

ORIGINAL ARTICLE

STRESS FACTORS AND THEIR COPING STRATEGIES AMONGST THE STUDENTS OF AZAD JAMMU KASHMIR MEDICAL COLLEGE MUZAFFARABAD: A CROSS SECTIONAL STUDY

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Background: Medical studies are known to be highly stressful. Since students get information in Medical Education regarding Health and Development they are also taught the application of necessary skills for them to overcome stress. The aim of this study was to identify various stress factors subjectively, along with the coping strategies in Medical students. **Methods:** The study was conducted at Azad Jammu and Kashmir Medical College, Muzaffarabad. All students of the college were included in the study. Two questionnaires were developed; first to identify the major sources of stress and coping techniques employed by the students and the second for identification of the factors related to the role of Medical College in reduction of stress in students. Data was collected on 5 point Likert Scale and analyzed on Microsoft Excel in percentage. **Results:** Response rate was 65%. Long hours in college were detected as the biggest stressor. Absence of Wi-Fi was the second. The modular system of curriculum was not found to be a major source of stress for the students. Coping skill used most frequently was *Namaz/Nawafil*, followed by interactions with friends and family. **Conclusion:** The integrated, modular system appeared to be well accepted by the students. Religion and social support provide help in coping with the stress of medical studies.

Keywords: Stress, Coping Skills, Questionnaire, Medical Students, Institutional role, Modular system

Pak J Physiol 2018;14(2):50-2

INTRODUCTION

World Health Organization defines mental health as ‘a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity’.¹ Stress is generally defined as body’s non-specific response or reaction to demands made on it.² Stress is a rising burden of the current competitive era. It is because of this rising incidence and importance that stress and its repercussion on the physical and psychological health and other parts of life is an extensively studied area in scientific and academic research.³

Students in general and medical students in particular are no exception to this phenomenon. A stressful college environment has a negative impact on the performance in academics, resulting in problems in psychological as well as in physical aspects.⁴ High level of stress may have a negative effect on cognitive functioning and learning. A stressor is a personal or environmental event that causes stress. Coping skills are defined as the person’s constantly changing cognitive and behavioural efforts employed to manage, reduce or control stress.⁵

Various studies have proved that compared to the other professional studies, stress is more frequent in medical students.² The recent change of the curriculum from traditional to integrated modular system is also perceived as a contributing added stress.⁶ If we identify stressors and effective coping mechanism in early years of medical school we can provide students with essential

support to intervene and lessen the consequences.⁷ The present study was undertaken to identify the stressors, including the integrated, modular curriculum and the coping strategies employed by the students. Another aim was to identify ways in which the institute can help decrease the amount of stress on the students.

METHODOLOGY

A cross-sectional, questionnaire based survey was performed amongst students of 1st to 5th year MBBS in May–June 2017 in Azad Jammu & Kashmir Medical College Muzaffarabad, after approval of the Ethical Review Committee. Students were explained about the study and their written consent was obtained. A written questionnaire was used for gathering data for this study. The 19-item structured questionnaire was designed in which the stressors, both academic and social factors, were included. These were decided by discussions in various classes with students, going through literature and personal observation. The second questionnaire was developed, based on the discussion with the students, listing their coping strategies, and institutional stress-relieving factors.³ Fourteen items were used to assess coping skills of students and twelve items were used to evaluate institutional stress-reducing factors. The questionnaires were distributed among the students and anonymous responses were collected. Results were collected using a 5-point Likert scale and were tabulated in percentages. A total of 18 sources of stress were identified and broadly divided into academic, physical,

social, and psychological factors, and for each stressor the severity was rated as having never, rarely, sometimes, often, and always, and scored as 1, 2, 3, 4, and 5 respectively. The data was tabulated as frequency and percentage.

RESULTS

A total of 329 out of 500 students participated in the study showing response rate of 65.8%. The year wise distribution of the participants is shown in Table-1.

Modular system seemed to be very well tolerated by all the 5 classes with acceptance increasing as the duration of study increased. It was a factor for 59% for 1st year but reduced to 31% in 5th year. The biggest source of academic stress for all the years was long hours. For 1st year students it was followed by time management. For 2nd, 3rd and 4th year students, it was followed by ambiguous policies. For final (5th) year student the strict policy of wearing a uniform was the second biggest source of stress (Table-2).

Students of all the years cited lack of Wi-Fi facility as the biggest source of stress. First year students cited lack of entertainment as the second biggest source of stress. Lack of sleep was the second source for 3rd year student, while food problem at hostel was second biggest source for 4th year students. Final year students also perceived lack of sleep as the second biggest source of their stress (Table-3).

Personal coping strategies: Overall the most frequently employed coping strategy was religion in the form of *Namaz* and *Nawafil*. First year students reported sleeping as the next most common coping strategy. Second year students used interaction with family and friends and *Namaz* as equally frequent strategies. Third year reported professional help as most frequently employed followed by interaction with friends and family as second most frequent strategy. Both 4th year and 5th year reported acceptance and adaptation, followed by *Namaz* and *Nawafil* as coping strategies of choice (Table-4).

Table-5 shows factors related to the institute that students perceive to be helpful in reducing stress. Of these the most frequently reported was recreational tours. For 1st year student, the second factor was vacations. The 2nd year reported vacations with the same frequency as tours. Third year reported vacations as top factor, followed by tours. Same was the case with 4th year. Final year reported tours, followed by vacations.

Table-1: The number of medical students participating in the study

Year	Number	Percentage
1 st year MBBS	51	15.5
2 nd year MBBS	73	22.1
3 rd year MBBS	61	18.5
4 th year MBBS	60	18.2
5 th year MBBS	84	25.5
Total	329	100

Table-2: Association of academic stressors with year of study

Stressors	Year of Study					Total (%)
	1 st	2 nd	3 rd	4 th	5 th	
Modular system	59	29	43	26	31	37.6
Long hours in college	76	75	83	72	57	72.6
Biased behaviour of teachers	27.3	38.7	37	47.5	47.5	39.6
Conflicts with seniors	9	12.8	13	18.2	24	15.4
Fear of failure in exams	30.6	25	23.4	27	24	26
Time management	69	52	54	54	58	57.4
Uniform	36	45	62	49	59	50.2
Ambiguous policies	47	62	68	65	58	60

Table-3: Association of social stressors with year of study

Stressors	Year of Study					Total (%)
	1 st	2 nd	3 rd	4 th	5 th	
Absence of Wi-Fi	62	61	69	58.6	58.8	61.9
Lack of sleep	57	54.8	57	45.2	54	54
Lack of Entertainment	58.4	54	53.6	42	52	52
Difficulty journey back home	40	53	48	48	46	47
Food Problems at Hostel	45	55	15	57	45	43.2
Health Problems	37.5	46	39.5	45	42	42
Spacing at Hostels	41	37	50	37	28	38.5
Inability to socialize	38.5	30.5	28	25.8	30.2	30.6
Financial burden	29	23	32	23	30	27.4
Roommate Problems	20	23	15	25	14	19.4

Table-4:-Coping strategies adopted by students under stress

Coping Strategies	Year of Study					Total (%)
	1 st	2 nd	3 rd	4 th	5 th	
<i>Namaz/Nawafil</i>	78	69	65	68	76	71.4
Interaction with family/ Friends	57	69.2	67.8	65	72	66.2
Sleeping	70.1	64	64.3	63	66.6	65.6
Acceptance/Adaptation	31	53	59	74	76.1	58.6
Phone/Social media	48	53.4	61	58	54.6	55
Music/Movies	46	50	43	52	54	49
Time management/ Activity scheduling	41.8	47	45	51	51.2	47.2
Sports/Games	29	31.5	24.5	41	43	33.6
Walk/Jogging/Gym	32.4	40.2	19	35.4	39	33.2
Shopping/Window shopping	19.5	29.5	33.8	33.2	41	31.4
Professional help	32.6	22	70	11.4	18	30.8
Internet games	14.3	26	30	29.7	26	25.2
Medication	11.6	9	15.4	13	14	12.4
Unhealthy activity like smoking/Alcohol	1.4	3	29.5	2	3.1	7.8

Table-5: Institutional factors responsible for managing stress as perceived by students

Institutional Helps	Year					Total (%)
	1 st	2 nd	3 rd	4 th	5 th	
Recreational tours	81	73	70	67	74	74
Vacations/Holidays	80	73	75	71	69	73
Provision of written policies by college	62	63	61	56	58	60
Guidance from teachers/mentors	71	62	61	43	57	59
Sports	58	60	58	53	57	57.2
Improvement in teaching schedule/system	66	62	62	51	52	55.9
Scholarships/financial help	60	51	56	35	52	51
Orientation classes	54	53	53	37	42	47.8
Professional help	60	52	53	30	43	47.6
Guidance workshops like how to appear in exams/stress management programs	64	42	47	28	36	43.4
Students committees	45	46	44	34	31	40
Participation in various societies of college	40	39	32	32	35	35.6
Youth exchange programs with other sister colleges	44	38	42	27	27	35.6

DISCUSSION

Literature shows abundant evidence of great amount of stress in medical students.⁸ Medical students have acknowledged academics and examinations as major stressors and have identified these as having an impact on their physical and psychological well-being and academic performance.⁹ In our study, it was observed that physical and social factors are greater perceived stress factors in students. The top five stressors found in our survey were long hours, lack of internet (Wi-Fi) facilities, ambiguous policies, lack of sleep and lack of entertainment. This study was conducted to see whether a modular system is being a source of stress for the students but the results were surprising, showing that this system is not that big a stress. Earlier studies have reported that examinations were a frequent source of stress among medical students.¹⁰

Various new stressors were picked up in this study with different coping strategies. A significant proportion of the students expressed the need for clear written policies regarding rules and regulations. Although such policies do exist, this study highlights the need to effectively communicate them to the students.

Students expressed a need for more effective and readily available help in the form of guidance from teachers/mentors. They wanted more entertainment activities such as movie shows, literary clubs, various societies like adventure and debates, musical and cultural events, sports, free internet facilities and more college-sponsored tours. Compared to day scholars, hostellites reported food as a source of stress. This has been reported in another study as well.¹¹

Another finding was students' use of unhealthy activities like smoking to relieve stress. Although overall this was not common place, yet one class in particular seemed to use it several times more than the rest. This is of concern and should be look into with an intention to identify the cause. Previous studies have linked smoking with peer pressure and anxiety.^{12,13}

Our study highlighted the need for helping students to identify their stressors and learn to cope with it in extremely demanding professional life. The response from students of all the 5 classes was appreciable overall. This study would help identify the role that the institution can play in enabling the students to reduce the stress. A few factors like a good communication with teachers/faculty, guidance workshops, presence of mentors/counsellors could help a lot to reduce the stress in the lives of future doctors.

CONCLUSION

The present study highlights the changing stressors of

the contemporary medical students. While in the past academic stress has been reported as the top stressor, lack of internet facility was cited as the main source of stress. Integrated modular system of teaching does not seem to be a major source of stress for our students.

LIMITATIONS

We did not study day scholars and hostellites separately. Understandably their stressors and coping mechanisms are likely to be different from one another. This could be the subject of a future study. While different year students identified varying sources of stress, it might be prudent to study these students prospectively to understand how their perceived stress and coping mechanisms evolve over the years.

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Received: 8 May 2018

Reviewed: 18 May 2018

Accepted: 20 May 2018