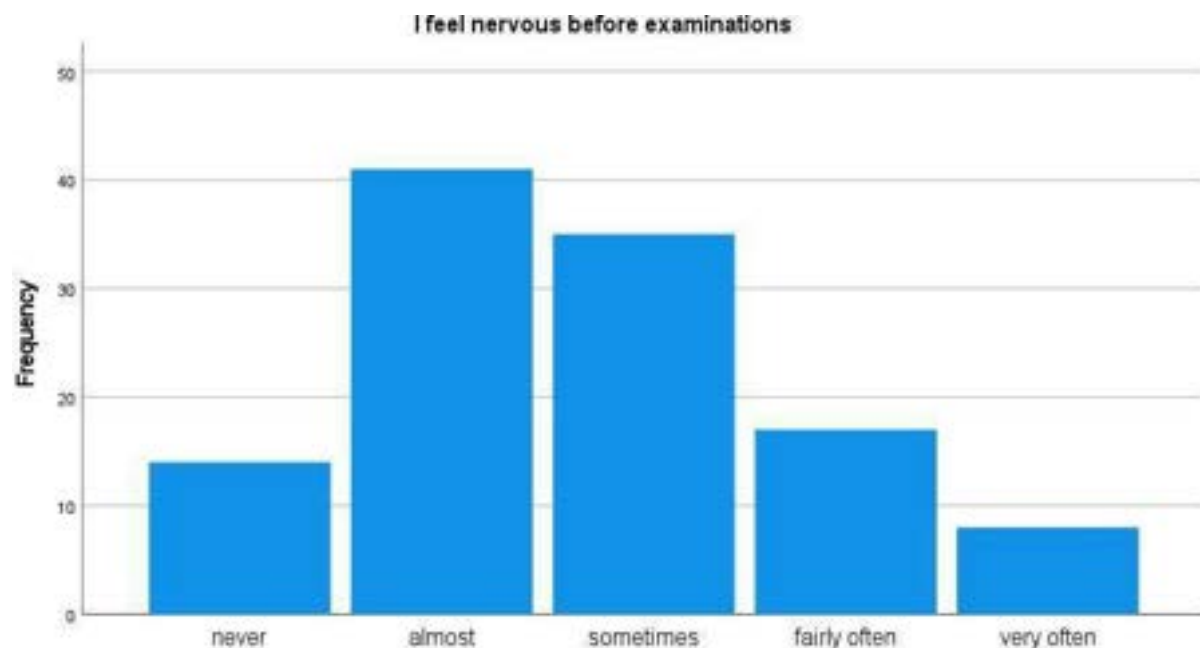
Most respondents were aged 21-23 year the second highest group was 18-20 year. Very few respondents 24 or above



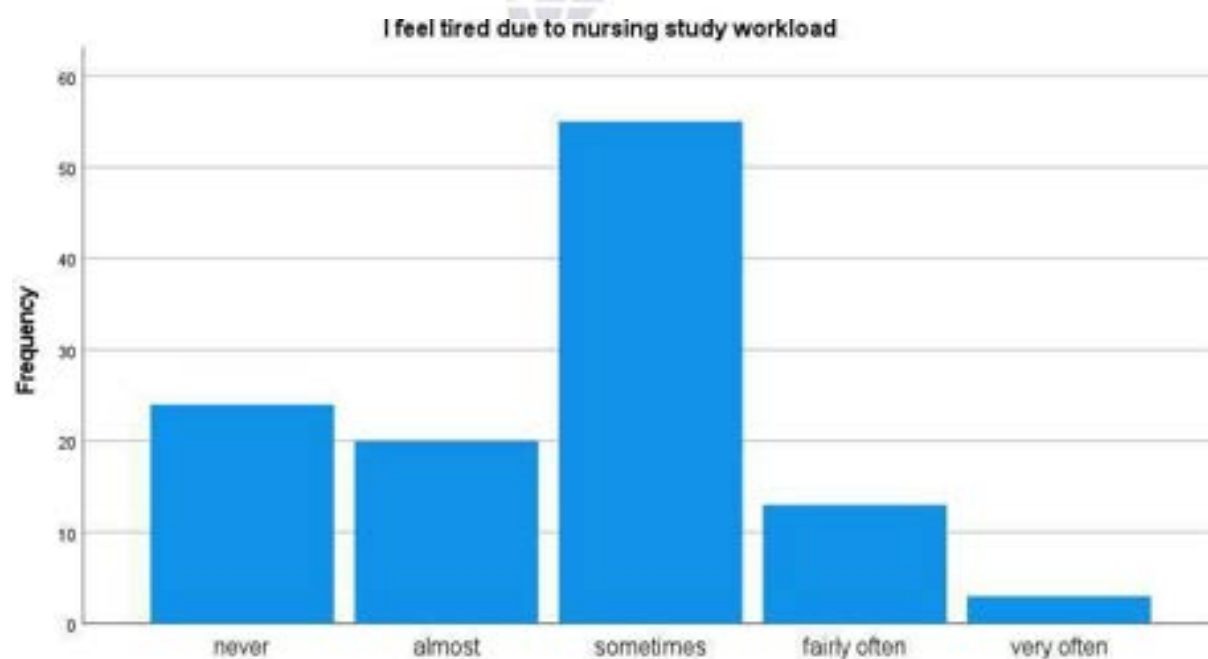
The most respondents were unmarried. Some are married.



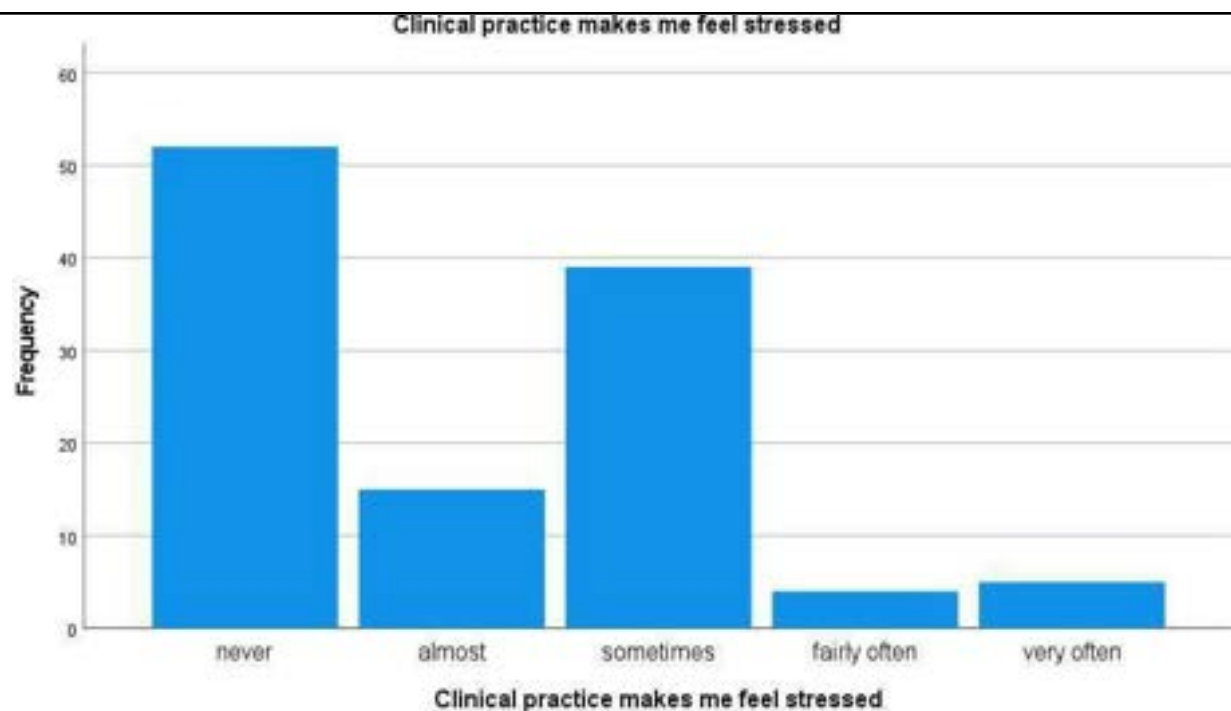
Most respondents said they sometimes feel stressed due to academic workload. Some reported almost or never few reported often very often.



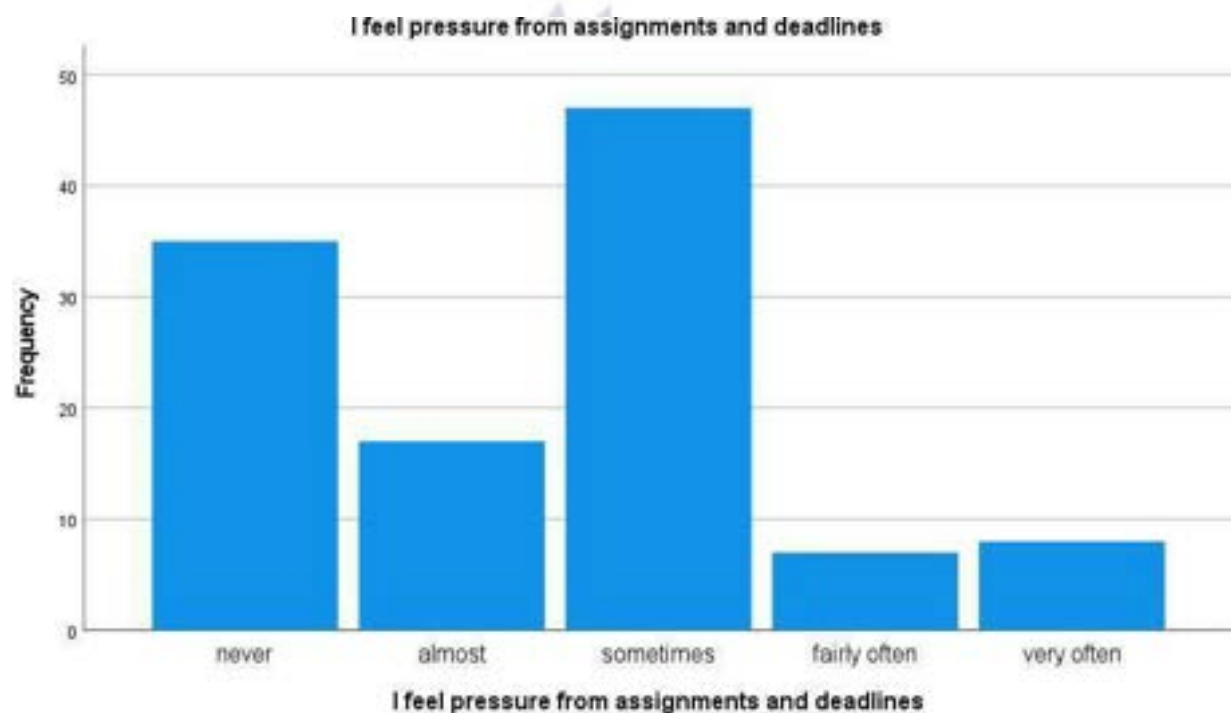
Most respondents said they almost feel nervous before examination, some reported some time, while fairly often or never very often



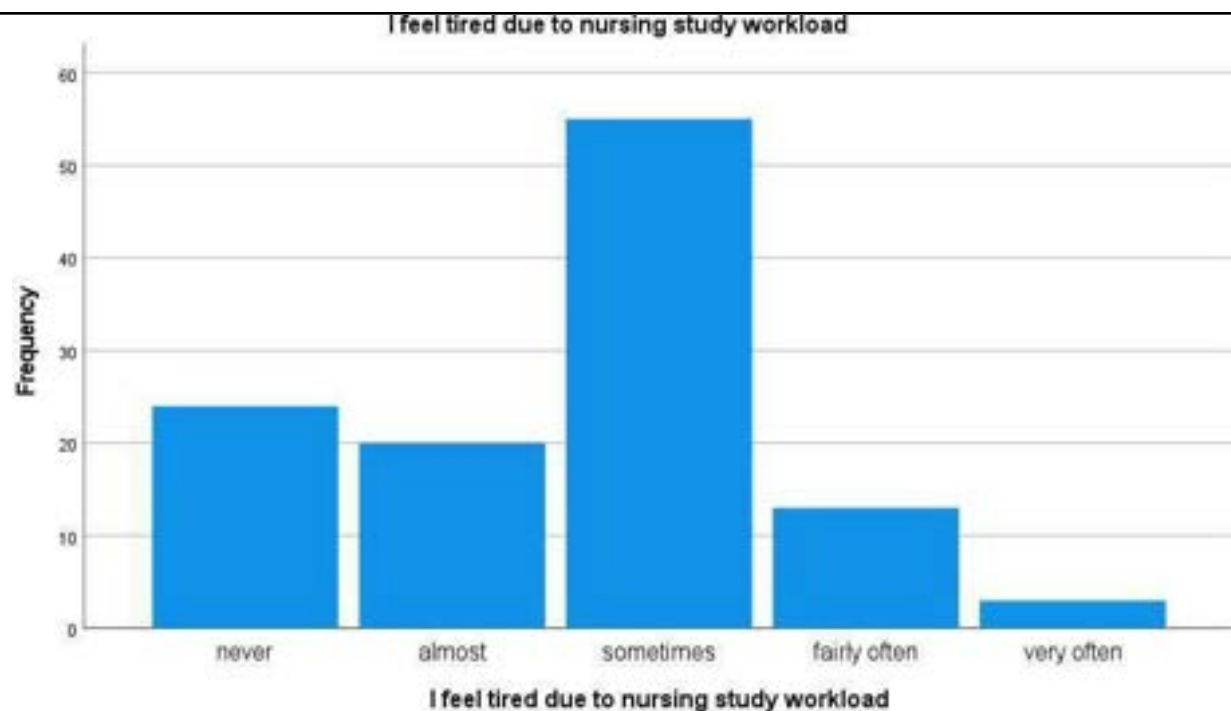
Most of respondents said they feel tired due to study workload sometimes some reported never, while some said almost, fairly often or very often



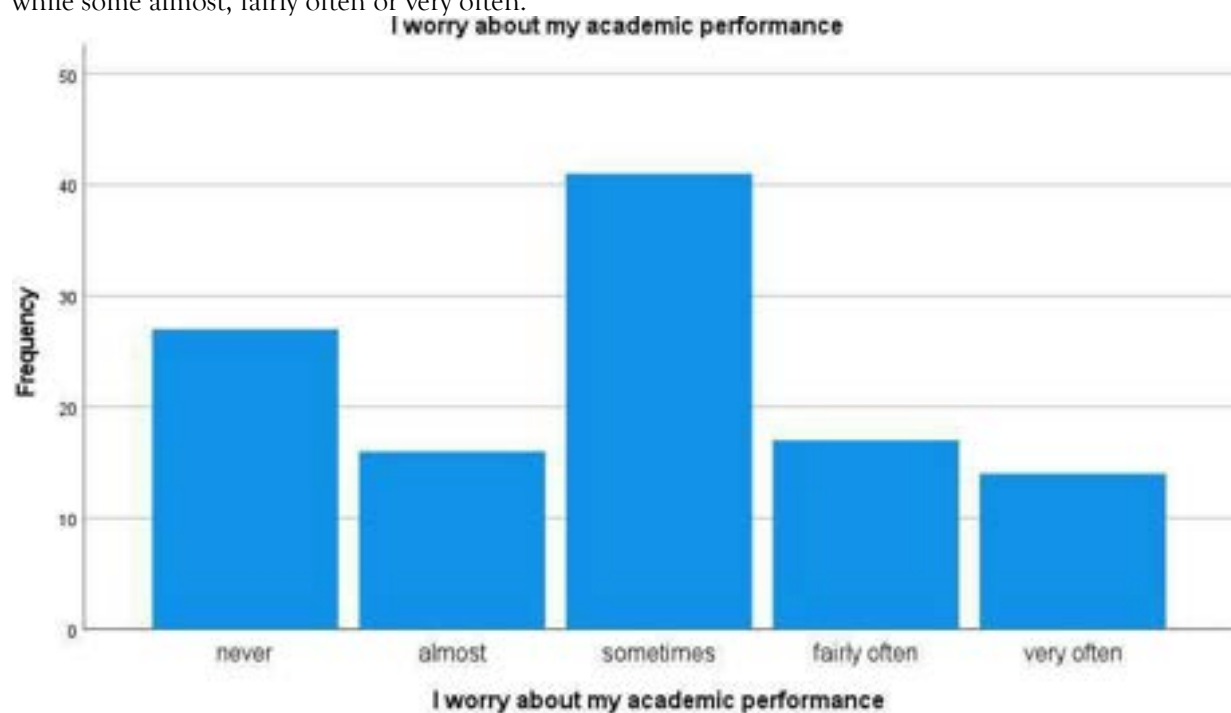
Most respondents said for clinical practice makes me feel stressed never some reported some time while few are reported almost, fairly often or very often



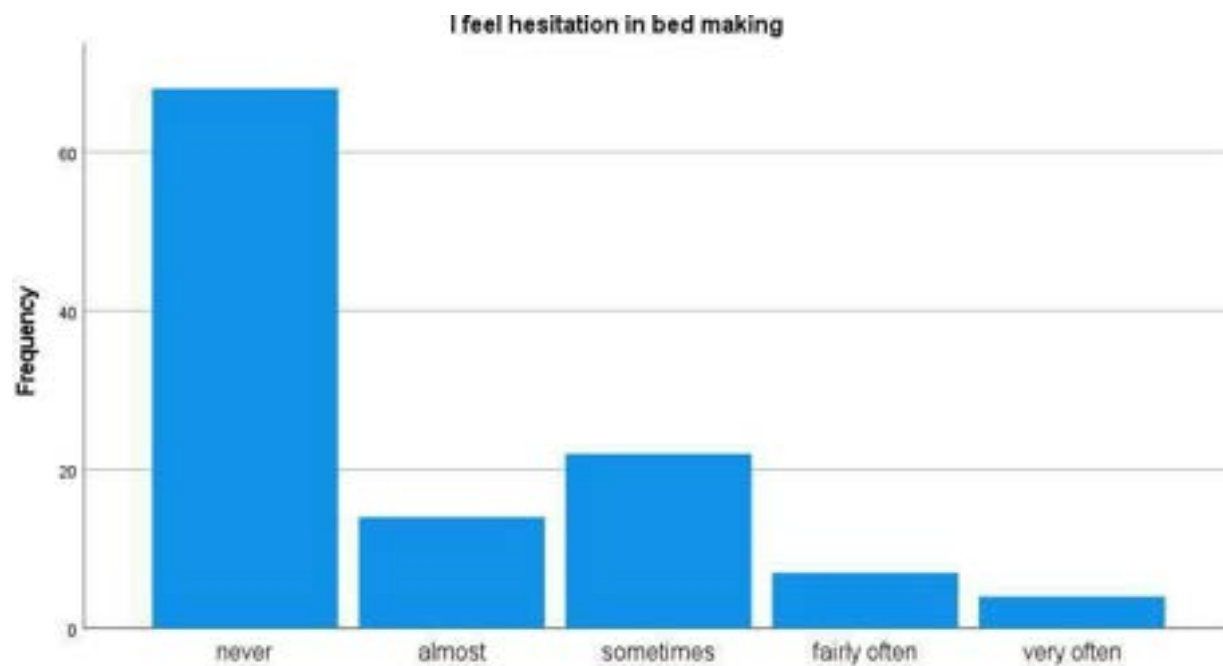
Most of respondents feel pressure from assignments and deadline, they said sometimes, some reported never, while some said very or fairly often



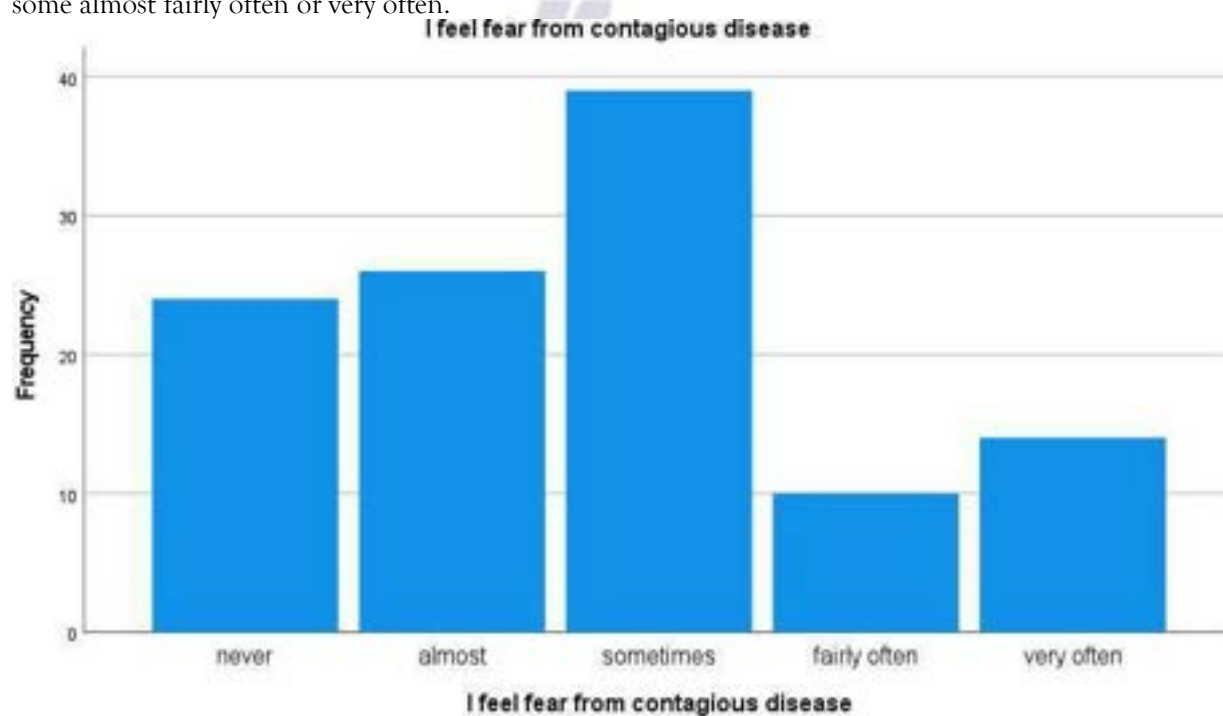
Most respondents said they feel tired due to nursing study workload sometimes, some reported never, while some almost, fairly often or very often.



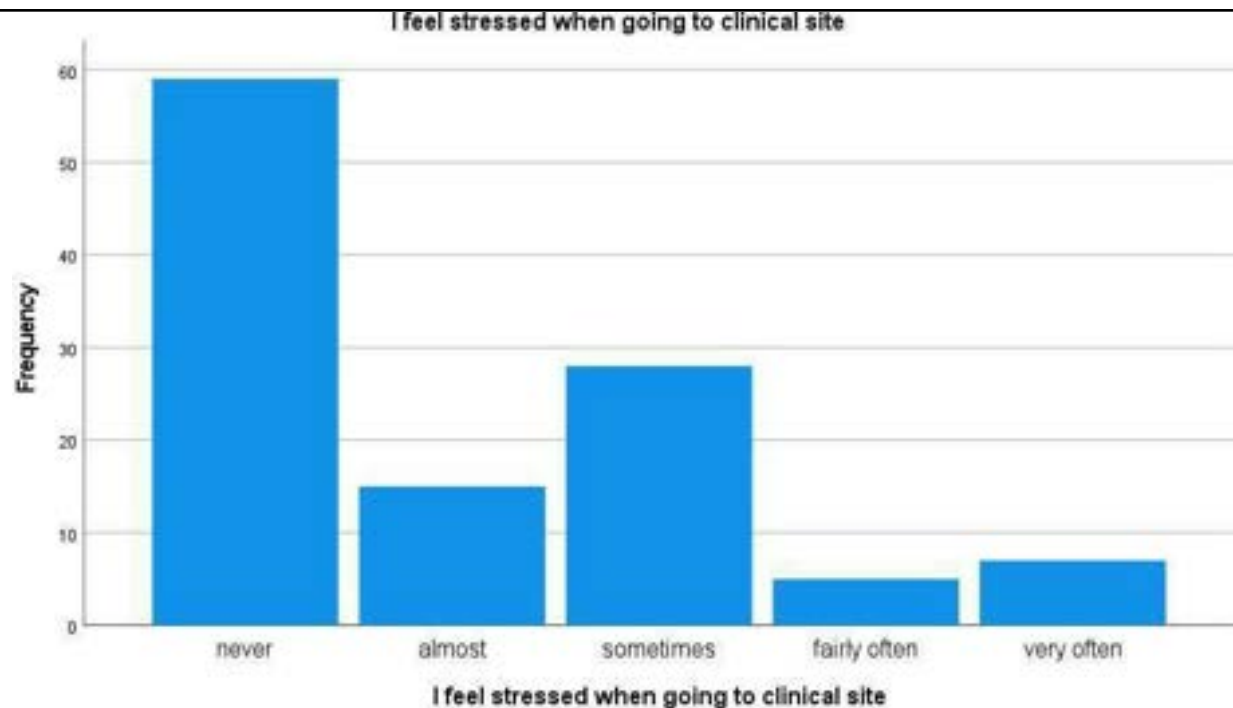
Most of respondents said they are worry about their academic performance sometimes some reported never while some said almost, fairly often of very often.



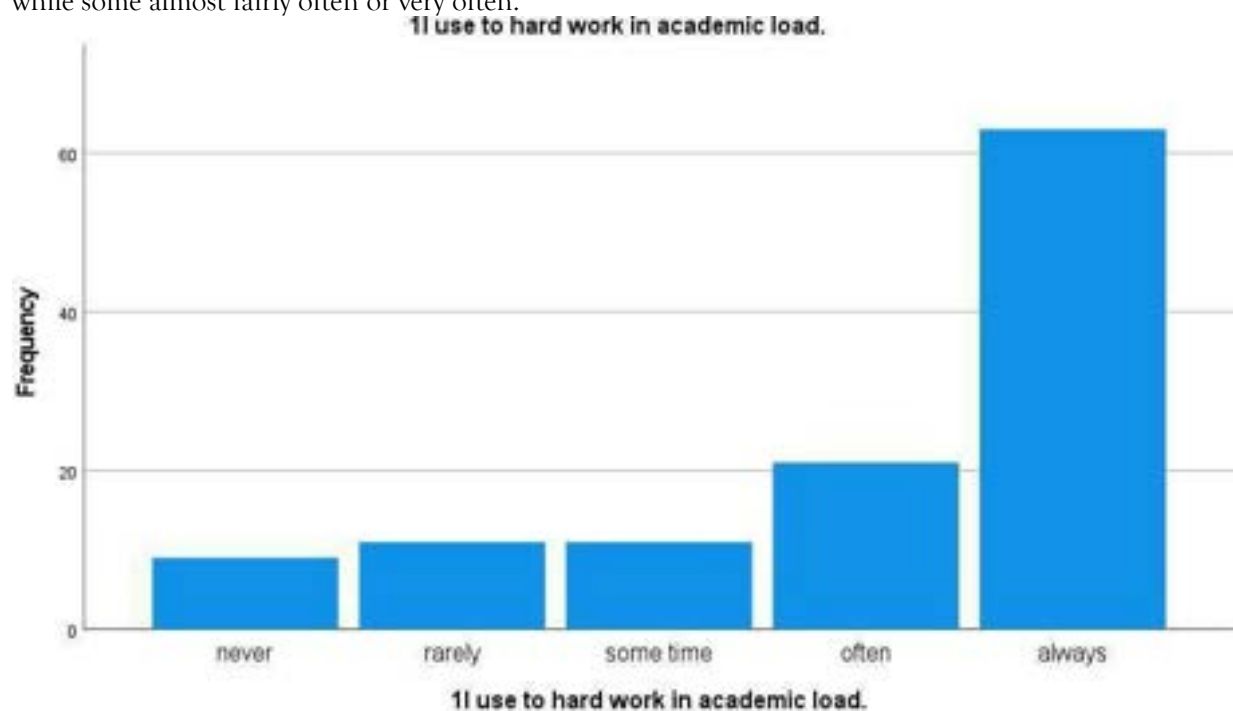
Most of respondents said they feel hesitation in bed making, never some are reported sometimes, while some almost fairly often or very often.



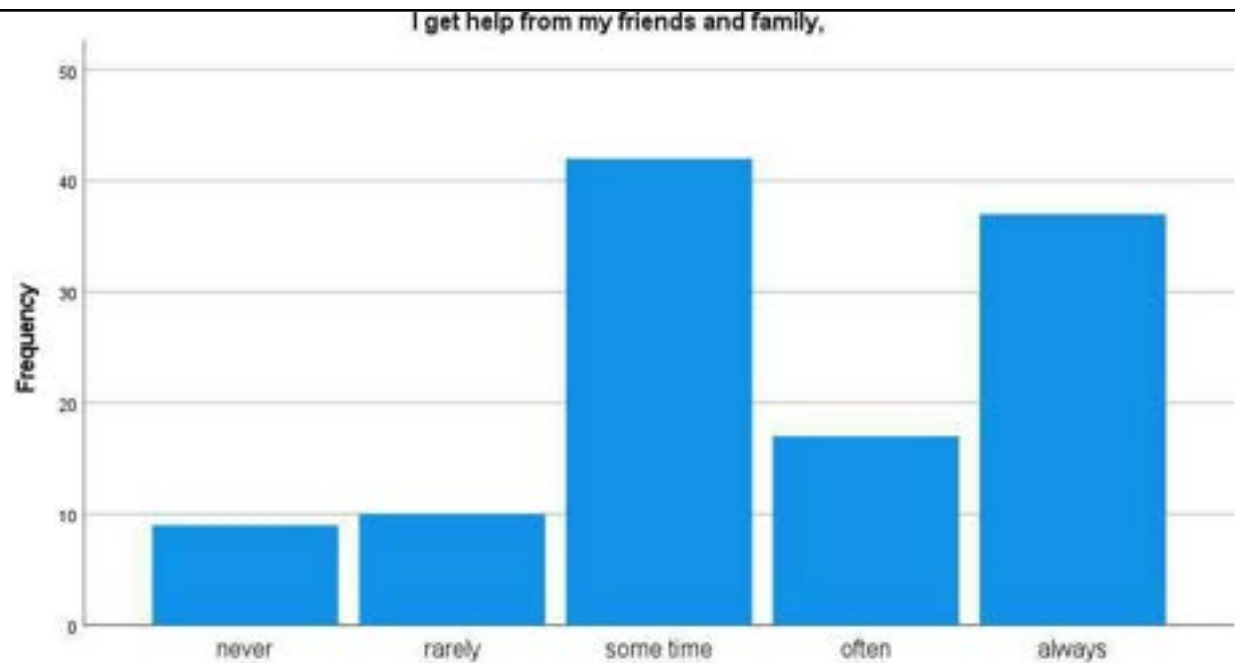
Most of respondents said the feel fear from contagious disease sometime some of reported almost, while some never fairly often or very often.



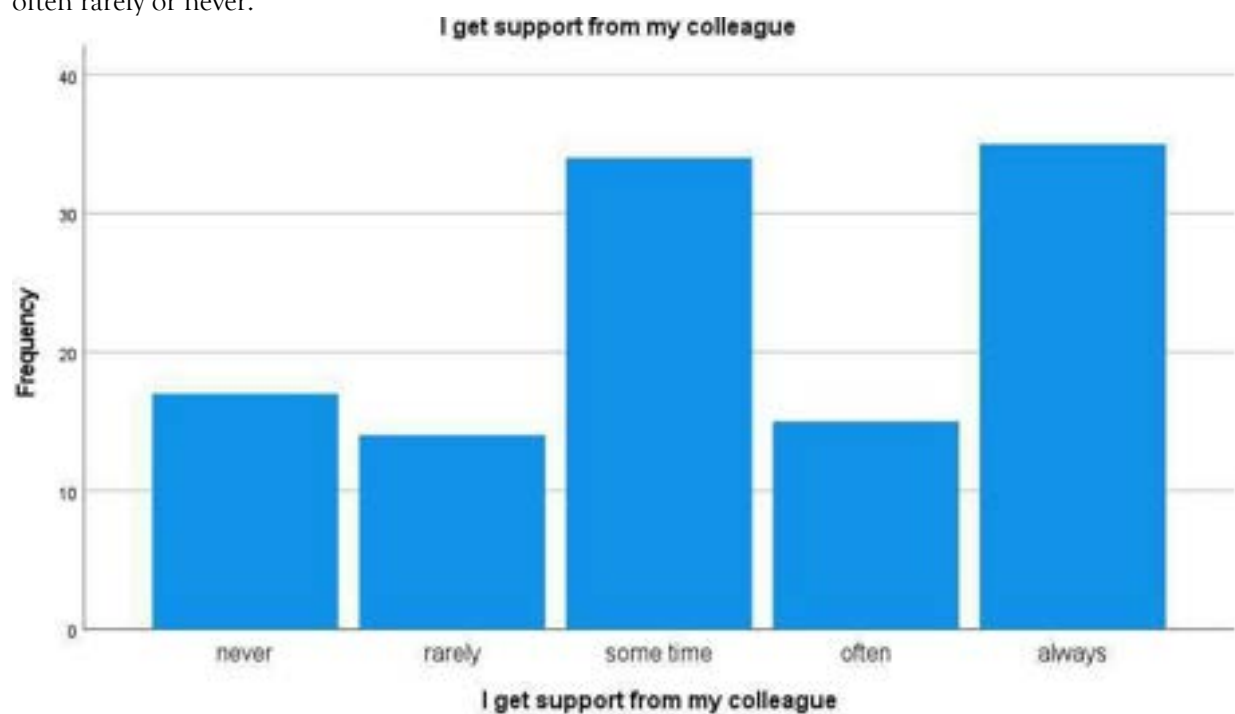
Most respondents said they feel stressed when going to clinical site, never some of reported some time, while some almost fairly often or very often.



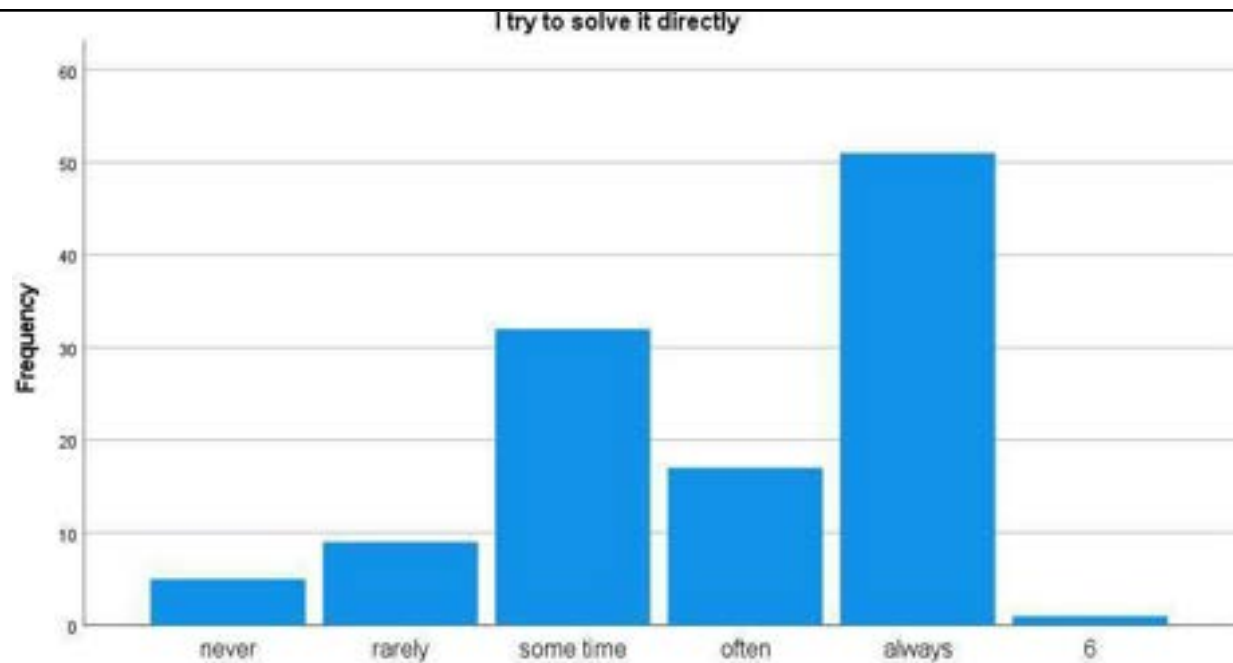
Most of respondent use to hard work in academic load always, some is reported often, while some sometimes rarely or never.



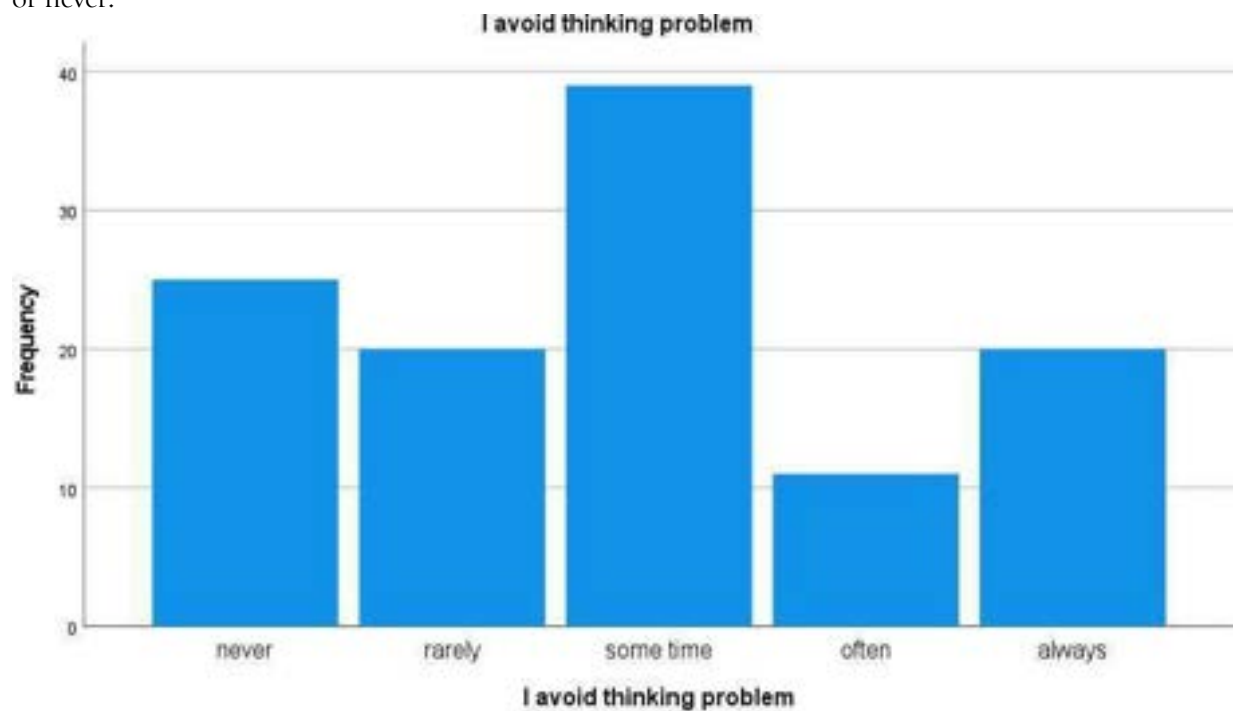
Most respondents said they get help from friends and family sometimes some reported always while often rarely or never.



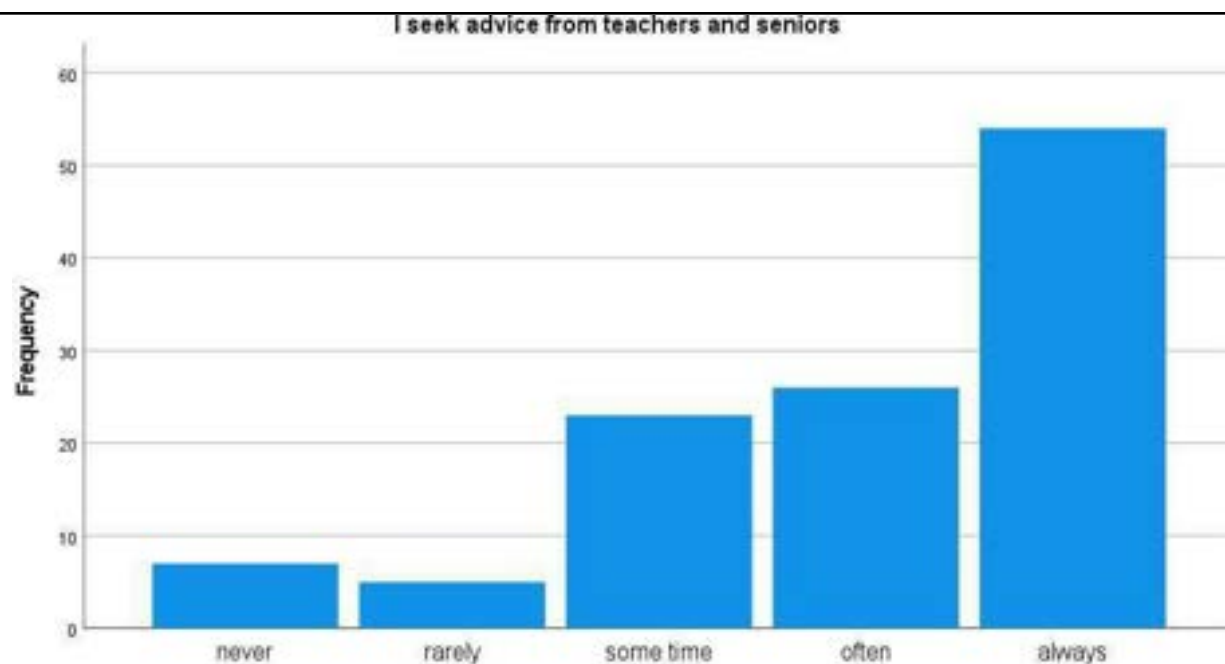
Most respondents said they get support from their colleague sometimes some are reported always while some is never rarely or often.



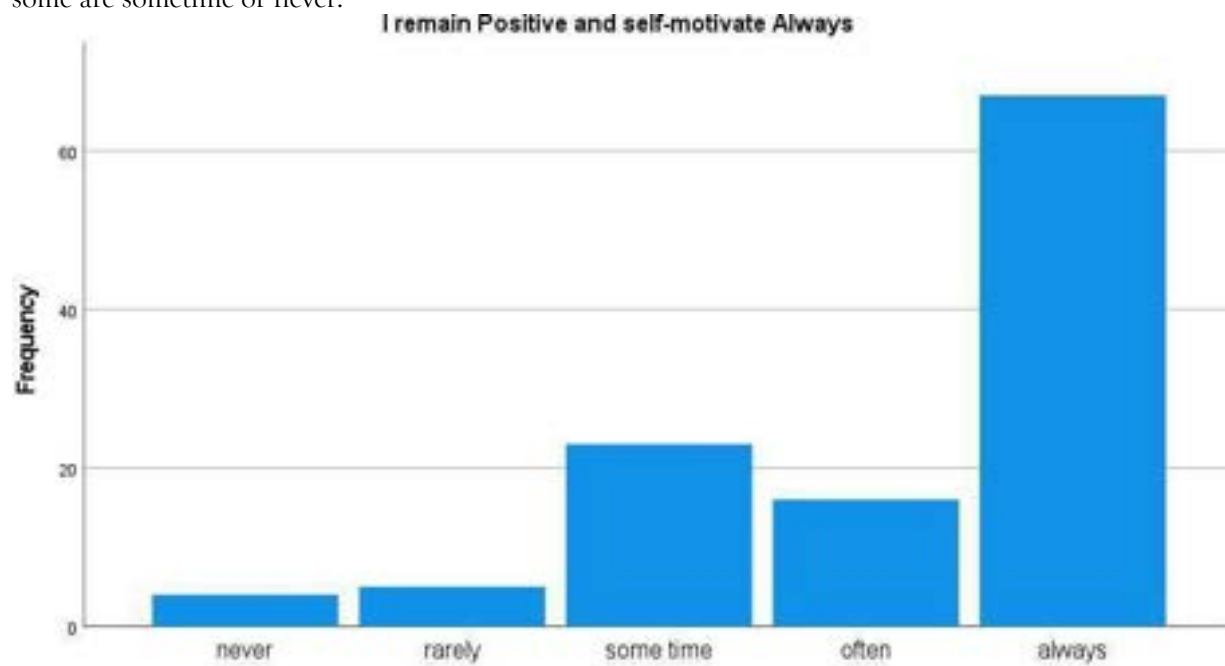
Most of respondents said they try solve it directly always, some are reported sometime while some rarely or never.



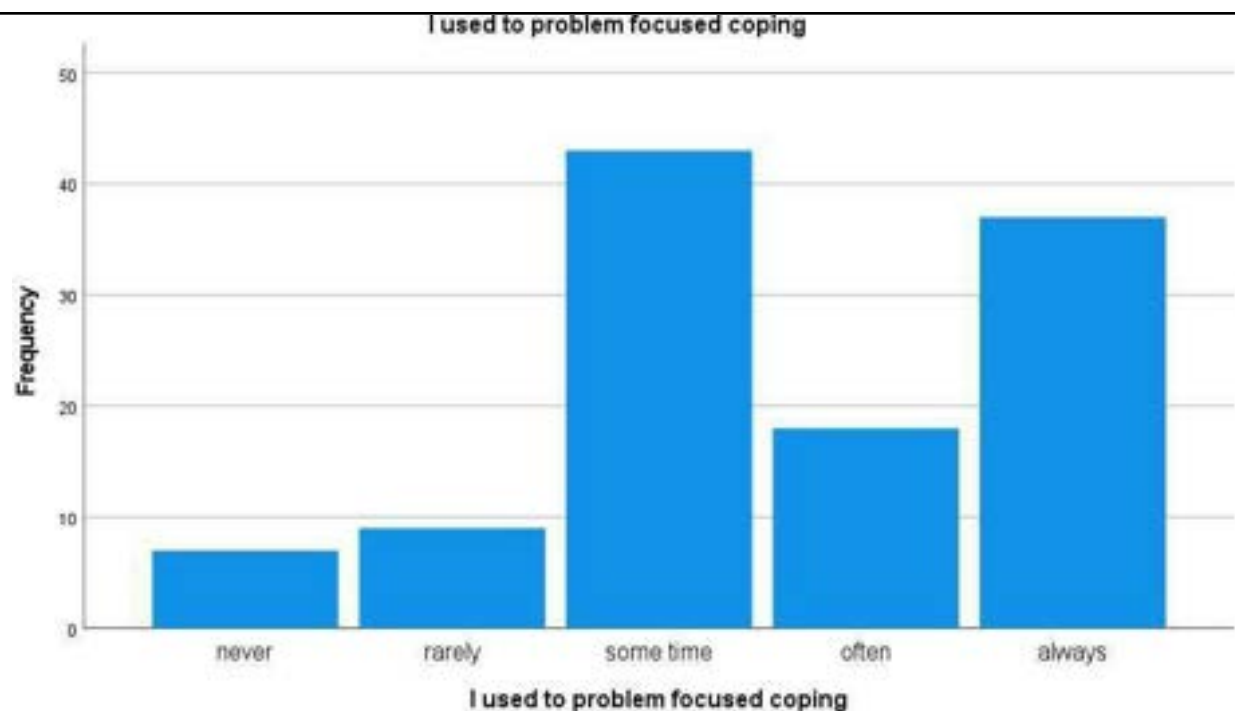
Most of respondents said they avoid thinking problem some time some reported never while some always of rarely .



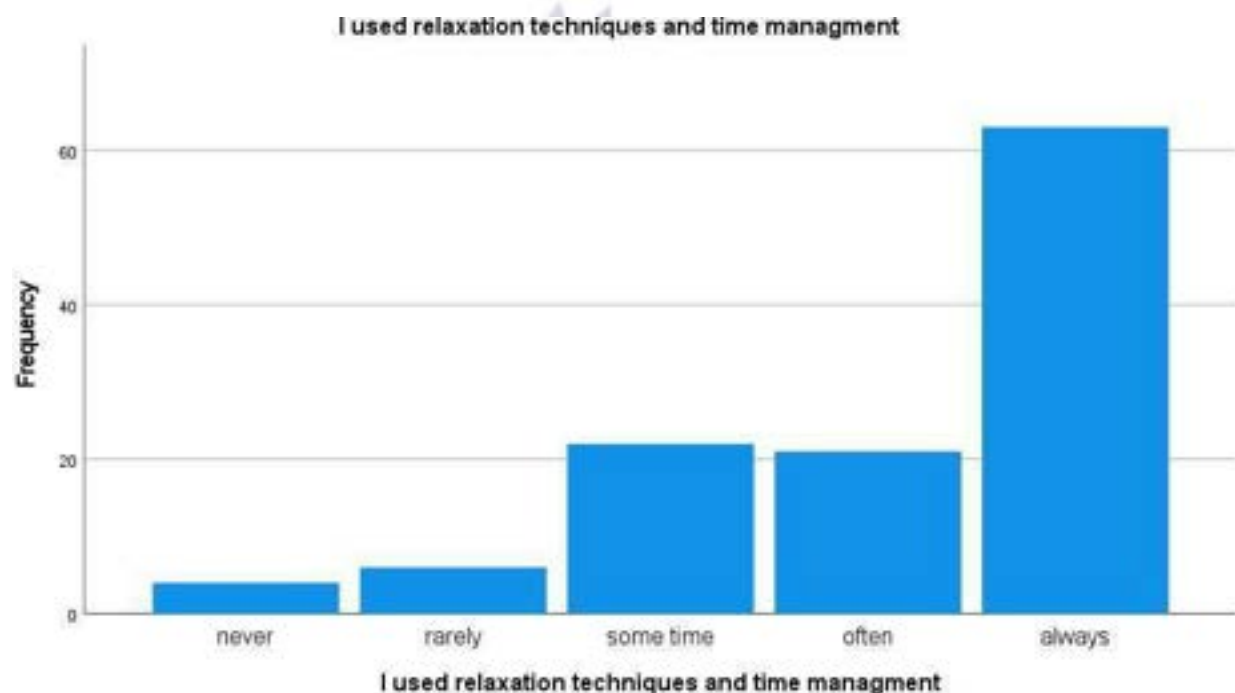
Most of respondents said they seek advice from teacher and seniors always some reported often while some are sometime or never.



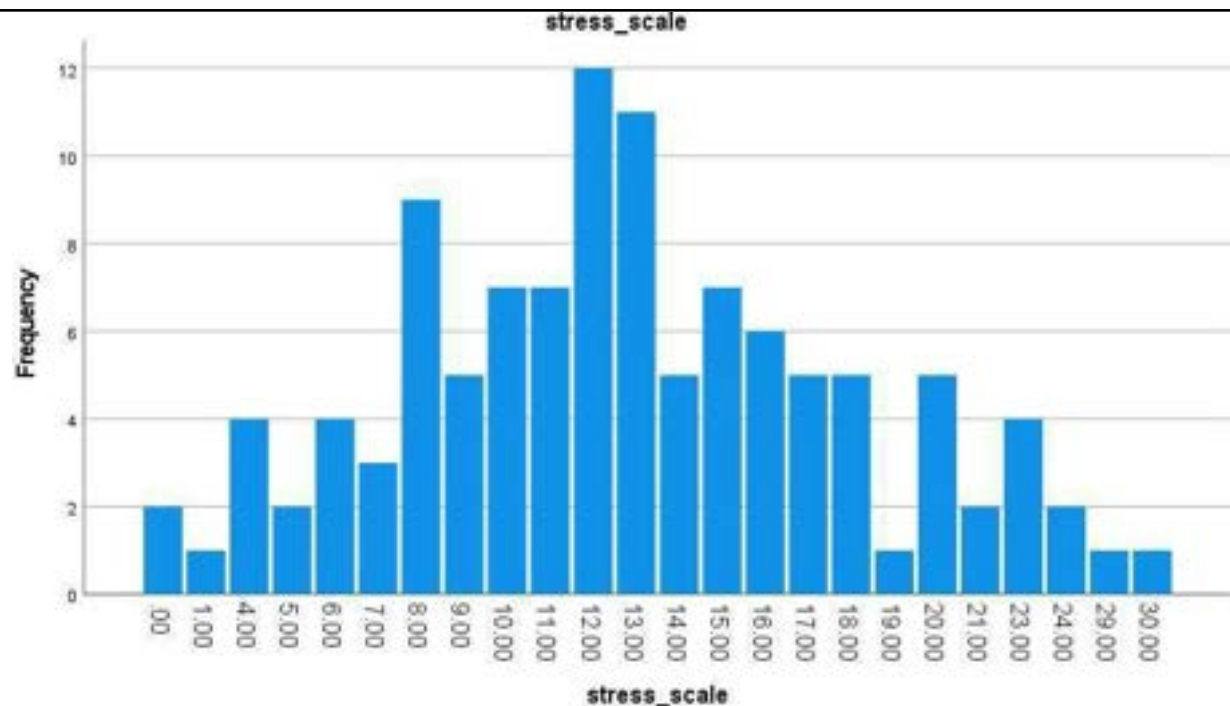
Most respondents said they remain positive and self-motivate always some reported sometimes while often rarely or never.



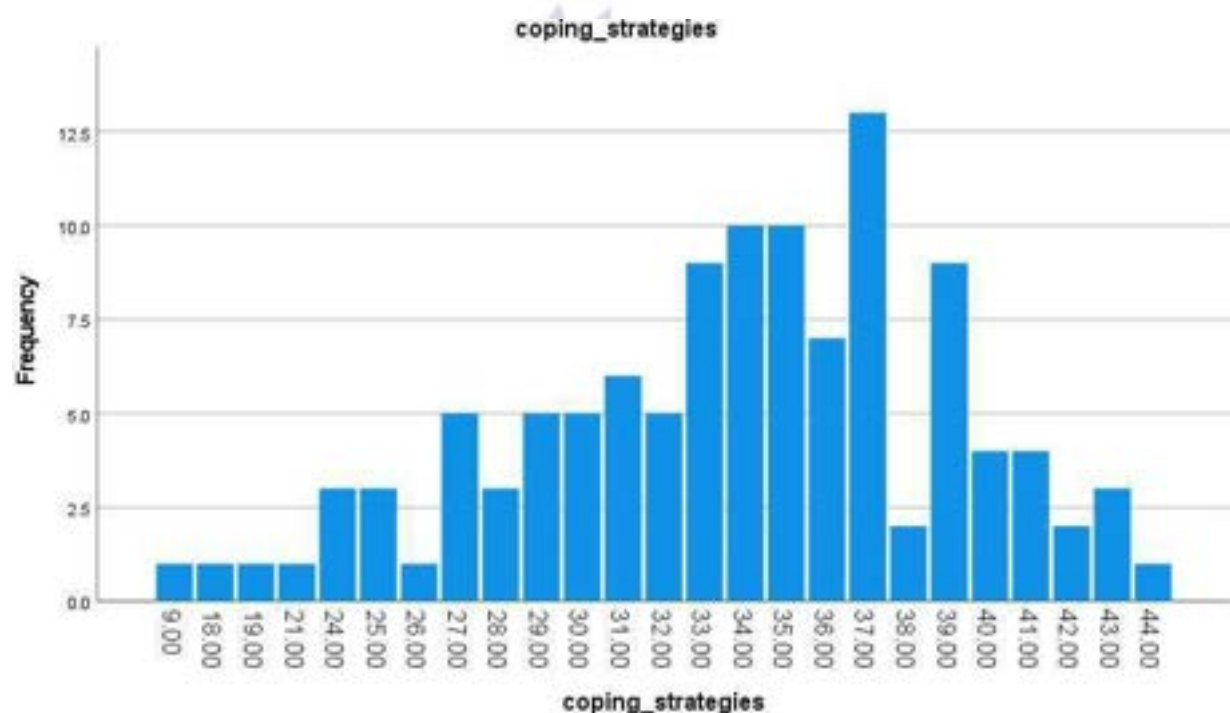
Most respondents said they used to problem focused coping sometime some reported always while often or never.



Most respondents said they used relaxation techniques and time management always, some are reported sometimes while often rarely, never



Most respondents have stress scores in the middle range (around 10 -15), showing moderate stress. few respondents have very low or very high stress.



There are fewer values at the extreme meaning low coping strategies.

Discussion

The present study aimed to identify the association between the level of stress and coping strategies among undergraduate nursing students. the finding of this study revealed that

the majority of students experienced a moderate level of stress. academic workload was identified as common source of stress, most reporting that they sometimes feel stressed due to their studied.

Furthermore, the response indicated a significant relationship between stress level and coping strategies. Students who experienced higher levels of stress tended to adopt different coping strategies compare to those with lower stress level. This suggest that as stress increase, students are more likely to modify or intensify their coping strategies to manage academic and clinical challenges,

The finding is consistent with previous studies, which reported that nursing students often experience moderate to high level stress due to academic level pressure, clinical responsibilities and time management issues effective coping strategies such as problem solving, seeking teacher, colleagues supports self-motivated reducing stress level.

However, some students may adopt less effective coping strategies, which can negatively affect their academic performance and mental wellbeing.

Conclusion

The present study concluded that undergraduate nursing students experience varying level of stress, with the majority reporting a moderate level of stress. academic workload was identified as major contributing factor to stress among students,

The study further concluded that there is a significant association between the level of stress and coping strategies. Students with higher stress level tend to adopt different coping strategies compared to those with lower stress levels. Effective coping strategies play an important role in managing stress and improving students overall wellbeing.

Limitation of this study

Cross-sectional design

The study captures data at one point in time, so it cannot establish cause-and-effect relationships between stress and coping strategies.

Self-reported data

Data collected through questionnaires may be affected by recall bias or social desirability bias, where students may not report their true stress levels or coping behaviors.

Limited sample size

A small or specific sample may reduce the generalizability of the findings to all nursing students. Single institution setting

If conducted in one college/university, results may not represent nursing students from different regions or educational systems.

Cultural influence not considered

Cultural background can affect stress perception and coping methods, but may not be fully explored in the study.

Uncontrolled confounding variables

Factors like academic workload, personal life issues, financial problems, and clinical exposure may influence stress but are not fully controlled.

Use of standardized tools only

Questionnaires may not capture deep personal experiences or qualitative aspects of stress and coping.

Response bias

Some participants may skip questions or give incomplete/biased answers, affecting data accuracy.

Recommendation

1. Educational institutions should develop stress management programs
2. Workshops and seminar on coping strategies.
3. Counseling services should be made available
4. Academic workload should be managed properly.
5. Students should be encouraged to adopt positive coping strategies.

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