Anxiety and Stress among B.Sc. Nursing First Year Students in a Selected Nursing College at Lekhnath, Pokhara, Nepal

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ABSTRACT

Background: Nursing students are important human resources in the field of health. Detection of potential anxiety and stress among nursing students is crucial since anxiety and stress can lead to low productivity, low quality of life, and suicidal ideas. Identifying factors affecting anxiety and stress in initial period of college among nursing students can help nursing educators to find ways to decrease anxiety and stress.

Objectives: To assess the anxiety and stress among B.Sc. nursing first year students in their initial college life.

Methods: A cross-sectional descriptive research design was used for this study. Consecutive sampling technique was used to select the subjects. Total 13 students (100%) were taken as a sample and standardized Beck anxiety scale and modified scale for academic stress was used to collect data.

Results: The study shows that majority of the students, 8 (61.5%) were in the age of 18 years old, follows Hindu religion, 10 (76.9%) belonged to upper caste, 11 (84.6%) stayed in urban area, 7 (53.8%) had no difficulty in this college. Out of 13, 2 (15.4%) students had moderate anxiety and 11 (84.60%) had low level of anxiety with 1.15 ±0.37 whereas 6 (46%) students had mild stress and 7 (54%) had moderate level of stress with 1.53 ±0.51. There were no significant association of anxiety score and stress score with age, ethnicity, residence, feeling difficulties in the college with $p < 0.05$; 6 (46%). There was low positive correlation between anxiety and academic stress with $r_p = 0.395$. It was found that the cause of anxiety was due to college environment, seniors ragging, difficult subjects, delay session and can be reduced by stopping seniors ragging, providing transportation, starting session on time, counselling, providing lunch in canteen, friendly environment, free hours for library.

Conclusions: Students who are newly taking admission to nursing profession will have mild form of psychological variation. Students are mainly faced with practical and academic stressors and anxiety. Hence the study strongly suggests that, starting session on time, time management, avoid ragging, student counselling are the most important factors to reduce anxiety and academic stress to the newly admitted students.

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INTRODUCTION

Everyone goes through anxiety and stress at one time or another. Stress and anxiety goes hand in hand as anxiety is a response to the stress in times of threat. Anxiety is a vague feeling of dread that is unwarranted by the situation or any event. It is an unpleasant affect characterized by psychological, physiological and behavioral changes in response to an intra psychic conflict[2].

Anxiety is a diffuse apprehension that is vague in nature and is associated with feelings of uncertainty and helplessness. Low levels of anxiety are adaptive and can provide the motivation required for survival, whereas it becomes problematic when the individual is unable to prevent the anxiety from escalating to a level that interferes with the ability to meet basic needs[3].

Standardized professional preparation of nursing students in the nursing institutions is largely determined by their initial adjustment in new environment and ability to cope and adjust with changes, necessary during her entire study period. In this period if they can take care of their self, then they will be able to study effectively and take care of the others or clients[1].

Nursing course is very stressful, most of the students experience increase stress prior to their class adjustment because of ragging from their seniors, clinical rotations or their written examinations, especially their finals. More paperwork and skill performance and evaluation system increase the tension round the year with very tight schedule. Academic sources of stress include long hours of study during examination assignments and grades, lack of free time, and lack of timely feedback[4].

When stress is perceived negatively or becomes excessive, students experience physical and psychological impairment. Methods to reduce stress by students often include effective time management, social support, positive reappraisal and engagement in leisure activities[5].

It has been estimated that 10% to 30% students experience academic related stress that affects their academic performance. Information load, high expectations, academic burden or pressure, unrealistic ambitions limited opportunities, high competitiveness are some of the sources of stress which create tension, fear and anxiety[6].

OBJECTIVES OF THE STUDY

1. Determine the level of anxiety among B.Sc. Nursing first year students

2. determine the level of stress among B.Sc. Nursing first year students.

3. find the association between anxiety score and selected baseline variables.

4. find the association between stress score and selected baseline variables.

5. examine the correlation between anxiety level and stress level

METHODS

Descriptive cross sectional research design was employed to explore the level of anxiety and academic stress among 13 B.Sc. nursing first year students of College of Nursing Sciences, Gandaki Medical College. Data was collected on their starting period of the college life. Non-probability consecutive sampling technique was used in this study. Data was collected using self-administered standardized tools for anxiety scale and modified scale for academic stress to assess the academic stress. The research instrument was divided into three sections.

Section I: Socio demographics characteristics of respondents

Section II: Beck anxiety scale

Section III: Modified scale for academic stress

B.Sc. nursing students started their class from october 19, 2017. The data was collected on september 18, 2017; verbal consent was taken voluntarily from the participant with assured confidentiality and anonymity. Self–administered standardized tool was administered to assess the level of anxiety and academic stress among B.Sc. Nursing first year students. Ethical clearance is obtained from institutional review board of Gandaki Medical College. SPSS Program version 16.0 was used for entering and tabulating data. Frequency and percentage was used to analyze socio-demographic characteristics. Descriptive statistics as mean, standard deviation and mean percentage was used to assess level of level of anxiety and stress. The association of level of anxiety and stress with their selected demographic variables were analyzed by using Chi-square test and Correlation between anxiety level and stress level by using the Karl Pearson's correlation coefficient formula.

RESULTS

Organization and presentation of related data

Section I: Description of demographic variables of students.

Section II: Level of anxiety among students.

Section III: level of stress among students.

Section IV: Association of the level of anxiety with selected demographic variables.

Section V: Association of the level of stress with selected demographic variables.

Section VI: co-relation between level of anxiety and level of stress.

Section I: Description of characteristics of respondents

Table 1: Frequency and percentage distribution of demographic characteristics (N = 13)

Demographic characteristics	Frequency	Percentage	
Age (in years)			Mean age
18	8	61.5%	
19	3	23.1%	18.54
20	2	15.4%	
Religion			
Hindu	13	100%	
Ethnicity			
Upper caste	10	76.9%	
Janjati	2	15.4%	
Dalit	1	7.7%	
Residence			
Rural	2	15.4%	
Urban	11	84.6%	
Did you feel difficulties in this college?			
Yes	6	46.2%	
No	7	53.8%	

Table 1 depicts that the mean age of the subjects was 18.54, ranging between 18 to 20 years. Among them eight (61.5%) participants were in the age group of 18 years, 3 (23.1%) were 19 years and 2 (15.4%) were 20 years. All respondents (100%) were belonged to Hindu religion. Ten (76.9%) subjects were belonged to upper cast (chhetri and Brahmin), two (15.4%) were janajati and only one (7.7%) was dalit; among them majority 11 (84.6%) were from urban area and two (15.4%) were from the rural area. Almost half (46.2%) of the respondents responded that they felt difficulties in this college.

Section II: Level of anxiety among students
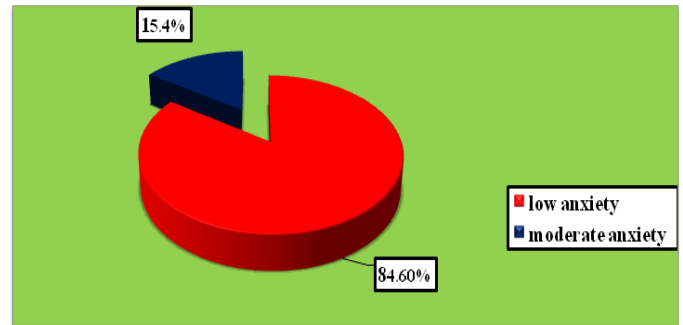
Fig 1: Level of anxiety among students

Fig 1 shows that out of 13 respondents, two (15.4%) respondents had moderate anxiety and 11 (84.60%) had low level of anxiety whereas mean and standard deviation were 1.15 ±0.37

Section III: Level of stress among students
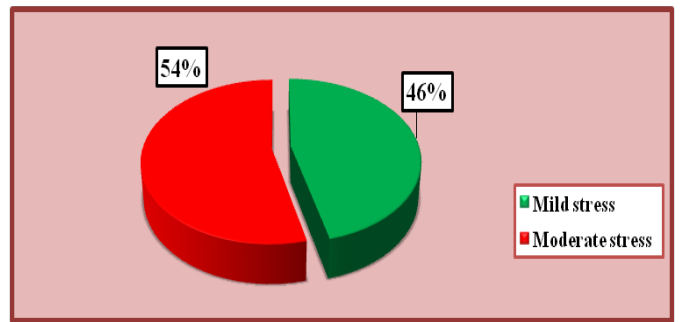
Fig 2: Level of stress among students

Fig 2 shows that out of 13 respondents, 6 (46%) students had mild stress and 7 (54%) had moderate level of stress whereas mean and standard deviation were 1.53 ±0.51.

Section IV: Association of the level of anxiety with selected demographic variables

This section analyses the association between anxiety score with selected baseline variables such as age, religion, ethnicity, residence and feeling difficulties in the college. The association was observed by cross tabulation and calculating Pearson Chi-square test. Specific findings are as follows:

Table 2: The association between anxiety score with selected baseline variables (N = 13)

Baseline variables	Pearson Chi-square	df	P value
Age (in years)			
18			
19	1.477	2	0.478
20			

Ethnicity			
Dalit	2.245	2	0.325
Janjati			
Upper caste			
Residence			
Rural	0.430	1	0.512
Urban			
Feeling difficulties in this college			
Yes	.014	1	0.906
No			

The above Table 2 shows that there was no significant association between anxiety score with demographic variables like age, ethnicity, residence, feeling difficulties in the college with p <0.05.

Section V: Association of the level of stress with selected demographic variables

This section analyses the association between stress score with selected baseline variables such as age, religion, ethnicity, residence and feeling difficulties in the college. The association was observed by cross tabulation and calculating Pearson Chi-square test. Specific findings are as follows:

Table 3: The association between stress score with selected baseline variables (N = 13)

Baseline variables	Pearson Chi-square	df	P value
Age (years)			
18			
19	0.258	2	0.879
20			
Ethnicity			
Dalit			
Janjati	1.331	2	0.514
Upper caste			
Residence			
Rural	0.14	1	0.731
Urban			
Feeling difficulties in this college			
Yes	3.899	1	0.078
No			

The above Table 3 shows that there was no significant association between stress score with demographic variables like age, ethnicity, residence, feeling difficulties in the college with p < 0.05.

Section VI: Co-relation between level of anxiety and level of stress

Table 4: Correlation between anxiety and stress level (N = 13)

		Academic stress		Total	Pearson's Correlation (r_p)
		Mild stress	Moderate stress		
Anxiety	Low anxiety	6	5	11	0.395
	Moderate anxiety	0	2	2	
Total		6	7	13	

The above table 4 shows that there was low positive correlation between anxiety and academic stress with r_p = 0.395.

Table 5: Causes of anxiety (N = 13)

Causes	Frequency	Percentage
College environment		
Yes	7	53.8%
No	6	46.2%
Seniors/ragging		
Yes	13	100%
faculty/basic		
Yes	3	23.1%
No	10	76.9%
New environment		
Yes	4	30.8%
No	9	69.2%
Difficult subjects		
Yes	9	69.2%
No	4	30.8%
Adjustment problem		
Yes	6	46.2%
No	7	53.8%
Class hour		
Yes	4	30.8%
No	9	69.2%
Lunch hour		
Yes	2	15.4%
No	11	84.6%
Vehicle / Transportation		
Yes	4	30.8%
No	9	69.2%
Expenditure		
Yes	4	30.8%
No	9	69.2%
Delay session		
Yes	9	69.2%
No	4	30.8%

Hostel problem		
Yes	1	7.7%
No	12	92.3%
Food adjustment		
Yes	5	38.5%
No	8	61.5%
Lack of time to sleep		
Yes	3	23.1%
No	10	10%
Tight class schedule		
Yes	4	30.8%
No	9	69.2%

The above table shows that the cause of anxiety was due to college environment (53.8%), seniors ragging (100%), difficulty in subjects (69.2%), delayed session (69.2%).

Table 6: Management of anxiety (N = 13)

Management	Frequency	Percentage
Stop seniors ragging		
Yes	13	100%
Decrease class hour		
Yes	3	23.1%
No	10	76.9%
Increase lunch hour		
Yes	2	15.4%
No	11	84.6%
Provide transportation		
Yes	9	69.2%
No	4	30.8%
Session start in time		
Yes	11	84.6%
No	2	15.4%
Compulsion of stay in hostel		
Yes	1	7.7%
No	12	92.3%
Counselling		
Yes	13	100%
Lunch/ tiffin in canteen		
Yes	9	69.2%
No	4	30.8%
Friendly environment		
Yes	12	92.3%
No	1	7.7%
Free hours for library		
Yes	11	84.6%
No	2	15.4%

The above table shows that anxiety can be reduced by stopping seniors ragging (100%), providing transportation (69.2%), starting session on time (84.6%), counselling (100%), providing lunch in canteen (69.2%), friendly environment (92.3%), and free hours for library (84.6%).

DISCUSSION

The study shows that majority of the students, 8 (61.5%) were in the age of 18 years old, follows Hindu religion, 10 (76.9%) belonged to upper caste, 11 (84.6%) stayed in urban area, 7 (53.8%) had no difficulty in this college.

Out of 13 respondents, two (15.4%) students had moderate anxiety and 11 (84.60%) had low level of anxiety whereas mean and standard deviation were 1.15 ±0.37.

Out of 13 respondents, six (46%) students had mild stress and seven (54%) had moderate level of stress whereas mean and standard deviation were 1.53 ±0.51

Another study supported the present study was conducted to in National Institute of Nursing Education, PGIMER, Chandigarh to assess the causes of stress in B.Sc. nursing first year students at 2009. The study findings showed 48.83% students had mild level of stress[7].

Current study is supported by another study conducted in Nellore, India to assess the level of stress in BSc nursing first year students. The study findings showed 36.7% students had mild level of stress[8].

Current study is supported by next similar types of study conducted in Manipal College of Nursing, Pokhara, Nepal to assess the level of stress/ stressors and coping mechanism in nursing students. The finding of the study showed that 60.4% students had moderate level of stress[9].

There was no significant association between anxiety score with age, ethnicity, residence, feeling difficulties in the college with $p < 0.05$.

In total 13 participants, 6 (46%) students had mild stress and 7 (54%) had moderate level of anxiety whereas mean and standard deviation were 1.53 ±0.51. There was low positive correlation between anxiety and academic stress with $r_p = 0.395$. It was found that the cause of anxiety was due to college environment, seniors ragging, difficult subjects, delay session and tight schedule.

These problems can be reduced by stopping seniors ragging, providing transportation, starting session on

time, and counselling, providing lunch in canteen, friendly environment, and free hours for library.

CONCLUSIONS

Students who are newly taking admission to nursing profession will have mild form of psychological variation. It's the institutional teachers who have to focus on their psychological needs.

Students are mainly faced with practical and academic stressors and anxiety. Hence the study strongly suggests that, starting session on time, time management, avoid ragging, student counselling are the most important factors to reduce anxiety and academic stress to the newly admitted students.

Nursing faculty should create caring and supportive learning environments that facilitate students coping and persistence, perceived self- efficacy, and success in nursing.

Acknowledgement

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