

# Stress, anxiety, and depression in clinical practice of undergraduates and awareness of its effective management - A survey

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## ABSTRACT

To assess the ability of the participants to manage the conditions such as stress, anxiety, and depression during the clinical practice of undergraduate education. Stress and anxiety are two common feelings people would encounter when they are in tensed conditions. Some level of stress may be associated with students in clinical practice because of various reasons. Some of them could manage it by relaxing or meditation, however, these would not work for some people, thus taking drugs that could relieve stress or anxiety is seen as a great solution for this condition. Thus, this survey was done to determine the different condition of stress and how the participants overcome these situations. A survey questionnaire with 13 pre-tested questions was used to assess the main cause of stress and its awareness among dental students at a private dental college. 110 dental students filled the questionnaires which are conducted through online (survey planet). Data were analyzed using descriptive statistics. Most of the dental students (55%) feel stressed before handling patients and the level of stress management for third and final years altogether was moderate (59%). The main cause of stress was quota (71%) followed by others (22%) and patient behavior (7%) and the students choose various methods including time management (66%), improve communication (87%), and nonpharmacological measures such as laughing club (50%), exercise (37%), meditation (8%), and yoga (5%) to overcome stress or anxiety. All of the students chose various methods in overcoming stress or anxiety condition and none of them administered any anti-anxiolytic drugs.

**Keywords:** Stress, anxiety, depression, drug

## Introduction

Stress is a condition or feeling of being burdened or overloaded, tense, worried, and anxious. People most probably experience stress in everyday life. Stress can create both advantages and disadvantages. In certain situation, it helps to motivate an individual to finish up assignments and task within given time or perform well. However, it can be worst if individuals cannot cope their stress well leading to over-stressed and thus affecting the ability to carry out a normal life for a longer period.<sup>[1]</sup>

Highly demanding and stressful learning environments are well known in dental schools.<sup>[2]</sup> Dental students are required to attain broad

proficiencies, which include theoretical knowledge acquisition, clinical competencies, and interpersonal skills due to the contemporary curriculum. Students are likely exposed to stress condition similar to those experienced by dental practitioners during the period of clinical training.<sup>[3]</sup>

Dental students showed considerable stress symptoms that were experienced during their training, as reported by Grandy *et al.*<sup>[4]</sup> and becoming more anxious in comparison to general population.<sup>[5,6]</sup> They have shown higher levels of depression, obsessive-compulsive disorders and also interpersonal sensitivity than age-matched norms.<sup>[7,8]</sup> Both dental education and practice, based on the studies of dental school life, occupational pressures, health issues, alcohol use and mortality, suggested that contain stress provoking elements, which contribute negative effects on individual well-being.<sup>[9,10]</sup>

## Materials and Methods

The study sample was derived from 110 dental students, both male and female from third and final years at a private dental college during the academic year of 2016. There were 63 and 47

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dental students from third and final years, respectively, who have completed the study questionnaire regarding stress, anxiety, and depression in clinical practice of undergraduates and its effective management.

A predesigned validated questionnaire consisting of 13 pre-tested questions was used to assess the attitude and practice among study population which is based on the dental environment stress questionnaire.<sup>[2]</sup> The questionnaire was divided into several sections including demographic details, sources of stress, stress awareness, and a part that was intended to collect information on the acceptance and knowledge of anti-anxiolytic drugs among dental students. The statistical analysis was collected with the use of “survey planet” which is conducted online.

## Results and Discussion

The data were analyzed using descriptive statistics. The questionnaires were distributed to third and final year’s dental students at Saveetha Dental College. The sample description is presented in Table 1 and Figure 1.

As expected, more than 50% of the students feel stressed or anxious before handling patients which mostly contributed by female students. “Yes” scored the highest, followed by “sometimes” and “no,” about 37% and 8%, respectively Figure 2.

In spite of feeling stressed, most of them could not manage their stress well as <40 students, 32% of the participants choose “good” for the level of stress management when the results from both years are combined. Most of the participants had “moderate” level of stress management, scored almost 60% which ranked the highest in both years Figure 3.

“Quota” beliefs constituted the most stress provoking factor as perceived by the students, both male and female from each year of study in comparison to “patient behavior” and “others.” The result obtained was approximately 70% of the students choose “quota” as

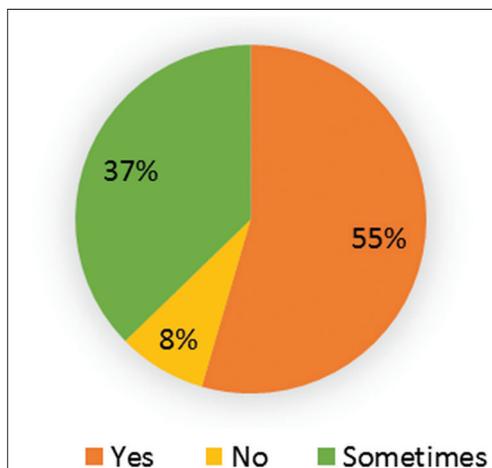


Figure 1: Feel stresses/anxiety before handling patients

main cause of stress for both years of study. None of the male students from both years choose “patient behavior” as main cause of stress or anxiety and answered “others” instead. “Others” is the second most common cause of stress about 22% followed by “patient behavior,” with the least percentage of 7% Figure 4.

Year of study	n	Gender	
		Male	Female
Third year	63	11	52
Final year	47	17	30
Total	110	28	82

Questions	Year of study/gender			
	Third year		Final year	
	Male	Female	Male	Female
Have you ever feel stressed or anxious before handling patients?				
Yes	6	31	8	15
No	1	4	2	2
Sometimes	4	17	7	13
How well you manage your stress?				
Poor	1	5	-	4
Moderate	7	28	9	21
Good	3	19	8	5
What is the main cause of your stress?				
Quota	8	35	13	22
Patient behavior	-	6	-	2
Others	3	11	4	6
If your option is A, how did you manage your stress/anxiety?				
Time management	4	21	9	17
Sharing experience with seniors	1	8	-	3
Seek help from colleagues	3	6	4	2
If your option is B, how did you manage your stress/anxiety?				
Improve communication	-	5	-	2
Try alternative on dealing with patients	-	1	-	-
Find things that could distract them	-	-	-	-
How did you manage your stress if your option is C?				
Nonpharmacological measures	3	11	4	6
Consult doctor and take medication	-	-	-	-
If it is via nonpharmacological measures, how did you manage your stress?				
Laughing club	2	7	-	3
Exercise	1	3	4	1
Meditation	-	1	-	1
Yoga	-	-	-	1
Do you take any drugs for control of anxiety?				
Yes	-	-	-	-
No	11	52	17	30
If YES, do you take these drugs under your own concern or it is prescribed by doctor?				
Self-decision	-	-	-	-
Prescribed by doctor	-	-	-	-
If it is under your own concern, do you thoroughly know the safety and side effect information before administration?				
Yes	-	-	-	-
No	-	-	-	-
Not sure	-	-	-	-
Do you think you should know every side effects of the drug you are taking?				
Yes	-	-	-	-
No	-	-	-	-

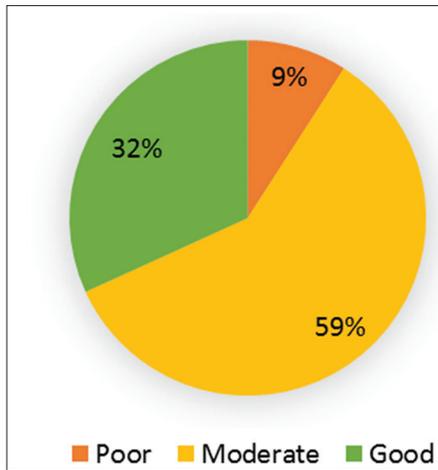


Figure 2: Ability to manage stress

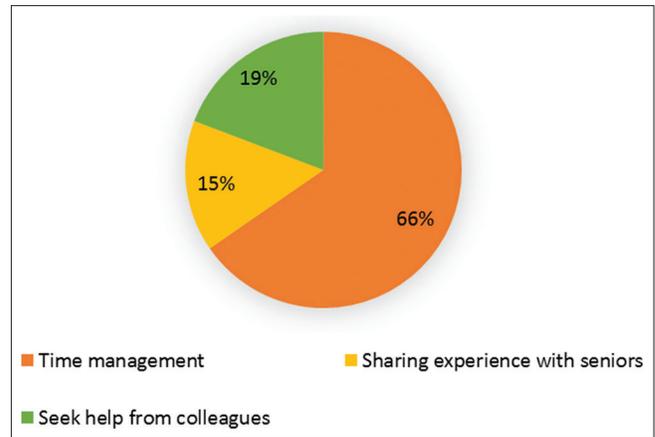


Figure 4: Stress/anxiety management if option is quota

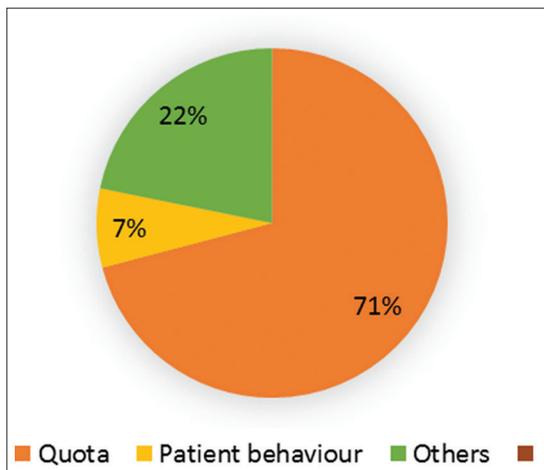


Figure 3: Main cause of stress

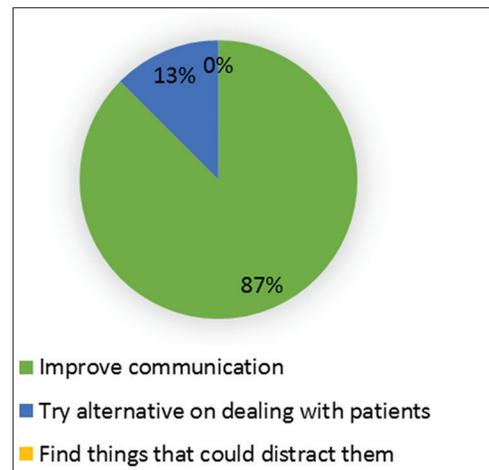


Figure 5: Stress/anxiety management if option is patient behavior

For those who answered “quota” as main cause of stress or anxiety, “time management” scored the most by both male and female students in managing the stress followed by “seek help from colleagues” and “sharing experience with seniors.” The percentages scored by each were approximately 66%, 19%, and 15% Figure 5.

For those who chose “patient behavior” as main cause of stress, “improve communication” is seen as the best solution to overcome stress and anxiety, scored almost 90% Figure 6.

“Others” scored the second highest following “quota” as main cause of stress, where 24 participants chose this option. All of them chose “nonpharmacological measures” to manage stress or anxiety instead of consult doctor and take modification.

There are various nonpharmacological measures that can be used to overcome stress and anxiety problems. Most male participants preferred “exercise” to overcome the situation compared to female students answered “laughing club” as the best way to overcome the stress. Based on this pie chart, 50% of dental students chose laughing club, followed by exercise 37%, meditation 8%, and yoga 5%. “Yoga” is the least option choose by the dental students.

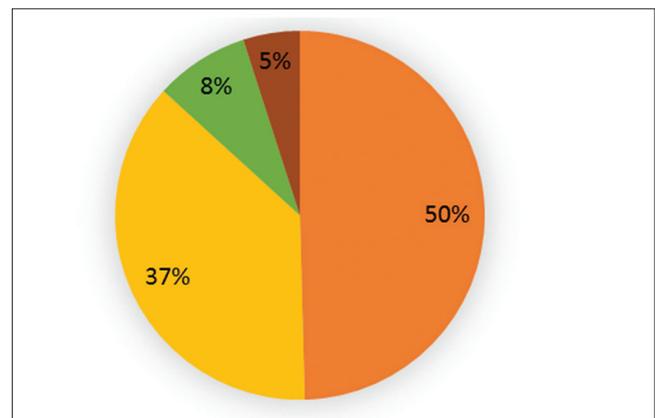


Figure 6: Various pharmacological measures used

Although stress or anxiety due to several factors in the dental environment is becoming one of the major problems in dental school, however, none of the dental students treated this problem by administering any drugs for control of anxiety. Thus, following the question “do you take any drugs for control of anxiety,” the remaining questionnaires, which are optional questions, were not attended as all of the dental students did not take any drugs for anxiety or stress control.

## Conclusion

The primary sources of stress as perceived by 110 dental students at a private dental college were “quota,” followed by “patient behavior” and “others.” In this study, it has shown that female students expressed a higher level of stress in dental training. Although stress environment is common in dental school, however, the students chose a better way in managing the stress or anxiety instead of administering anti-anxiolytic drugs.

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