

ACADEMIC STRESS AMONG THE PARAMEDICAL SCIENCE STUDENTS: A DESCRIPTIVE CROSS SECTIONAL STUDY

Syed Vaqar Ahmad Shah¹, Kadir Alam², Sarif Rajbhat³, Amit Kumar Gupta⁴, Deependra Prasad Sarraf²

ABSTRACT:

Background: Every person experiences stress in their daily life. It affects all the physical, mental and social wellbeing. Every single person has an ideal level of stress, but it varies among the individuals. Data is scarce on academic stress among the medical and paramedical students. Therefore, this study aimed to investigate academic stress of students of paramedical sciences.

Methods: A cross sectional study was conducted among 135 students of paramedical sciences using a semi-structured questionnaire consisting of demographic variables and items on academic stress. Descriptive statistics were used to analyze the data using Microsoft Excel 2010.

Results: Out of 135, 65.2% students felt academic stress during their daily life which was more in female students (71% vs 61%) and students having age group of 20-30 years (72.6%).

Conclusion: Prevalence of academic stress among the students was 65.2%. Understanding the academic stress in early stage and implementing help and support system might help to mitigate the burden of stress and prevents the future illness in the students.

KEYWORDS: Academic stress, paramedical, students

INTRODUCTION:

According to World Health Organization, health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity¹. There are many reasons that affect the mental health. Academic stress is one of the prime cause of negative impact on mental health among the students². Academic stress is the body's response to academic-related demands that exceed adaptive capabilities of students³. It can lead to anxiety, depression, alcohol and drug abuse among the students⁴. The data on academic stress among the paramedical students is scarce. The aim of this study was to assess the perception of the academic stress of students studying paramedical sciences.

METHODS:

A cross sectional descriptive survey was conducted among 135 paramedical students studying at Sunsari Technical College (STC), Dharan, Nepal in January 2021. The students studying at various paramedical courses at STC and giving consent to participate were enrolled in the study. Convenience sampling method was used. A semi-structured questionnaire was prepared using relevant literatures. It consisted of sociodemographic data and items on academic stress having 'yes' and 'no' responses. The reliability and validity of the questionnaire was determined by the three subject experts at STC. It was then pilot tested among 14 students of Bachelor in pharmacy and those students were not included in the data analysis. The objective of the study was explained to the study participants and written consent was obtained. The questionnaire was distributed to the students after the first class in the morning and collected after 15 minutes. No incentive were given to the study participants. Identifying personal information like name, email and mobile number were not collected to

Corresponding Author : Dr. Syed Vaqar Ahmad Shah

¹Assitant Professor, Dept. Internal Medicine, Nobel Medical College Teaching Hospital, Biratnagar, Nepal

²Associate Professor, Dept. Clinical Pharmacology and Therapeutics, B.P. Koirala Institute of Health Sciences, Nepal

³Student B. Pharm final Year, Dept. of Pharmacy, STC, Nepal.

⁴Campus Chief and Head of Department of Pharmacy, Sunsari Technical College, Dharan, Nepal



maintain the confidentiality of the participants. The data were entered in the Microsoft Excel 2010 and descriptive statistics mean, frequency, standard deviation and percentage were calculated. The data were presented as tables and graphs.

RESULTS:

A total of 135 students participated in the study among which 82 (60.7%) were male. Out of 135, 84 (62.2%) students were 20-23 years old. Forty one (30.4%) students were studying Bachelor in Pharmacy (Table 1).

Table 1: Sociodemographic characteristics of the participants (n=135)

Variables		Frequency	Percentage
Gender	Male	82	60.7
	Female	53	39.3
Age (years)	15 - 19	30	22.2
	20 - 23	84	62.2
	>23	21	15.6
Academic stream	Bachelor in Pharmacy	41	30.4
	HA	29	21.5
	CMLT	27	20.0
	Diploma in Pharmacy	38	28.1

Table 2 shows the perception of students toward academic stress. Out of 135, 88 (65.2%) students felt a lot of pressure in their daily studying which was more common in female (71.7% vs 61.0%). Eighty-two (60.7%) students agreed that their parents care about their academic grades too much that brings a lot of pressure.

Table 2: Gender wise perception of students towards academic stress (n=135)

Questions on academic stress	Male		Female		Total	
	Yes	No	Yes	No	Yes	No
I feel a lot of pressure in my daily studying.	50(61.0)	32(39.0)	38(71.7)	15(28.3)	88(65.2)	47(34.8)
It's very difficult for me to concentrate during the classes.	54(65.9)	28(34.1)	32(60.4)	21(39.6)	86(63.7)	49(36.3)
My parents care about my academic grades too much that brings me a lot of pressure.	54(65.9)	28(34.1)	28(52.8)	25(47.2)	82(60.7)	53(39.3)
I feel there is too much homework.	8(9.8)	74(90.2)	4(7.5)	49(92.5)	12(8.9)	123(91.1)

Future education and employment brings me a lot of academic pressure.	48(58.5)	34(41.5)	22(41.5)	31(58.5)	70(51.9)	65(48.1)
I feel there is too many test/examinations.	6(7.3)	76(92.7)	6(11.3)	47(88.7)	12(8.9)	123(91.1)
There is too much competition among the classmates that brings me a lot of study pressure.	40(48.8)	42(51.2)	23(43.3)	30(56.7)	63(46.7)	72(53.3)
I am satisfied with my academic grades.	54(65.9)	28(34.1)	28(52.8)	25(47.2)	82(60.7)	53(39.3)

Table 3 shows the Perception of academic stress among the students of different age groups. Out of 135, 19 (63.3%) students of age less than 20 years and 61 (72.6%) students of age between 20 to 23 years felt a lot of pressure in their daily studying while 13 (61.9%) students did not felt a lot of pressure in their daily studying.

Table 3: Perception of academic stress among the students of different age groups (n=135)

Questions on academic stress	Age group (years)					
	15-19		20-23		>23	
	Yes	No	Yes	No	Yes	No
I feel a lot of pressure in my daily studying.	19(63.3)	11(36.7)	61(72.6)	23(27.4)	8(38.1)	13(61.9)
It's very difficult for me to concentrate during the classes.	20(66.7)	10(33.3)	59(70.2)	25(29.8)	7(33.3)	14(66.7)
My parents care about my academic grades too much that brings me a lot of pressure.	19(63.3)	11(36.7)	51(60.7)	33(39.3)	12(57.1)	9(42.9)
I feel there is too much homework.	3(10)	27(90)	8(9.5)	76(90.5)	1(4.8)	20(95.2)
Future education and employment brings me a lot of academic pressure.	18(60)	12(40)	54(64.3)	30(35.7)	16(76.2)	5(23.8)
I feel there is too many test/examinations.	3(10)	27(90)	8(9.5)	76(90.5)	1(4.8)	20(95.2)
There is too much competition among the classmates that brings me a lot of study pressure.	17(56.7)	13(43.3)	43(51.2)	41(48.8)	3(14.3)	18(85.7)
I am satisfied with my academic grades.	12(40)	18(60)	54(64.3)	30(35.7)	16(76.2)	5(23.8)

DISCUSSION:

Two third (65.2%) of the students experienced academic stress in this study. In contrast, a higher percentage of students (96%) felt academic pressure in an Indian study [5]. A Malaysian study had reported that only 41.9% medical student were stressed due to academic activities [6]. The prevalence of the



academic pressure was higher among the females by 1.18 times compared to their male counterparts. Similarly, it was interesting to find that the level of academic pressure was highest among the students of age group 20 to 23 and the concern for the future education and employment increases as the age increases and irrespective of increasing or decreasing the grade, the satisfaction with academic grade increases with age. The possible causes for the stress may be due to the combination of various factors like academic grade, family's concern, future education and employment, competition among the classmates, financial concern of their family, worrying about meeting academic demands, pleasing teachers and parents, and keeping up with their classmates, peer pressure, skipping meals, overeating or eating unhealthy foods and lying awake at night⁷. The students should be supported by various support systems in the college and should be regularly exposed to various stress management methods. The identification of stress in early stage and implementation of various effective psychological services may prevent possible future illness in the students. Health promotion programme has positive impact on reducing the negative effects of stress and such programmes might be conducted in medical and paramedical colleges of Nepal⁸.

Students themselves can deal with the academic stress by performing various activities such as healthy eating, good night's sleep, doing physical and mental exercise, regularity in studying and seeking help if necessary and to avoid negative effects of the stress, numerous approaches can be employed for stress management such as self-regulation and mindful based intervention programs⁹. The imbalanced and overloaded curriculum, physical environment of classrooms, poor interaction between student and children, improper methodology of teaching, focussing on weakness of students rather than strength, fear of punishments and high expectations of teachers may also lead to academic stress. Therefore, the academic institution can also play important role such as preparing well balanced class

schedule, teaching the techniques to overcome stress such as yoga, meditations, sports and involving them in creative works¹⁰.

Parents also play significant role in the social and emotional development of their child. Parents should be aware of their children's attitudes, interests, strengths, weakness and emotions. They should respect their children's interest, should be understanding and truthful and should always motivate and encourage them¹¹.

LIMITATIONS :

As this study was conducted at a single academic institution, its findings could not be generalized to the other colleges. The study had small sample size.

CONCLUSION :

The prevalence of the academic stress was 65.2% among the students of paramedical sciences. The study findings would help the teachers, parents, policy makers and other concerned authorities to develop an effective workshop and seminar to reduce the academic stress to the students.

REFERENCES :

1. WHO remains firmly committed to the principles set out in the preamble to the constitution. World Health Organization, 2020. Available at <https://www.who.int/about/who-we-are/constitution>. Accessed on December 7, 2020.
2. Tyrrell J. Sources of stress among psychology undergraduates. *Ir J Psychol.* 1992;13(2):184-92.
3. Saleh A, Z Omar A, Alhabeeb M, et.al. perception of academic stress among health science preparatory program students in two Saudi universities. *Adv Med Educ Pract.* 2018;9:159-164.
4. Pascoe MC, Sarah E. Hetrick, Parker AG. The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth.* 2020;25(1):104-112.
5. Kumar AM, Sudha M, Aravind Kumar R, Rajkumar D. Prevalence of stress among paramedical students in Cuddalore District. *IAIM,* 2018;5(11): 28-31.
6. Sherina MS, Rampal L, Kaneson N. Psychological stress among undergraduate medical students. *Med J Malaysia.* 2004;59(2):207-11.
7. Reddy KJ, Menon KR, Thattil A. Academic stress and its sources among university students. *Biomed Pharmacol J* 2018;11(1): 531-537.
8. Wolf TM, Randall HM, Faucett JM. A survey of health promotion programs in U.S. and Canadian medical schools. *Am J Health Promot.* 1988;3:33-6.



9. Bamber MD, Schneider JK. Mindfulness-based meditation to decrease stress and anxiety in college students: a narrative synthesis of the research. *Educ Res Rev.* 2016;18:1-32.
10. Agolla JE, Ongori H. An assessment of academic stress among undergraduate students: The case of University of Botswana. *ERR.* 2009;4(2):63-70.
11. Sarita S. Academic stress among students: role and responsibilities of parents. *IJAR.* 2015; 1(10):385-388.

