

Evaluation Of Stress Coping Skills Among Dental Students

Dr Rajeev Saxena*, Dr Sachin Wankhede**, Dr Avinash Supe***, Dr Payal Bansal****

*Assistant Professor, **Professor and Head, Department of Microbiology, SKNMC Pune. ***Ex. Dean, Sheth GS Medical College and KEM Hospital, Mumbai, ****Professor, Department of Medical Education. MUHS. Pune

Abstract: Background: Stress is common among dental students and there are many causes for this stress. Too much stress can hamper teaching and learning process and results in poor academic and clinical performance. Students are unable to focus on study. Material and Methods: Study was conducted for 300, 1st to 4th year BDS students of Sinhgad Dental College & Hospital, Pune. To assess the stress coping skills of the students Folkman and Lazarus scale was used. Statistical analysis was done using microsoft excel Results: There were no significant differences in coping strategy when compared between the I, II, III and IV BDS. The most common coping strategy was Positive reappraisal followed by Planfull problem solving, accepting responsibility and seeking support. No significant difference observed in coping strategy of different years of dental student, suggestive of uniform coping methods throughout their undergraduate carrier Conclusion: The present study concludes that students of different years will have same coping startagy, it will not affect with their study year. [Saxena R Natl J Integr Res Med, 2019; 10(3):45-48]

Key Words: Stress, Coping, Dental student

Author for correspondence: Dr Rajeev Saxena, Assistant Professor, Department of Microbiology, SKNMC Pune. E-mail: rajeevsaxenak2010@gmail.com, M: 9373054741

Introduction: The term “stress” was firstly employed in the 1930’s by the endocrinologist Hans Selye. Stress is a response to any event which is perceived to alter or threaten our well-being and is a cognitive (thought) process¹⁻⁵; is the body's reaction to a change that requires a physical, mental, or emotional response. Indian education system resembles colonial legacy: educational structure, curriculum design, and pattern of examination. But too much stress can cause a lot of discomfort and can get in the way of being able to focus and achieve.⁶⁻¹⁰

Stress is common among dental students and there are many causes for this stress. Too much stress can hamper teaching and learning process and results in poor academic and clinical performance. Students are unable to focus on study^{5,11,12}; stress can lead to increased depression, anxiety and suicidal tendency. Students resort to smoking, alcoholism¹³⁻¹⁶, drug abuse, procrastination etc to cope with stress.

All these factors hamper the process of a student becoming a good dentist. By this study we were be able to understand the complexity of stress in first year and second year students and accordingly the intervention of stress. This study was conducted keeping aim to find out strategy used by students to cope up the stress.

Through statistical analyses, it can be seen that there is a strong correlation between the academic satisfaction variable and the use of coping strategies such as positive reappraisal, planning/resolution, denial of the problem and

feelings, dis-tancing/ distraction, and acceptance/ resignation, as illustrated below¹⁷

Student-led support programs that are designed to promote the mentorship of junior students by senior students are recommended because they appear to lower student stress and ultimately burnout.

Although the Association of American Medical Colleges urges medical schools to foster relationships between faculty members and students to promote a positive learning environment¹⁸, we agree with Wolf et al¹⁹. that student-guided programs may present a stronger source of support and promote positive strategies for coping with stress. Mouret²⁰ proposed that senior medical students can more easily relate to challenges encountered by junior students.

Many studies have shown that such events help in easing anxiety and stress and preventing burnout¹⁰⁻¹³.

Material and Methods: After obtaining permission from IRB, cross sectional Study was conducted for 300, 1st to 4th year BDS students of Sinhgad Dental College & Hospital, Pune. To assess the stress coping skills of the students Folkman and Lazarus scale was used. Statistical analysis was done using microsoft excel.

Results: Result obtained from the study including demographic details and response to study instrument are describe in following table 1 & 2:

Table 1: General description of study participants: Age, Gender, Siblings, Birth order and home town of participants

Variables		Mean	SD
Age		19.76	1.39
12th Standard Marks		78.14%	8.15%
Gender	Male	37	37.4 %
	Female	62	62.6 %
	Total	99	100.0 %

Number of siblings	One	25	25.3 %
	Two	58	58.6 %
	Three	15	15.2 %
	Four	1	1.0 %
Birth order	First	72	72.7 %
	Second	23	23.2 %
	Third	3	3.0 %
	Sixth	1	1.0 %

Table 2 : Comparison of coping strategy between different years of BDS by ANOVA

		N	Mean	Std. Dev.	95% Confidence Interval for Mean		p-value
					Lower Bound	Upper Bound	
Confrontive coping	First Year	87	1.29	0.38	1.21	1.37	0.774, Not significant
	Second Year	87	1.29	0.38	1.21	1.37	
	Third Year	87	1.33	0.37	1.26	1.41	
	Final Year	87	1.33	0.37	1.26	1.41	
	Total	348	1.31	0.37	1.27	1.35	
Distancing coping	First Year	87	1.50	0.47	1.40	1.60	0.866, Not significant
	Second Year	87	1.50	0.47	1.40	1.60	
	Third Year	87	1.53	0.45	1.44	1.63	
	Final Year	87	1.55	0.43	1.46	1.64	
	Total	348	1.52	0.45	1.47	1.57	
Self-controlling coping	First Year	87	1.54	0.40	1.45	1.62	>0.05, Not Sig
	Second Year	87	1.54	0.40	1.45	1.62	
	Third Year	87	1.54	0.40	1.45	1.62	
	Final Year	87	1.54	0.39	1.45	1.62	
	Total	348	1.54	0.40	1.50	1.58	
Seeking Support	First Year	87	1.66	0.55	1.54	1.78	>0.05, Not Sig
	Second Year	87	1.66	0.55	1.54	1.78	
	Third Year	87	1.66	0.55	1.54	1.78	
	Final Year	87	1.66	0.55	1.54	1.78	
	Total	348	1.66	0.55	1.60	1.72	
Accepting Responsibility	First Year	87	1.76	0.49	1.66	1.86	>0.05, Not Sig.
	Second Year	87	1.76	0.49	1.66	1.86	
	Third Year	87	1.76	0.49	1.66	1.86	
	Final Year	87	1.76	0.48	1.66	1.87	
	Total	348	1.76	0.48	1.71	1.81	
Escapeavoidance	First Year	87	1.09	0.39	1.01	1.17	0.343, Not significant
	Second Year	87	1.09	0.39	1.01	1.17	
	Third Year	87	1.17	0.42	1.08	1.26	
	Final Year	87	1.17	0.42	1.08	1.26	
	Total	348	1.13	0.40	1.09	1.17	
Planful Problem Solving	First Year	87	1.84	0.49	1.74	1.94	>0.05, Not significant
	Second Year	87	1.84	0.49	1.74	1.94	
	Third Year	87	1.83	0.49	1.73	1.94	
	Final Year	87	1.83	0.49	1.73	1.94	
	Total	348	1.84	0.49	1.78	1.89	

Positive Reappraisal	First Year	87	2.01	0.53	1.90	2.13	0.999, Not significant
	Second Year	87	2.01	0.53	1.90	2.13	
	Third Year	87	2.02	0.52	1.91	2.13	
	Final Year	87	2.02	0.52	1.91	2.13	
	Total	348	2.02	0.52	1.96	2.07	

There were no significant differences in coping strategy when compared between the I, II, III and IV BDS. The most common coping strategy was Positive reappraisal followed by Planfull problem solving, accepting responsibility and seeking support. Escape avoidance was the least commonly used coping strategy. Listening music, talking to the friends, going on holiday and vacation are the major stress buster for all students, green campus and landscaping are also adding to their relaxation. No significant difference observed in coping strategy of different years of dental student, suggestive of uniform coping methods throughout their undergraduate carrier.

Previous research has reported that different coping strategies lead to different outcomes concerning an individual's perceived stress. For instance, Carver et al. found that strategies such as focusing on and the venting of emotions, as well as behavioral and/or mental disengagement, might be of limited usefulness.²⁸ In comparison, problem-focused coping (e.g., active coping, planning, suppression of competing activities, restraint coping, seeking of instrumental social support) and emotion-focused coping (e.g., seeking of emotional social support, positive reinterpretation, acceptance, denial, turning to religion) were found to be relatively more effective.

Conclusion: The present study concludes that students of different years will have same coping startagy, it will not affect with their study year

Recommendations: The results of this study suggest that a variety of changes need to be considered in the Dental colleges of India. Students wishing to study dentistry should be exposed to the nature of the profession and the study environment prior to applying to this program. We also recommend an entrance interview to evaluate the candidate's interest and suitability for the course. Dental colleges should collaborate with educational experts in designing and developing a curriculum structure which is more student-orientated, aimed at enhancing the

students' psychological well-being whilst maintaining a focus on academic and clinical performance and producing graduates with a positive professional attitude. The student

teacher relationship should be reformed to be more friendly so that the students won't fear with them and can share their feelings more comfortably. Teachers should understand their students and encourage them to share their problems. The students who are poor in academics and clinical skills should be given more time to improve them rather not humiliating them.

A stress reduction program could be implemented. Such programs for dental students as including specific courses, stress-reduction sessions, introduction to behavioural sciences and faculty incorporated advising systems foster coping behaviours that are useful on a daily basis, as well as preventative measures to reduce chronic stress effects.

Reference:

1. Toews JA, Lockyer JM, Dobson D, et al. Analysis of stress levels among medical students, residents, and graduate students at four Canadian Schools of Medicine. *Academic Medicine* 1997;72(11):997-1002.
2. Stewart SM, Betson C, Lam TH, et al. Predicting stress in first year medical students: A longitudinal study. *Medical Education* 1997;31:163-8.
3. Wolf TM, Heller, SS, Camp CJ, Faucett JM. The process of coping with a gross anatomy exam during the first year of medical school. *British Journal of Medical Psychology* 1995;68:85-7.
4. Mosley TH, Perrin SG, Neral SM, et al. Stress coping, and wellbeing among third-year medical students. *Academic Medicine* 1994;69:765-7.
5. Miller P McC. The first year at medical school: some findings and student perceptions. *Medical Education* 1994;28:5-7.
6. Santana S. Mind-body treatments gain foothold in medical curriculum. *AAMC Reporter* 2005;January:8- 9.

7. Horneffer K. Promoting student wellness in higher education: The use of relaxation breathing in the classroom. *Wellness Management*. Available at: <http://www.nationalwellness.org/index.php?id=237@id tier=201>. Accessed April 4 2003.
8. Lee J, Graham A. Students' perceptions of medical school stress and their evaluation of wellness elective. *Medical Education* 2001;35:652-9.
9. Hall P. The effect of meditation on the academic performance of African-American college students. *Journal of Black Studies* 1999;29:408-15.
10. Wolf TM, Randall HM, Faucett JM. A survey of health promotion programs in the US and Canadian medical schools. *American Journal of Health Promotion* 1988;3:33-6.
11. Seaward B. *Managing stress*. Boston: Jones and Bartlett, 2002.
12. Hembree R. Correlates, causes, effects, and treatment of test anxiety. *Review of Educational Research* 1988;58:47-77.
13. Benson B, Wilcher M, Greenberg B, et al. Academic performance among middle school students after exposure to a relaxation response curriculum. *The Journal of Research and Development in Education* 2000;33:156-65.
14. Harris HL, Coy, DR. Helping students cope with test anxiety. *ERIC Digest (ED479355)* 2003. Available at: <http://eric.ed.gov/ERICDocs/data/ericdocs2/content storage 01/0000000b/80/2a/3a/0c.pdf>. Accessed April 4 2003.
15. Stewart SM, Lam TH, Betson CM, et al. A prospective analysis of stress and academic performance in the first two years of medical school. *Medical Education* 1999;33:243-50.
16. Stecker T. Well-being in an academic environment. *Medical Education* 2004;38:465-78.
17. Hirsch CD, Barlem ELD, Almeida LK, Tomaschewski-Barlem JG, Figueira AB, Lunardi VL. Estratégias de coping de acadêmicos de enfermagem diante do estresse universitário. *Rev. Bras. Enferm.* 2015 ; 68(5):783-90
18. Fares J, Al Tabosh H, Saadeddin Z, El Mouhayyar C, Aridi H. Stress, burnout and coping strategies in preclinical medical students. *N. Am. J. Med. Sci.* 2016;8:75-81
19. Wolf TM, von Almen TK, Faucett JM, Randall HM, Franklin FA. Psychosocial changes during the first year of medical school. *Med Educ.* 1991;25:174-8
20. Wolf TM, Faucett JM, Randall HM, Balson PM. Graduating medical students' ratings of stresses, pleasures, and coping strategies. *J Med Educ.* 1988;63:636-42.

Conflict of interest: None
Funding: None
Cite this Article as: Saxena R, Wankhede S, Supe A, Bansal P, Shah C. Evaluation Of Stress Coping Skills Among Dental Students. <i>Natl J Integr Res Med</i> 2019; 10(3):45-48