Review Article

The Impact of Stress on Competency Among Nursing Students in Lahore, Pakistan

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Abstract

Introduction: Stress, is a part of the student experience enough evidence suggests that comparatively to other trainings nursing students experience high levels of stress, psychological morbidity, and depression (Zvauya, Oyebode, Day, Thomas, & Jones, 2017). Whereas, as brain plays the vital role in adaptation to the stress and make necessary changes in the behavioural and physiological responses to become resilient (McEwen, Gray, & Nasca, 2015). A study conducted by Al- Zayyat, and Al- Gamal (2014) illustrated that students suffered from high level of stress in the clinical setting and reported that common stressors among the students are independently caring to the patients, high expectations of teachers and clinical staff, and clinical assignments. Whereas, stress is important in the learning process as without stress the students are unable to realize the importance of time, schedules, evaluation criteria and study milestones. *Objective of the study:* The objective of this study is to determine the correlation between stress and competence among nursing student in Lahore, Pakistan. *Methodology:* Co relational study design is adopted to fulfill the research objectives. The study was conducted in the Private University from January, 2019 to May, 2019. Population of the study were nursing students and the sample size was 191. Two scales naming nursing competence and perceived stress scales were used to collect data. *Results:* The mean score of perceived stress was 2.1 on the scale (1= Never to 5= very often) which shows that students were usually having low levels of perceived stress. The students shared low competency values on the sub scales of serving as an example for other nurses, ethically oriented practice, general aptitude and nursing care in a team. There was negative moderate (r= -0.46, p=<.005) relationship between nursing competency and perceived stress among students. *Conclusion:* Stress is the hindering factor for learning whereas effective coping behavior can facilitate learning. Stress is related to poor nursing competence. To maintain the professional integrity the trait of stress has to be reduce among the nursing students. Being the student and deadlines in the training programs students face stress whereby student have to choose appropriate coping strategy to handle it effectively.
Keywords: Stress, Nursing Competency, Pakistan.

INTRODUCTION

Healthcare system and processes have greatly changed because of the epidemiology of the diseases, modern technology, and shifting population pyramids [1]. Therefore for the changing healthcare, care providers have to upgrade themselves [2]. Moreover with more advancement in ethics among the general public the demands of the patients are ever high [3]. Therefore nurses should provide complete care to the patients' complex and diversified needs [4] and are challenged for their contribution as professionals in society and are expected to take professional responsibilities [5] and to accomplish this, it is important for nurses to improve their insight for better care.

Majorly nursing students because of inexperience faces stress which creates frustration. Because of this they make inappropriate clinical judgment and poor clinical skills which is the result of incompetent nursing practices. Stress, is a part of the student experience and is defined by Townsend and Morgan [6] as 'a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being'. Enough evidence suggests that comparatively to other trainings nursing students experience high levels of stress, psychological morbidity, and depression [7]. Whereas, as brain plays the vital role in adaptation to the stress and make

necessary changes in the behavioural and physiological responses to become resilient [8]. A study conducted by Al-Zayyat, and Al-Gamal [9] illustrated that students suffered from high level of stress in the clinical setting and reported that common stressors among the students are independently caring to the patients, high expectations of teachers and clinical staff, and clinical assignments. In addition to this, a Chinese study showed that nursing students are much fearful of clinical rotations and related assignments and workload [10]. Another Asian study revealed that stress is common among the nursing students and students are majorly stressed because of the clinical expectations and assignments [11]. Whereby, notably, higher level of stress in the training is hindering for excellence in practice [12].

Moreover, stress is important in the learning process as without stress the students are unable to realize the importance of time, schedules, evaluation criteria and study milestones Widespread reports of high stress levels and mental health problems among university student populations indicate the use of interventions to facilitate stress reduction and support student resilience and wellbeing. There is growing evidence that regular mindfulness practice may confer positive health benefits and reduced stress levels [13].

Aim of the study
The objective of this study is to determine the correlation between stress and competence among nursing student in Lahore, Pakistan.

METODOLOGY
Co relational study design is adopted to fulfill the research objectives. The Study was conducted in the Private University. The study was conducted in from January, 2019 to May, 2019. Population of the study were nursing students and the sample size of the study was 191 Two scales naming nursing competence and perceived stress scales were used to collect data. Nursing competency scale was developed by Takase and Teraokain [14]. The scale was developed to measure the general aptitude and nursing competence of registered nurses. This scale has 36 items and 5 dimensions, measured usinga7-point Likert scale (scores range from1to 7). Five dimensions of this scale are 'serving as an example for other nurses', 'ethically oriented practices', 'general aptitude' and 'nursing care in a team'. The Perceived Stress Scale (PSS) was developed by Sheu *et al*., in 1997 to measure the stressful events perceived and encountered by nursing students [15]. This scale has 10 components, 6 dimensions and 5-point Likert scale (0= never to 4= very often) [16, 17]. Written informed consent attached was taken from all the participants. Participants remained anonymous throughout the study. The subjects were informed that there are no disadvantages or risk on the procedure of the study.

RESULTS
In the study 13 % of the participants were male whereas, 67% of the study participants were females. 32.5% of the participants were enrolled in the bachelors of Science in nursing (Post RN) program whereas, and 67.5% of the participants were from bachelors of Science in nursing (Hons) program. Figure-1 represents the age of the participants the mean age of the participants were 23 years.

Table-1: Demographic Characteristics of Participants

| S. No	Variables			n	%
1.	Gender	Male		25	13
		Female		166	87
2.	Education	Diploma Nursing		62	32.5
		Intermediate (Premedical)		129	67.5
3.	Program Enrolled	BS Nursing (Hons)		129	67.5
		BS Nursing (Post RN)		62	32.5
4.	Study Year	BS Nursing (Hons) 1st Year		42	22
		BS Nursing (Hons) 2nd Year		45	23.6
		BS Nursing (Hons) 3rd Year		32	16.8
		BS Nursing (Hons) (Hons) 4th Year		13	6.8
		BS Nursing (Post RN) 1st Year		28	14.7
		BS Nursing (Post RN) 2nd Year		31	16.2
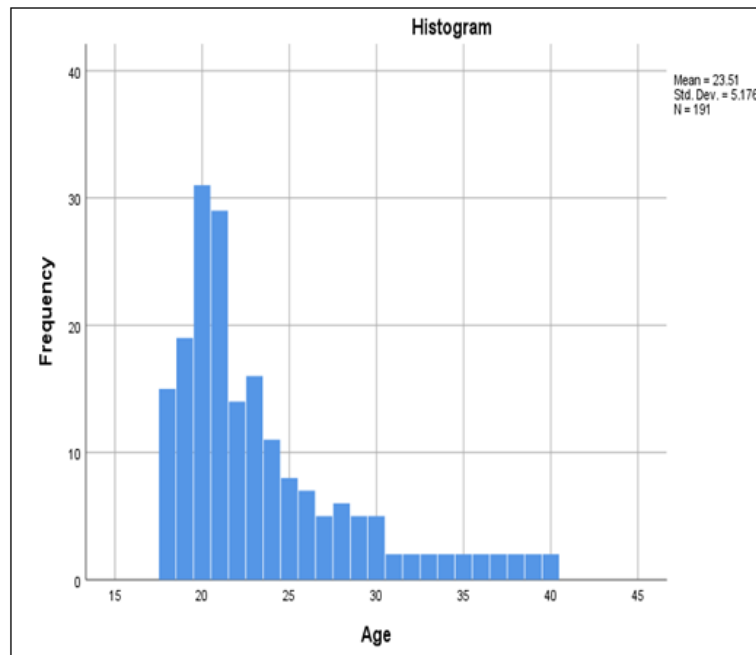
Fig-1: Age of the Participants

Table-2: Mean of the Perceived Stress and Nursing Competency among Students

S. No	Questions	Sub Scale	Mean
1.	Perceived Stress		2.1
2.	Competency	Serving as an example for other nurses	2.3
		Ethically oriented practice	2.1
		General Aptitude	2.4
		Nursing care in a team	2.3
		Total	2.3

Table-2 represents the mean of the scales of perceived stress and nursing competency among students. The mean score of perceived stress was 2.1 which shows that students were usually having low levels of perceived stress. .The students shared low competency values on the sub scales of serving as an example for other nurses, ethically oriented practice, general aptitude and nursing care in a team.

Table-3: Correlation between perceived stress and nursing competency among students

S. No	Variable	R	p
1.	Perceived Stress	-0.4	0.001

Table-3 represents the correlation between perceived stress and nursing competency among students. There was negative moderate (r= -0.46, p=<.005) relationship between nursing competency and perceived stress among students.

DISCUSSION

This study revealed that the there is a negative relationship between stress and nursing competence. A study conducted by Al-Zayyat, and Al-Gamal [9] illustrated that students suffered from high level of stress in the clinical setting and reported that common stressors among the students are independently caring to the patients, high expectations of teachers and clinical staff, and clinical assignments. In addition to this, a Chinese study showed that nursing students are much fearful of clinical rotations and related assignments and workload [10]. Another Asian study revealed that stress is common among the nursing students and students are majorly stressed because of the clinical expectations and assignments [11]. Whereby, notably, higher level of stress in the training is hindering for excellence in practice [12].

Strengths of the Study

This study have many strengths but few are very evident including this is the first study conducted in the Pakistani context which assessed the correlation between the perceived stress and nursing competency. Study gathered rich data on among the Bachelor of Science in Nursing (HONS) and Bachelors of Science in Nursing (Post RN). The study data was collected from the validated and reliable tools already used among the nursing students. The large sample size, i.e., 191, in this study enhanced the internal validity of this

research. Principal Investigator himself was involved in the supervision, data collection ensures quality of data.

Limitations of the Study

This study have few limitations as a cross-sectional study therefore inferences related to the causality of association could not be drawn. As the data was collected from only one setting, it has limited generalizability. Face-to-face interviews increases the chances of response bias.

Recommendations of the Study

This study put forward the following recommendations.
- It is crucial for clinical teachers to improve the nursing competence of nursing students. It would be valuable for clinical teachers to design an intervention program to improve nursing students' competency.
- Longitudinal research to follow the effect of stress among students is recommended.
- It is crucial to teach nursing students to have good stress management and coping behaviors is important, as it will affect nursing competence and practice performance.
- Curricula that provide the management of stress and emotions management need to be included in nursing programs

CONCLUSION

Stress is the hindering factor for learning whereas effective coping behavior can facilitate learning. Stress is related to poor nursing competence. Nursing students score less on all the components of competency i.e., 'serving as an example for other nurses', 'ethically oriented practice', 'general aptitude', 'nursing care in a team'. To maintain the professional integrity the trait of stress has to be reduce among the nursing students. Being the student and deadlines in the training programs students face stress whereby student have to choose appropriate coping strategy to handle it effectively.

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