Factors associated with the development of anxiety and depression in dental students

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ABSTRACT

The aim of this study was to evaluate the students of a public dental school located in Brazil, regarding anxiety and depression, relating the scores of each disorder with the students' personal, academic, and socioeconomic characteristics. This is a cross-sectional study in which 423 dental students participated. Three assessment instruments were submitted to be completed, namely the Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), and a questionnaire to record the profile of each student. Mann Whitney and Kruskal Wallis tests were used to compare scores between groups. The average value of anxiety and depression scores were, respectively, 15.21± 10.78 and 12.08± 8.38. Being freshman, not practicing physical activities, being atheist or agnostic, using social networks for more than three hours a day, willingness to give up dentistry at some point of the course, having sought psychological help from professionals during the course, and having low income, were factors that resulted in higher scores for anxiety and depression in college students. The symptoms of depression and anxiety were verified in the students, and personal and academic characteristics can influence their mental health.

Descriptors: Depression. Anxiety. Students, Dental. Quality of Life.

1 INTRODUCTION

The introduction of young people to academic life is a phase marked by several changes and adaptations. From the moment they enter university until finishing their education, this population group has a strong tendency for developing psychiatric disorders. In Brazil, it is estimated that 15% to 25% of undergraduate students suffer from some type of disorder, and the most common impairments are depression and anxiety[1].

Among the reasons for the inclination of university students to this type of problem are household separation - especially for students who have just entered university -, intense course loads, demands from professors, self-accountability not to disappoint the parents, lack of vocation for the course selected, personal social conflicts, and insecurities regarding the professional future after finishing the course[2].

The most common symptoms of these disorders are anxiety and depression, anxiety being defined as a state of restlessness and tension without any specific reason and, depending on its intensity and duration, can generate somatic symptoms that cause a significant drop in the quality of life of their carriers[3]. Depression is a more serious condition, which leads to an extreme state of sadness and social isolation and, when left untreated, its outcome may be suicide[4].

The levels of anxiety and depression may vary according to course year[1]. Each phase of the academic life produces different conflicts and concerns. For instance, freshmen go through an adaptation phase, having to assimilate too much information suddenly; mid-course, the students are concerned with self-improvement and ensuring they chose the best career for their professional future; and at course completion, with the end of academic life, anxiety develops around the personal and professional changes to come.

The courses may also trigger distinct levels of anxiety and depression symptoms in students, having found, in a survey, that Dentistry had the highest scores for anxiety compared to the other 12 courses included[5]. The exposure to an environment with strong emotional stress, long work hours, transition period from theoretical and pre-clinical training to clinical training, high cost of materials[6], and leaving university to the labor market are factors that make dental students more likely to develop anxiety[5].

The studies exploring anxiety and depression are important tools that may help understanding better such disorders, which are becoming increasingly common in current society. Different population groups may present distinct levels of anxiety and depression symptomatology, thus the ones that are more prone to such disorders, which become research targets, produce more evidence to understand the extent of the problem and what specific reasons lead to its appearance.

This study aimed to assess the students of a Brazilian public dental school regarding anxiety and depression, relating the scores of each disorder to the personal, academic, and socioeconomic characteristics of the students.

2 METHODOLOGY

This is a cross-sectional study, in which 423 students from a Brazilian public dental school, located in the state of São Paulo, participated in the full-time (5-year course) and night (6-year course) periods. This type of research aims to assess the relationship between diseases and / or other health outcomes with the variables of interest to be investigated, also determining the prevalence of the condition in the individuals evaluated[7]. The sample consisted of all students regularly

enrolled in the year 2018, who met the following eligibility criteria: be present on the day of application of the collection instruments and be attending Dentistry full or night. Thus, there was the characterization of census sampling. During the period of data collection, the course in question had 580 students regularly enrolled, of which 400 were full-time, with classes in the morning and afternoon, and 180 were in the night period, with classes only at night. It is noteworthy that the course has its pedagogical project in line with the National Curriculum Guidelines.

For the execution of the study, all the regulatory guidelines and standards for research involving human beings of Resolution 466/2012 were respected and followed, having been approved by the Institutional Research Ethics Committee (report number 2.924.654, CAAE 91331918.8.0000.5420). All participants signed the Informed Consent Form.

The questionnaires were applied by a postgraduate student at the institution of higher education where the research was carried out, in June 2018. A schedule was established based on the days and times made available by some subjects that, upon prior contact with the responsible teachers for elucidation of the characteristics of the research, they kindly provided the time needed to fill the material during their classes, and the data collection was then developed in classrooms, laboratories, or in clinics (before or after patient care), in a single session for each year of course.

Two inventories were used as assessment tools: the Beck Anxiety Inventory (BAI) and the Beck Depression Inventory (BDI). Additionally, a questionnaire was applied to record the profile of each student, requiring information from the participants on several aspects of their life and daily activities, such as practice of physical activities, musical and cultural activities, participation in scientific initiation of extension activities, family income, failures in the curriculum, religion, estimated time spent daily on social media, among other variables. For the "religion" variable, four alternatives should be noted: 1) Claims some religion, but does not usually attend masses, cults, meetings, or gatherings; 2) Attends masses, cults, meetings, or religious gatherings 1 to 2 times a month; 3) Attends masses, cults, meetings, or religious gatherings 3 to 4 times a month; 4) Claims to be atheist or agnostic.

The BAI is a tool developed by Beck et al.[8] and it is used to assess the rigor of anxiety symptoms. The individuals subjected to it responded to 21 affirmatives reflecting the symptoms typical of anxiety somatically, cognitively, and affectively.4 The participants should identify to what extent they were affected or troubled by every symptom over the last week, including the day of application. An X is marked for the condition that mostly fits their sensations in an intensity scale with four options: not at all, mildly (did not bother me much), moderately (it was unpleasant, but bearable), and severely (hardly bearable). The BAI assessment is summative and the higher the score obtained the more severe the anxiety symptomatology. The sum of scores is concentrated from 0 to 63 and each question presents results from 0 to 3. Anxiety is classified in four intervals, considering the following scores: 0-10, minimal; 11-19, mild; 20-30, moderate; and 31-63, severe.

The BDI is a depression assessment tool also developed by Beck et al.[9] and it includes 21 categories of symptoms and attitudes that correspond to the behavioral, cognitive-affective, and somatic manifestations of

depression. Among such manifestations are pessimism, humor, feelings of failure, feelings of guilt, dissatisfaction, feelings of punishment, self-deprecation, self-accusation, desire for self-punishment, irritability, crying fits, indecision, social isolation, work inhibition, sleep crises, fatigue, loss of appetite, weight loss, loss of libido, and somatic concern. The participants should identify to what extent they were troubled by every symptom or situation over the last week, including the day of application. The BDI is assessed with the sum of scores, classifying them into 0-11, minimal; 12-19, mild; 20-35, moderate; and 36-63, severe. Both inventories were translated and validated into the Portuguese language, showing satisfactory psychometric characteristics[10].

The statistical analyses were performed using two software: EpiInfo (Version 7.2.2.6) and GraphPad Prism 7.00. Data normality was verified with the Shapiro Wilk test. The Mann Whitney and Kruskal Wallis non-parametric tests, followed by Dunn's test for multiple comparisons, at 5% significance level, were used to compare the anxiety and depression scores.

3 RESULTS

The mean value of anxiety and depression scores were, considering all study participants, 15.21±10.78 and 12.08±8.38 respectively.

The percentage distribution of anxiety scores divided among the aforementioned classification intervals showed that 41.61% of students presented values between 0-10 (minimal) and the remaining 57.92% were distributed in the intervals corresponding to mild, moderate, and severe classifications, according to table 1. As for depression scores, 55.08% of students presented scores in the interval corresponding to the minimal classification and 43.03% were distributed in the remaining classifications, which is verified in table 2.

Table 1. Absolute and percentage distribution of anxiety scores from students of a Brazilian dental school, in the intervals corresponding to the classification created by Beck[8]

Interval	n	%
0-10 (minimal)	176	41.61
11-19 (mild)	119	28.13
20-30 (moderate)	76	17.97
31-63 (severe)	50	11.82
did not answer	2	0.47
Total	**423**	**100**

Table 2. Absolute and percentage distribution of depression scores from students of a Brazilian dental school, in the intervals corresponding to the classification created by Beck[9]

Interval	n	%
0-11 (minimal)	233	55.08
12-19 (mild)	110	26.00
20-35 (moderate)	67	15.84
36-63 (severe)	5	1.18
did not answer	8	1.89
Total	**423**	**100**

Slightly over one-fourth of the study participants are men (25.77%), while the vast majority are female (74.23%). In women, the mean scores were higher for both BAI (16.31±10.93) and BDI (12.82 ± 8.28), while in men the values were 12.03±9.69 for anxiety and 9.91±8.33 for measuring depression. The other variables and their respective results are presented in subcategories; with descriptive statistics that appear in tables 3 and 4.

Table 3. Means, standard deviations, minimum and maximum values of anxiety scores from students of a Brazilian dental school, according to personal and socioeconomic characteristics

VARIBLES			ANXIETY SCORES			
	N	%	Mean (SD)	minimum	maximum	p-value
Physical activity						
Yes	234	55.3	13.33 (10.59)	0	55	<0.0001*
No	187	44.2	17.56 (10.59)	0	57	
Did not answer	2	0.47				
Musical and cultural activity						
Yes	91	21.5	16.56 (11.58)	0	55	0.2128
No	329	44.2	14.81 (10.55)	0	57	
Did not answer	3	0.07				
Scientific initiation						
Yes, without scholarship	120	28.4	15.91 (11.16)	0	47	0.7771
Yes, with scholarship	78	18.4	15.26 (11.74)	0	57	
No	222	52.5	14.84 (10.26)	0	54	
Did not answer	3	0.71				
Religion						
Have a religion, but do not attend	186	44	14.7 (10.69)	0	54	0.5548
Attend, 1 to 2 times a month	100	23.6	15.39 (10.74)	0	57	
Attend, 3 to 4 times a month	79	18.7	14.87 (9.99)	2	44	
Self-consider an atheist or agnostic	54	12.8	17.37 (12.23)	0	55	
Did not answer	4	0.95				
Social media (time spent per day)						
Up to 1 hour	20	4.73	13.45 (13.37)	0	57	0.0062*
1 to 2 hours	71	16.8	12.07 (9.93)	0	37	
2 to 3 hours	116	27.4	15.42 (11.10)	0	55	
More than 3 hours	214	50.6	16.30 (10.46)	0	55	
Did not answer	2	0.47				
Dentistry as a first option						
Yes	226	53.4	14.73 (10.12)	0	55	0.602
No	192	45.4	15.81 (11.58)	0	57	
Did not answer	5	1.18				
Desire to quit the course						
Yes	193	45.6	17.55 (11.26)	0	57	<0.0001*
No	226	53.4	13.21 (10)	0	55	
Did not answer	4	0.95				
Search for psychological treatment						
Yes	114	27	20.15 (13.21)	1	57	<0.0001*
No	308	72.8	13.65 (9.66)	0	47	
Did not answer	1	0.24				
Failure in subjects						
Yes	91	21.5	13.35 (10.92)	0	54	0.0259*
No	329	77.8	15.69 (10.7)	0	57	
Did not answer	3	0.71				
Income						
Up to R$2500,00	72	17	18.68 (11.83)	1	47	0.0004*
R$2501,00 to 7,500	176	41.6	15.66 (11.10)	0	57	
More than R$7500,00	95	22.5	12.13 (9.43)	0	48	
Did not answer	80	18.9				
Year						
1st (Full-time and Night periods)	71	16.8	19.58 (10.39)	2	48	0.0005*
2nd (Full-time and Night periods)	97	22.9	14.88 (11.29)	0	49	
3rd (Full-time and Night periods)	108	25.5	15 (9.96)	2	54	
4th (Full-time and Night periods)	52	12.3	12.88 (9.12)	0	39	
5th (Night period)	27	6.38	15.1 (11.9)	0	40	
Final years (5th Full-time and 6th Night period)	65	15.4	13.76 (11.64)	0	57	
Did not answer	3	0.71				

* statistically significant differences; Mann-Whitney tests (dichotomous variables) and Kruskal-Wallis tests (more than 2 categories). SD: standard deviation.

Table 4. Means, standard deviations, minimum and maximum values of depression scores from students of a Brazilian dental school, according to personal and socioeconomic characteristics

VARIABLES			DEPRESSION SCORES			
	N	%	Mean (SD)	minimum	maximum	p-value
Physical activity						
Yes	234	55.3	10.27 (7.32)	0	38	<0.0001*
No	187	44.2	14.31 (9.05)	0	43	
Musical and cultural activity						
Yes	91	21.5	12.73 (8.92)	0	38	0.5202
No	329	44.2	11.9 (8.23)	0	43	
Scientific initiation						
Yes, without scholarship	120	28.4	12.16 (8.48)	0	41	0.6869
Yes, with scholarship	78	18.4	11.19 (7.18)	0	31	
No	222	52.5	12.4 (8.71)	0	43	
Religion						
Have a religion, but do not attend	186	44	11.41 (7.89)	0	32	0.0031*
Attend, 1 to 2 times a month	100	23.6	11.67 (7.99)	0	41	
Attend, 3 to 4 times a month	79	18.7	11.08 (7.63)	0	37	
Self-consider an atheist or agnostic	54	12.8	16.7 (10.26)	0	43	
Social media (time spent per day)						
Up to 1 hour	20	4.73	9.89 (6.84)	0	25	0.0459*
1 to 2 hours	71	16.8	10.24 (7.67)	0	31	
2 to 3 hours	116	27.4	11.47 (7.64)	0	32	
More than 3 hours	214	50.6	13.22 (8.96)	0	43	
Dentistry as a first option						
Yes	226	53.4	11.65 (8.1)	0	40	0.3219
No	192	45.4	12.55 (8.75)	0	43	
Desire to quit the course						
Yes	193	45.6	14.66 (9.0)	0	43	<0.0001*
No	226	53.4	9.893 (7.18)	0	32	
Search for psychological treatment						
Yes	114	27	15.96 (9.96)	0	43	<0.0001*
No	308	72.8	10.64 (7.56)	0	31	
Failure in subjects						
Yes	91	21.5	12.24 (8.41)	0	38	0.7122
No	329	77.8	12 (8.37)	0	43	
Income						
Up to R$2500,00	72	17	15.2 (9.62)	1	43	0.0005*
R$2501,00 to 7,500	176	41.6	11.91 (7.84)	0	31	
More than R$7500,00	95	22.5	9.904 (7.96)	0	38	
Year						
1st (Full-time and Night periods)	71	16.8	15.22 (9.64)	0	41	
2nd (Full-time and Night periods)	97	22.9	12.23 (9.60)	0	43	0.0185*
3rd (Full-time and Night periods)	108	25.5	11.92 (7.29)	0	34	
4th (Full-time and Night periods)	52	12.3	10.23 (6.86)	0	28	
5th (Night period)	27	6.38	12.24 (8.5)	1	32	
Final years (5th Full-time and 6th Night period)	65	15.4	10.82 (7.46)	0	34	

* statistically significant differences; Mann-Whitney tests (dichotomous variables) and Kruskal-Wallis tests (more than 2 categories). SD: standard deviation.

Course year

First year students had the highest scores both BAI (p = 0.0005) and BDI (p = 0.0185), with statistically significant differences between groups.

Physical activities

With regard to the practice of physical activities by students, 55.32% perform at least 3

times a week, some type of exercise, with 44.21% indicating the option that they do not, and 0.47% did not answer this. question.

In the anxiety and depression scores, there were statistically significant differences between the two groups (p = <0.0001 for both inventories).

Musical and cultural activities

Most of the students do not perform any type of musical or artistic activity (77.78%), and only 21.51% answered positively to this question.

In the anxiety and depression scores, there were no statistically significant differences between the two groups (p = 0.2128 for BAI and p = 0.5202 for BDI).

Scientific initiation or extension activity

In the percentage distribution of students with respect to this variable, 52.48% replied that they did not perform it, 28.37% replied that they did it without having a scholarship, and 18.44% performed it with a scholarship.

No statistically significant differences were found in either the BAI (p = 0.7777) or the BDI (p = 0.6869).

Religion

In the percentage distribution, 43.97% of the students indicated the first option, 23.64% the second, 18.68% the third, and 12.77% the fourth. For BAI, there were no statistically significant differences between groups (p = 0.5548), while for BDI it was found p = 0.0031, indicating the presence of differences.

Daily time spent on social media

This variable offered the following options: up to 1 hour, from 1 to 2 hours, from 2 to 3 hours, and more than 3 hours. More than half of the students (50.59%) spend more than 3 hours of their day on social media. Both for BAI (p = 0.0062) and BDI (p = 0.0459), statistically significant differences were observed.

Dentistry as a first option

Dentistry was considered the first course option for 53.43% of undergraduate students, while 45.39% answered this question negatively. No statistically significant differences were found for either BAI (p = 0.6020) or BDI (p = 0.3219).

Desire to quit dental school at some point in the course

This question was answered positively by 45.63% of students and negatively by 53.43%. For the two Inventories, there were statistically significant differences, both with p = <0.0001.

Professional psychological treatment during the course

When asked if they had already sought professional psychological treatment at any time during the course, 26.95% answered yes, while 72.81% answered no, and for both inventories statistically significant differences were found, both with p = <0, 0001.

Failures in subject(s)

Just over a fifth of the students, 21.51%, fail in one or more subjects, while 77.78% answered that they have none. For BAI, there were statistically significant differences (p = 0.0259), which did not occur in BDI (p = 0.7122).

Income

Regarding the values for monthly family income, the questionnaire applied to the students offered eight options. However, in order to perform the comparisons, this variable was divided into three groups: 1) up to

R$2500.00; 2) from R$2500.00 to R$7500.00; and 3) incomes over R$7500.00. A rate of 17.02% of students is in the first group, 41.61% in the second, and 22.46% in the third. For the two inventories, there were statistically significant differences, both with p = <0.0005.

4 DISCUSSION

This study has clearly evidenced that, regarding the course year, freshmen presented the highest scores for both anxiety and depression, with statistically significant differences from students of other years. The adaptation to a new environment, new study routines, new friendships, household separation, new responsibilities, facing troubling situations without family support, among several other reasons may be responsible for the greater symptomatology of such disorders in freshmen[11]. The success of such student adaptation to the new environment depends on several factors, and some of them are not related directly to the academic context. Nevertheless, the university plays an essential role to facilitate this process[12].

The present study found that students who practiced physical activities obtained higher mean scores for both BAI and BDI, with statistically significant differences. Other studies[13,14] follow the same trend. A stud which aimed to verify the association between the level of physical activity and quality of life of physiotherapy students of a private higher education institution, confirmed the positive association between the variables, that is, the participants with the highest level of quality of life were more likely to be active[13]. It is alarming the fact that future health professionals do not act as promoters and multipliers of healthy life habits through patient awareness, and even themselves may not practice it in their lives[14]. In the present study, 44.21% of participants do not practice any type of physical activity.

A rate of 77.78% of students do not perform any type of musical and cultural activity, which shows their low interest on it. Both BAI and BDI scores did not show statistically significant differences between the groups that perform such activities and the ones that do not. It is worth noting that every artistic and cultural activity that undergraduate students perform in programs or projects offered by the universities is included in the context of intellectual qualification, acquisition, and development required to train a more complete professional[15].

As for the potential differences in the levels of anxiety and depression among fellows, volunteers, and non-fellows, there were no statistically significant differences. It would be more likely to assume that fellows - because they have to fulfill extracurricular tasks and tend to other responsibilities outside their study schedule, deadlines, sending reports, and other tasks related to scientific initiation or extension activities - would present higher scores, but this was not confirmed. Therefore, it may be stated that this variable did not affect the quality of life of students regarding anxiety and depression. Additionally, scientific initiation has positive impacts on the personal, professional, and academic life of students, because they have the opportunity to develop academic and interpersonal skills, as well as find professional direction[16].

In order to explore the variable of religion, the questionnaire applied to the students did not address to which religious group or segment they belonged, but rather the frequency of religious practices, thus

determining the importance of such practices in their routines. Most participants (43.97%) claimed to belong to some religion, but not usually attend masses, cults, or gatherings. This same group presented the lowest mean scores for both BAI and BDI. In contrast, the students claiming to be atheist or agnostic (12.77%) obtained the highest mean values for anxiety and depression, and the latter showed statistically significant differences, which indicates that this group suffers more with diseases. This finding is in line with similar studies, which differ that one of the strategies to cope with hypotheses that generate stress or trigger anxiety symptoms is the search for support in religion[17] and, moreover, spirituality was considered as a tool to confront adverse hypotheses through religious-spiritual coping, which deals with the way in which people appropriately use faith to deal with stress, having been associated with the best quality of life indexes and physical and mental health[17,18].

The use of social media, which ascended from the XXI century, is a fairly recent human cultural phenomenon, and the consequences of this new practice in the routine of individuals has been the target of contemporary studies, especially aiming to associate the excessive use of media with behavioral pathological symptoms[19]. A study confirmed that medical students presented the spectrum of the harmful aspects that the excessive internet use may determine, reflecting in anxious and depressive symptomatology and harming academic performance[20]. Numerous deleterious effects may be triggered by the uncontrolled use of social media, such as changes in sleep quality, nutrition, and physical activity, drop in academic or professional performance, harm to interpersonal relationships, humor disorders, attention deficit disorder and hyperactivity, substance use disorders, low self-esteem, anxiety, social anxiety, loneliness, aggressive behavior and hostility, compulsive behavior, impulsiveness, higher rates of personality disorders, harm to overall mental health, and in more severe cases, suicide[21-23].

The present study found that more than half of the dental students spend three hours or more on social media daily and this group presented the highest mean values for both anxiety and depression scores. The question to be explained now is whether the poor internet use and the excessive time spent on social media may produce anxiety and depression symptoms or if such use represents a compensation mechanism for those who are already prone to such disorders[24,25].

As for course option, 45.39% of students said that Dentistry was not their first choice. From these, 54.69% had Medicine as a first course option. The potential frustration that such situation might cause allowed assuming that higher levels of depression and anxiety would be observed in this group and, although higher mean values for BAI and BDI were found in the group to which Dentistry was not the first choice, there were no statistically significant differences. On the other hand, when asked about the desire to quit dental school at some point in the course, there were statistically significant differences between the groups, and the ones who answered "yes" presented the highest anxiety and depression scores. Therefore, it may be assumed that the problems produced throughout the course have a higher impact than the initial uncertainty of their choice, regarding the triggering of anxiety and depression symptoms.

Approximately one-fourth of the study participants (26.95%) sought psychological

help with specialized professionals during the course. For both depression and anxiety scores, the group that responded positively to this question presented the highest mean values, with statistically significant differences. Thus, it may be assumed that the undergraduate students with greater symptomatology in the conditions studied sought psychological help to treat the problem, but could not necessarily eliminate the symptoms, which would have resulted in lower score values. A great portion of the individuals with some type of psychiatric disorder does not seek treatment with specialized professionals[26]. The profile of most university students that seek psychological treatment in assistance programs within the university is as follows: freshmen, aged 19 through 22 years, female, not working a paid job, and presenting "moderate psychological difficulties"[26] related to internal conditions (mental suffering) and environment and interpersonal – and environmental – conditions[27]. It is worth noting that the school selected for the present study offers psychological assistance to undergraduate students at no cost.

Failing in subjects may result in a few more years in the course, which would delay graduation. This study found that 21.51% of students have failed one or more subjects. Curiously, the group that claimed no failures presented the highest mean values for BAI, with statistically significant differences. It may be understood that, in order to maintain good grades and satisfactory academic performance, the students would demand more of themselves in their studies, resulting in higher stress, which could lead to exacerbated anxiety symptoms. A similar study found that although most participants in their study (74%) had presented signs of stress, their academic performance remained above average[28]. For BDI, the mean values among the groups were similar, without significant differences.

Regarding the family income of students, the highest and the lowest mean scores for both anxiety and depression were verified, respectively, in the group whose income reached a maximum value of R$2500.00 and in the group whose income was over R$7500.00, and statistically significant differences were also verified. This means that the potential economic difficulties faced by the family of students in order to maintain them in a course considered expensive, especially for buying materials and tools, may potentially decrease the quality of life of students, which is reflected in the symptomatology of the psychological disorders treated in this study[6].

It should be noted that, although BAI and BDI are proven effective tools in research on this topic, the complexity of depression and anxiety as psychological conditions may require, depending on the researcher's specific objective, other forms of diagnosis with other methodological approaches, and this situation may constitute a limitation of this study. Therefore, the development of more similar studies should be encouraged, especially in populations where these disorders are more prevalent, resulting in greater scientific evidence on the extent of this problem, which is becoming more and more present in the population.

It is important to highlight that the Inventories used in this work provide evidence of anxiety and depression, but the diagnosis and appropriate treatments need guidance and supervision from professionals in the field.

There is a growing consensus that university students are more affected by

psychological disorders[1,2,5] and, therefore, studies that explore the mental health of this population group are necessary, mainly to know the extent of the problem and what factors trigger it such conditions. In particular, dentistry has specific characteristics that can further leverage such symptoms[5,6].

5 CONCLUSION

Being a freshman, not practicing physical activities, being atheist or agnostic, using social media for more than three hours a day, wanting to quit dental school at some point in the course, having searched for professional psychological help during the course, and presenting low family income were considered factors that resulted in higher anxiety and depression scores in the university students.

RESUMO

Fatores associados ao desenvolvimento de ansiedade e depressão em estudantes de Odontologia

O objetivo desta pesquisa foi avaliar os estudantes de uma faculdade pública de Odontologia localizada no Brasil, no que diz respeito à ansiedade e depressão, relacionando os escores de cada transtorno com as características pessoais, acadêmicas, e socioeconômicas dos discentes. Trata-se de um estudo transversal, no qual participaram 423 estudantes de Odontologia. Foram entregues três instrumentos de avaliação a serem preenchidos, sendo eles o Inventário de Ansiedade de Beck (BAI), Inventário de Depressão de Beck (BDI), e um questionário para registro do perfil de cada estudante. Os testes de Mann Whitney e Kruskal Wallis foram utilizados para comparação dos escores entre os grupos. O valor médio dos escores de ansiedade e depressão foram, respectivamente, 15,21±10,78 e 12,08±8,38. Ser calouro, não praticar atividades físicas, ser ateu ou agnóstico, utilizar redes sociais por mais de três horas diárias, vontade de desistir da Odontologia em algum momento do curso, ter procurado ajuda psicológica profissional durante o curso e ter baixa renda foram considerados fatores que resultaram em escores mais elevados de ansiedade e depressão nos universitários. A sintomatologia de depressão e ansiedade foi verificada nos discentes, sendo que características pessoais e acadêmicas podem influenciar em sua saúde mental.

Descritores: Depressão. Ansiedade. Estudantes de Odontologia. Qualidade de Vida.

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