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Mental Health of Dental Students and Dentists

By G.V Raghavasree

Abstract

Dental students and dentists are prone to psychological disorders. A study was conducted to know the levels of Depression, Anxiety, and Stress Scale (DASS-21) of dental students and dentists to identify the highest risk groups and to know the association between academic and psychological well-being. In this cross-sectional study, a total of dental students and dentists of both clinical and non-clinical departments were recruited for assessment of their psychological levels. Out of the number of participants the numbers of responses received were 133 of 145 participants. This makes up a 91% response rate. The participants were surveyed through online questionnaires. The different levels of stress, anxiety, and depression were identified by percentages. Based on gender, the study showed different results in both male and female students. In order to cope with the stress, the students engaged in various activities such as reading, writing, sports, television, and social networking, et al. A large number of dental students and practitioners reported psychological problems related to clinical work, exams, and the fear of being contaminated by diseases. Qualitative investigations were conducted with tailor-made supportive strategies.

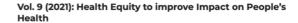
Keywords

Anxiety, stress, dental students, dental practitioners, psychological well being

Introduction

Dental education is considered a significant source of the psychological affects of dental students (1). Studies have found that increases in academic year studies have affected the stress level of students (2). Stress is the main factor for psychological disorders in an individual in the dental field(3).

In recent studies it has been found that stress is influenced by local and cultural factors (4). Stress is the main factor for the high number of suicides in dentists even before graduation, affecting 6% of dental students in Untied States(5-6). The related psychological problems have had a strong association with suicide as the systemic review concluded (7). All over the world studies have proven a high prevalence of psychological problems among dental students and dentists (8,9,10). Dental education being clinically oriented during the clinical years, as well as the clinical task quota and overly stressful examination has an immense





impact on the mental wellbeing of the student according to a study done in France (11). Studies have found that improving the learning environment through teaching and stress management in the UK (12), mindfulness in Germany (13), and through spiritual health and religion helped students to cope with studies in India and Turkey (14,15)

The main aim of this study was to map out the psychological problems associate with dental students and dentists and to improve the stress management.

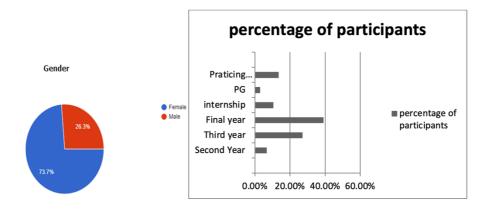
Method

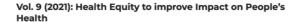
Students and dentists were invited to participate in an online questionnaire. The main students are concentrated in the third and fifth year as well as practicing dentists. As they have both clinical and non-clinical departments. Dental education consists of four academic years and one year for an internship. All the participants' personal details were kept anonymous and was of voluntary consent.

The main aim of this study is to know the psychological health of the dental practitioners and how they cope with the hectic schedule. The structured questionnaire collected information regarding the age, sex, year, and their perception of their mental health through various questions on depression, anxiety, stress, peer pressure, insomnia, mental exhaustion, anger issues, emotional health, levels of stress with increases in academic years, knowing the root cause of all psychological problems, and being able to cope with their mental health. The other main issue studied was the clinical work of the psychological aspect of the participants. The language of questionnaire was in English with relevant objectives underneath the respective questions.

Results

The total numbers of participants was 133. The majority of the participants were females (females 73.3% and males 26.3%). The age of the female participants ranged between 18 years to 40 years and the age of the male participant range from 18 years to 45 years of age.

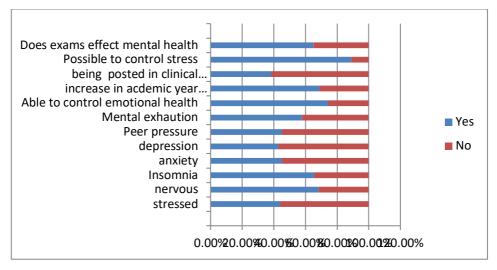


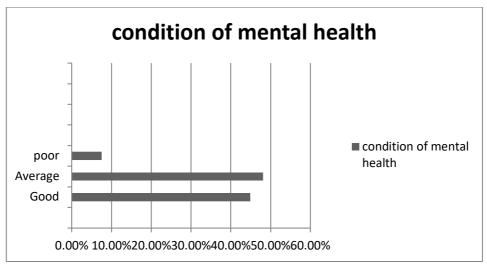




Out of the total number of participants, 39.1% of the majority of participants are in their final year, 27.1% in their third year 3% ,6.8% in their second year, 39.1% in internternships,3% are pg students, and 13.5% are dental practitioners. In this survey first year students did not participate as they are new to this profession and lack the experience.

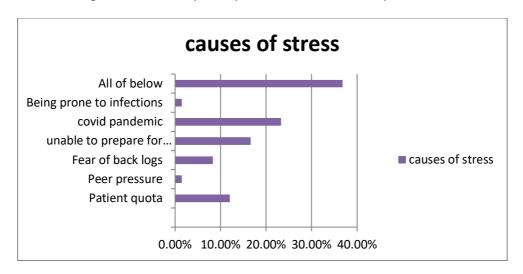
The reports have shown that female participants are more psychologically affected when compared to males. A large number of participants have agreed that they are psychologically disturbed. 68.4% of participants claimed to be nervous, 34.6% of participants suffered from insomnia, 45.1% of participants said they were anxious all the time, 42.9% of participants suffered from depression, 57.9% of participants suffered from mental exhaustion,45.9% of participants claimed to have anger issues,74.4% of participants were able to control mental health, 68.8% of participants claimed that increases in academic years increased their level of stress, 38.3% of participants have reported that being posted in clinical departments are depressed, and 44% of candidates claimed to be under stress.



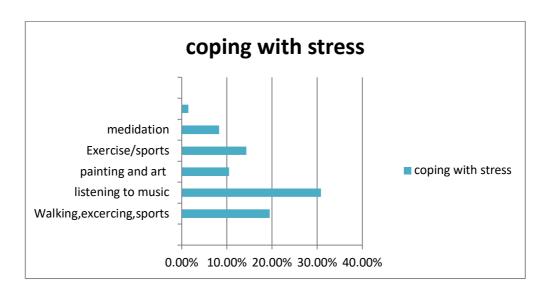




The majority of candidates have reported that their mental health is good -- 44.9%, 48.1% reported it as average, and 7.5% of participants claimed to be of poor mental health.



It's been reported that the main causes of stress were due to the coronavirus (COVID-19) pandemic (23.3%), being unable to prepare for exams (16.6%), being unable to complete patient quota (12%), peer pressure (1.5%), fear of back logs (8.3%), and being prone to infections (1.5%). The majority of participants, 36.8%, agreed that all of the reasons are causes of their stress.



88.8% of participants have agreed that it is possible to control stress. The various methods are through watching web series and movies -- 19.5% ,meditation -- 8.3%, running/exercise/sports --14.3%, painting/art --10.5, and listening to music -- 30.8%.



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Discussion

Undergraduate programs for Bachelor of Dental Surgery in India have a duration of five years, of which the first four years are the academic years followed by the final year as a compulsory year-round internship. The first initial years consist of basic medical and dental subjects and students are posted in the respective dental departments from the third year onwards. Students enroll into dental college after qualifying for the **National Eligibility cum Entrance Test (Undergraduate)-Neet Exam.** Only the best merit competitive students qualify for the Neet exam. The competition persists throughout the dental education program due to the norms of maintaining expected grades, additional stress is also generated to learn the vast syllabus and the technical skills that they have to master to complete the clinical quota. According to Schmitter and colleagues, dental education is more stressful than medical education (16).

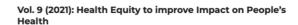
In this study, high levels of stress, anxiety, and depression were shown especially among undergraduates of the third year and final year. Additional studies about stress in dental students was reported in other countries (17,18, 19). High levels of anxiety, depression, stress, obsessive compulsive disorders, and interpersonal sensitivity have been reported in dental students (20,21).

The high psychological effect on dental students could have manifested due to exams, clinical work, and grades {22,23}. Dental students are more psychologically effected and dental students are three times more depressed than medical students (24).

Female students have reported higher levels of stress and anxiety when compared to male students (25). Intrinsic psychological differences between genders especially among females means that they are more likely to articulate their worries and emotions.

Studies have reported that higher levels of stress among students with low grades and among average grade students (4). Several investigations have found that senior dental students or students transitioning from preclinical to clinical training exhibit the most stress (4).

Student's satisfaction with their faculty and peer relationships, followed by their overall experience at the college has a greater impact on psychological health than other academic factors according to Wayt's observation (26). Studies have found dissatisfaction leads to higher levels of stress, anxiety, and depression. Students have stated that their relationships with faculty or staff critically affects their learning experience in one way or the other through grades, development, and learning (27, 28).





It was reported in studies that the higher the student's social support is, the lower their symptoms of stress as peers act as mentors and the levels of stress and anxiety are significantly reduced (29).

Stressed students adopt certain coping patterns to cope with stress and tension. The majority of students got involved in other hobbies like listening to songs, watching movies, and surfing net (30). Reports from Prinz and colleagues reported that students with the highest levels of depression and anxiety and have been subjected to dysfunctional coping.

Students with certain personality traits are more prone to distress according to reports which includes anger suppression, self-awareness, sense of fulfilment, and depression (32, 33,34). It has been found out that emotional intelligence affect both stress and coping with stress (35). Social support protects students from experiencing depression or anxiety according to Zhou and colleagues (35).

Conclusion

In the present pilot study it showed a high number of undergraduate dental students especially in their third and final year have reported psychological problems in connection with clinical work, exams, and the fear of being contaminated by diseases. A qualitative investigation was conducted along with a tailor-made supportive strategies.

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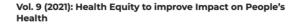
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