

Prevalence of generalised anxiety towards dental education among the first year dental students in a private dental institution in chennai city.

Title: Generalised anxiety towards dental education among the first year dental students in Chennai City.

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ABSTRACT

Background: Generalised anxiety disorder (GAD) is a syndrome of ongoing anxiety and worry about many events or thoughts that the patient generally recognised as excessive, inappropriate and unusual. It is one of the most common mental disorders. The increasing demand and pressure to perform well academically may have a contribution to increasing levels of GAD among dental students. This study was conducted to assess the general anxiety among the first year dental students in a private dental institution.

Methods: A Cross-sectional questionnaire survey was conducted among the 1st year dental students in Chennai. A 13 item questionnaire was developed and the responses were collected using Google forms. The collected data was entered and analysed using the statistical package for social sciences software (SPSS) version 23.

Results: From the survey conducted among the 1st year dental students. The study group comprised of 69.4% females and 30.6% males. It was found that the general anxiety was higher in the female student population compared to the male student population.

Conclusion: The present study shows high GAD among 1st year dental students in Chennai. Among which the females have high general anxiety compared to males. This suggests the need for special attention towards this topic in schools and colleges in order to help the children get over their anxiety.

Keywords: GAD, anxiety, mental disorders, dental students, survey, Innovative analysis.

INTRODUCTION

Generalised anxiety disorder (GAD) is one of the most common mental disorders. It

is a syndrome defined by ongoing anxiety and worry about many events or thoughts that the patient generally recognises as excessive and inappropriate. Almost 20% of the adults are affected by anxiety disorders every year (1). Generalized anxiety disorder causes fear, worry and a feeling of constantly being overwhelmed. It is usually characterized by persistent, excessive, and unrealistic worry about day to day things. This worry can be multifocal like finance, family, health and also the future. It is excessive, troublesome to manage and is usually accompanied by lots of psychological and physical symptoms. Excessive worry is the main feature of generalized anxiety disorder (2).

The diagnostic criteria for generalized anxiety disorder is- Excessive anxiety and worry for at least six months, Difficulty in controlling the anxiety or worry. Some of the most common symptoms are- Restlessness, feeling on edge, being easily fatigued, difficulty in concentrating or mind going blank, irritability, muscle getting tensed, sleep disturbances (3). The main treatments for generalized anxiety disorder are cognitive behavioral therapy and medications. Most patients may benefit from a combination of the two

Generalised anxiety disorder interferes with the day to day activities of a person. Increased levels of GAD may cause psychological disturbances like depression, anxiety, stress. In general many people experience these mental health disorders (4), but students are at greater risk due to the busy, stressful and transitional nature of a student's life. Especially the dental students in first year as they have to adjust to a different environment with new social norms, new people and new friendships. The increased demand and pressure to perform well academically may have a contribution in the increasing levels of GAD. The elevated levels of GAD among dental students may predispose them to physical and mental illness, substance abuse, decrease in work efficiency and burnouts thereby adversely affecting their academic performance and also their way of handling patients (5)

Medical and dental colleges are known to be highly demanding and stressful learning environments. Dental education is regarded as a complex, demanding, and often stressful exposure for the students (Schmitter et al.). (6–14), (15), (16), (17,18), (19), (20), (21–25)

Hence this study was conducted to assess the general anxiety among the first year dental students in a private dental institution in Chennai.

MATERIALS AND METHODS

Study design: A Cross-sectional questionnaire survey was conducted among the 1st year dental students in Chennai. First, the general anxiety questionnaire was prepared. Seven questions were collected from the GAD-7 screening tool and the other four questions were formed on the basis of review of existing anxiety scales. The 1st two questions were related to demographics that is age and gender. A 13 item questionnaire was developed. The response options were "not at all",

"several days ", "more than half the days","nearly everyday ". The formed and prepared questionnaire was circulated among the 1st year dental students and the responses were collected using Google forms. The collected data was entered and analysed using the statistical package for social sciences software (SPSS) version 23. Differences were tested at a significance level of $P < 0.05$. The questionnaire included-

Demographics- Age, Gender, Excessive anxiety or worry about a number of events or activities, Feeling nervous, anxious or on edge, Not being able to stop or control worrying, Trouble relaxing, Being so restless that its hard to sit still, Becoming easily annoyed or irritable, Feeling afraid as if something awful might happen, Being easily fatigued, Having disturbed sleep or difficulty in falling asleep, Difficulty in concentrating or mind going blank.

This study included those students who agreed to the terms of free and informed consent. Ethical approval was granted for the study by the institutional Research Ethics Committee. Criteria for inclusion are a selected batch of dental students who gave their consent to participate in the study were included. Criteria for exclusion are dental students on extended leave (>1 month) due to health or personal reasons, as well as dental students whose enrollment has been cancelled and they are no longer part of the daily batch, and were not allowed to study.

Statistical analysis: All the responses were collected and exported in SPSS version 2.3 software. Descriptive status was used for data summarisation and presentation. Degree association was measured using T-test to assess the significance level and statistical significance was set at 5%.

RESULTS

From the survey conducted among the 1st year dental students, 98 responses were collected. The study group comprised of 69.4% females and 30.6% males. According to Table:1 It was found that the general anxiety was higher in the female population compared to the male population. Pearson's chi square test was done demonstrating the association between gender and general anxiety, p value is 0.045 .

In the survey conducted 48.8% of the students were of the age group less than 18 and 51.2% were among the age group more than 18. According to Table:2 it was found that the general anxiety among the age group less than 18 is slightly lower compared to the age group more than 18. Pearson's chi square test was done demonstrating the association between the age groups and general anxiety, p value is 0.155 .

Table 1: Comparison of mean general anxiety scores among males and females in our study sample. There was a significant difference in the mean anxiety scores and females had significantly higher scores ($P = 0.045$).

	Gender	N	Mean	Std. Deviation	P value
anxiety	MALE	28	23.04	6.925	0.045
	FEMALE	58	26.14	6.495	

Table 2: Comparison of general anxiety among the age categories. The mean anxiety scores between individuals <18 years and >18 years was not statistically significant ($P = 0.155$).

Age in years	N	Mean	Std. Deviation	P value
Less than 18	44	18.7273	0.92419	0.155

More than 18	42	18.4762	0.67130	
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DISCUSSION

The study examined the generalized anxiety among the 1st year dental students in Chennai with a total of 98 participants out of which 69.4% of them were females and the rest 30.6% were males. The age group categories in this study population were less than 18 (48.8%) and more than 18(51.26%). In this study it was recorded that out of the 98 participants 12.2% of them are anxious nearly everyday, 25.5% responded with more than half the days, 49% several days and 13% are not anxious at all. (26). researched anxiety in 53 fourth year dental students before they were to start dental treatment of children. The study showed that half of the students present had moderate anxiety, both as a trait (54.3%) and state (55.0%). The authors were mainly focused on the students' stress management.

In this study population it was observed that the general anxiety was higher among the females compared to the males. Result analysis of the previous study showed high level of anxiety as a state in 47.62% females and 61.90% males, while anxiety as a trait was high in 31.75% and 33.33%, respectively. Low anxiety as a state level was noted in 20.63% females and in 14.29% males, and for anxiety as a trait, these values were 41.27% and 42.86% (27)

A previous study conducted among 529 students studying dentistry, from first to fifth year in one of the private colleges in Malaysia. The Dental Environment Stress (DES) questionnaire was applied to evaluate stress level. Interestingly, the fear of failure in a course was the greatest stressor, as described by the students of all years(28)

In another previous study, it was mentioned that the dental students were anxious due to the interactions with staff and patients, lots of paper work, uncertainty of future, economic instability which affected their mental and physical health by causing anxiety, depression and psychological problems(29).

CONCLUSION

The present study shows high GAD among first year dental students in Chennai. Among which the females have high general anxiety compared to males, it was also found that the general anxiety was slightly higher among the age group more than 18 compared to the age group less than 18. This suggests the need for special attention towards this topic in schools and colleges in order to help the children get over their anxiety.

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