

Stress among Dental Students

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Abstract: *The aim of the article is to do a survey on stress among dental students. This survey will be conducted among 100 dental students by providing a set of questions through a questionnaire. Evaluating the factors influence student perception, might allow programmatic changes designed to enhance students' psychosocial well-being and academic performance. The purpose of this survey is to investigate perceived sources of stress on dental students. The study population comprised undergraduate first to fourth year dental students enrolled with the Saveetha Dental College, India.*

Keywords: Stress, Dental students, Education, Clinical training

1. Introduction

Dental schools are known to be highly demanding and stressful learning [1]. Contemporary dental curricula requires students to attain diverse proficiencies including acquisition of theoretical knowledge, clinical competencies and interpersonal skills [1]. Dental schools are demanding: the academic, preclinical and clinical requirements extend students' working hours into nights and weekends [2]. Typical sources of stress for dental students include frequent examinations, examination phobia, reduced leisure time, demanding curricula, requirements to perform specified types and numbers of procedures, anxious patients, time limits, complicated treatments, possible conflicts with patients, fellow students, staff and faculty, lack of self-confidence, and the differences between the students' expectations [3]. High levels of stress can result in a variety of physical and psychological distress which in turn can affect the well-being and performance of the student. Symptoms of distress can include anxiety, depression, phobia, hostility, fear, tension, dizziness, fatigue, sleeplessness, tachycardia, gastrointestinal symptoms, irritability and cynicism. Furthermore, there is evidence that high stress levels impair the immune system function [4]. Over the past decade, dental educators have given increasing attention to investigating stress among dental students within the academic environment. Several authors have attempted to identify the factors perceived as stressful among dental students, while others attempted to document stress symptoms via psychological testing [5]. Although some of these studies have followed a strict separation between the assessment of environmental factors involved in the appraisal of stress and subsequent results (i.e. the so called distress response) the clear distinction between an environmental stressor and distress response is difficult. Furthermore, the initial reaction (response) to an event often serves as a new stimuli to elicit further unrest. Stress is significantly influenced by one's personal system of beliefs and attitudes. Stress can either motivate the student to peak performance or reduce their effectiveness in different degrees [6]. These studies have been repeated in several countries to verify whether different socio-cultural factors affect students' levels of perceived problems and India is a country in which there are many socio-cultural issues that are fundamentally different than other countries. The dental education system in India is a hierarchical system, in which there is an initial preparatory General Science year, followed

by 5 years of dental school education in which the 1st and 2nd years include both basic sciences, medical and dental courses. The 3rd year introduces the students to the clinical disciplines, while the 4th and 5th year are mainly clinical oriented courses. The internship year is spent training on rotation in different hospitals around the kingdom. The objectives of this study are to determine the different problems facing dental students in India that may serve as possible stressors.

2. Materials and Methods

This survey will be conducted among 100 dental students by providing a set of questions through a questionnaire.

1) Sample

All undergraduate students, who had completed at least one successful year in Saveetha Dental College were included in the study.

2) Instrument

An open-ended verbal and written interview of 12 dental students to assist in the development of the questionnaire which was designed to elicit students' perceptions of the problems they face during their study. The pilot questionnaire included the dental environmental stress questionnaire as well as an opportunity for the students to elaborate. After modification of the questionnaire, a final questionnaire was prepared. The resulting questionnaire contained 15 items that required the student to assess a variety of possible academic and related non-academic problems that could have an influence on them during their dental school years. The questionnaire was developed in English. Questions regarding the potential stress-inducing problems. The questionnaires were distributed to the sample and collected by student representatives.

3) Statistical Analysis

Descriptive statistics including frequency distributions and standard deviations were calculated for each problem item and the different variables.

The Student problem section of each questionnaire was scored to yield an average problem score across all possible items. In addition, the average of the problem scores in each category was calculated for each respondent.

3. Results

The questionnaire was completed by 100 dental students giving a response rate of 53%. More than half of respondents (65.4%) from Saveetha Dental College.

Table 1

Questions	Yes	No
Do you think studying dentistry makes you stress	90%	10%
do you think your supported through emotionally demanding work	84.5%	15.5%
Is studying dentist is hard for you to relax at home	79%	21%
Is your professors are gentle while teaching	95%	5%
Are you worried that you are not having enough sleep	73.2%	26.8%
Are you unable to sleep due to restlessness	12%	88%
Do you take sleeping pills to fall asleep	2%	98%
Is your weight reduced	56%	44%

Table 2

Question	Sleeping	Listening to song television and sports	Meditation	No idea
What are the steps to overcome stress	54%	36%	9.1%	0.9%

Table 3

Question	Aim	Parents compel
Is becoming dentist your aim or parents compel	79%	21%

Table 4

Questions	Excellent	Average	Poor
1.How is your performance in college	13%	63%	24%
2.your comments towards college how to reduce stress	Reducing work load (81%)	Extracurricular activities (15%)	Vacations/ break (4%)

Descriptive statistics and intercorrelations of the main study variables appear in Table 1. Higher acculturative stress was associated with higher levels of anxiety and depression. Additionally, peer support was positively associated with anxiety symptoms. Students stated that they are pressurised by overloaded work. They are unable to relax at home which leads to weight loss for many dental students as stated in table 1. The steps to overcome stress like sleeping and other extracurricular activities as stated in table2. According to their performance in college was average leads more percent then excellent and poor as it shown in table 4.

4. Discussion

Identification of potential problems is important in dental education programs as it might give students, faculty and administrators an opportunity to take precautionary measures to prevent dental stress. It is assumed that higher levels of perceived student problems lead to more stress [8].In the present study, the general problem level perceived by dental students was represented by the overall problem score. Stress levels, inferred from the overall problem score, revealed that most of the students in this study had a relatively high level of perceived stress, which lies between

“poses a small problem” and “poses a huge problem”. This may indicate that most of the dental students are not well adjusted to the dental school educational environment and to the pressure imposed to fulfill the school requirements. Among the investigated categories, the problem score related to clinical training was the highest. The problem score of personal and administrative issues was lower than other problem scores, which indicated that non-academic areas are not considered as stressful as the academic and clinical aspects of dental education.

As this survey was conducted at the beginning of the academic year, the students’ responses to the different problem items are most likely to be influenced by their experiences of the previous years. The 2nd year students had significantly less overall problem scores, category scores as well as individual item scores compared to the other academic years. This finding is in agreement with several studies [9]and may be explained by the fact that students at the beginning of the 2nd academic year are not yet exposed to any clinical experience or to highly condensed preclinical courses, which would impose a significant amount of stress.

Students living with their families had higher overall problem scores, and higher problem scores for the categories of personal and administrative issues and clinical training. These findings may be explained by lack of time and the increased demands of social activities that may limit time in general and lead to a feeling of being overloaded. In this study, only students with the lowest GPA experienced marginally statistically significant more perceived problems than students with the highest GPA in overall problem score and the theoretical problem score. This is consistent with the finding of other studies which showed that low academic achievement is characterized by less satisfaction with the education environment [10,11]

5. Conclusion

Within the limitations of this study, the findings indication of the dentals students had high levels of perceived stress. Clinical training was perceived to be the highest source of problems. The availability of suitable patients, their compliance with the treatment and student–faculty relationships were the students’ main concerns related to their clinical training. This suggested that enhancing and adjusting systems of patient screening and distributing them to different clinical courses, may contribute to possible reduction in the perceived problems by the students. The results of the present study showed that the demands of the profession related to both quality and quantity of academic and practical performance are potent sources of stress.

Both academic and non-academic perceived sources of stress should be considered in curriculum planning and the working environment for dental education. The educational system should deal with the potential stressors for students by stress management programs. Effective assistance from teaching staff, faculty administrators, and families is essential.

References

- [1] S.H. AcharyFactors affecting stress among Indian dental students.*J. Dent. Educ.*, Volume 67, 2003, pp. 1140–1148
- [2] Bradley et al., 1989I. Bradley, C. Clark, J. Eisner, K. DeGruchy, D. Singer, K. Hinkleman, S. Gelskey
- [3] The student survey of problems in the academic environment in Canadian dental faculties.*J. Dent. Educ.*, Volume 53, 1989, pp. 126–131
- [4] Eisler, 1995R. EislerThe relationship between masculine gender role stress and men's health risk: the validation of a construct*A New Psychological Men*, R. Levant, W. Pollack, et al., 1995, Basic Books, New York, pp. 207–225
- [5] Garbee et al., 1980W. Garbee, S. Zucker, G. SelbyPerceived sources of stress among dental students.*J. ADA*, Volume 100, 1980, pp. 853–857Article | PDF (2487 K)
- [6] Garbee, 1981W.H. GarbeeSources of stress in the dental school environment.*J. LA Dent. Assoc.*, Volume 39, 1981, pp. 9–14
- [7] Grandy et al., 1989T. Grandy, G. Westerman, C. ErskineCombs, C. TurnerPerceptions of stress among third-year dental students.*J. Dent. Educ.*, Volume 53, 1989, pp. 718–721
- [8] Heath et al., 1999J.R. Heath, T.V. Mcfarlane, M.S. UmarPerceived sources of stress in dental students.*Dent. Update*, Volume 26, 1999, pp. 94–100
- [9] Hendricks et al., 1949S. Hendricks, A. Joshi, K. Crombie, M. MoolaPerceived sources of stress among black dental students in South Africa.*J. Dent. Educ.*, Volume 58, 1949, pp. 406–410
- [10] King Saud University, Admission Department, 2006King Saud University, Admission Department, 2006. <www.ksu.edu.sa/english/statics.php>.
- [11] King Saud University, College of Dentistry, Department of Statistics, 2006King Saud University, College of Dentistry, Department of Statistics, 2006.