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BURNOUT SYNDROME AMONG MEDICAL STUDENTS: AN INTEGRATIVE REVIEW

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ABSTRACT

Introduction: Burnout Syndrome is conceptualized as a result of chronic stress in the workplace, characterized as a psychological syndrome composed of emotional exhaustion, depersonalization and reduced personal fulfillment. The prevalence of this syndrome in medical students is quite expressive, and the more the student is exposed to the academic cycle, the greater the risk of developing an anxiety disorder, especially Burnout Syndrome.

Objectives: To analyze in the literature the correlation between Anxiety Disorders, Burnout Syndrome and Medical Students.

Methodology: The research took place in the CAPES, PubMed and VHL Regional Portal. The terms “burnout”, “anxiety disorders” and “medical students” were considered as descriptors. Articles published between 2014 and 2019 were included.

Results: Of the 69 articles found, only six were included in the review. Evidence was found that there is an association relationship between medical study and student mental exhaustion. It was also relating the time of exposure to the course with a higher prevalence of mental disorders. Relaxation techniques have shown a decline in Burnout’s cognitive and emotional stress and anxiety.

Conclusion: Burnout Syndrome is a reality among medical students. However, despite the importance of the theme, the literature on this correlation is incipient. There is a need for further investigations into strategies that aim to reduce the incidence, and consequently the prevalence of this syndrome, favoring the mental health of college students and the training of good health professionals.

Keywords: Burnout, Anxiety Disorders, Medical Students

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INTRODUCTION

Admission to medical school requires the early transformation of adolescents into professionals, which often requires maturity for individual choices regarding professional performance and relationships with future colleagues and patients (1). The repercussions of this adaptation process to new situations can generate stress that, in the chronic stage, may evolve to Burnout Syndrome.

Comparing medical students at the beginning and end of the first semester and after two years of the course, an increase in the symptoms of cognitive and emotional burnout and loss of mental quality of life was shown. (1)

Burnout syndrome does not yet have a universally accepted definition, but the most widely used is Maslach (2), who describes it as a psychological syndrome composed of emotional exhaustion, depersonalization and reduction of personal fulfillment that occurs in individuals who experience interpersonal relationships. exhausting at work. The word "burnout" translates to "being burned out" or worn out.

It is well known that the Faculty of Medicine has unique characteristics that generate stress (in addition to those common to higher education in general) and that influence the construction of the student's professional identity, being associated with the development and perpetuation of Burnout. stress, which supports their occupational nature. (3,4,5)

Medical students are continually exposed to stressors such as: adaptation difficulties, excessive workload and / or studies and lack of leisure time which, if persistent, may trigger the syndrome. These factors are potentially responsible for several psychosocial changes that lead to the development of anxiety and depression, which can lead to suicide. Thus, given the importance of the theme, this study aims to analyze the literature on the correlation between Burnout Syndrome and Anxiety Disorders among medical students.

MATERIAL AND METHODS

Aiming at the present study, an integrative literature review was performed, which, according to Mendes and Silveira, (6) corresponds to an analysis based on secondary sources of information, with the purpose of gathering and synthesizing results from previous research on an delimited theme or question. The search was undertaken in three stages, the first related to the choice of Databases and Descriptors. In this stage, three Bases were chosen, which supported the research: Portal of Journals of the Coordination of Improvement of Higher Education Personnel (CAPES / MEC); International Database (PubMed) and Regional Portal of the Virtual Health Library (VHL). The descriptors selected for the research were extracted by consulting the bank "Descriptors in Health Sciences" (DeCS), considering: "Burnout", "Anxiety Disorders" and "Medical Students". These descriptors were used in Portuguese and / or English, using the boolean operator "AND". The selection was restricted to articles published in Portuguese and / or English, from 2014 to 2019.

The second stage of the research consisted of defining the inclusion and exclusion criteria, namely: Inclusion: a) texts whose abstract was available for reading; b) without restriction of search limits related to the place of study. Exclusion: a) studies published in the form of editorials, interviews, clinical notes, studies and case reports; b) other review studies; c) studies that do not present relationships between the above descriptors.

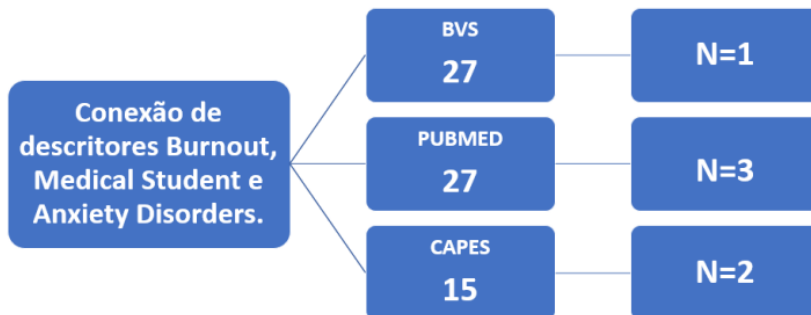
In the third stage it was decided to perform the reading, analysis and interpretation of the complete texts, based on four parameters: (a) critical appreciation of the material; (b) decomposition of the essential elements; (c) grouping and classification; (d) final analysis.

The studies were read and interpreted individually by two researchers. When disagreements were observed between them, a reading was performed together to form an agreement as to whether or not to include the

article. At the end, 69 articles were identified, but after reading the texts, only 6 articles were included in the review. The flowchart below

(Figure 1) presents the process of bibliographic survey and the selection of articles from this review.

Figure 1 - Schematic representation of bibliographic survey and article selection



RESULTS AND DISCUSSION

Chart 1 summarizes the information on the articles included in this review. It should be noted that there was no inclusion of articles produced in Brazil, nor written in Portuguese, given its absence, which demonstrates the need to expand studies on the subject at national and international levels. All selected articles showed correlations between medical students and Burnout syndrome, also correlated with anxiety disorder.

TALIH (2017) concluded that higher rates of depression, burnout, and suicidal ideation were found in medical students in the Middle East, in addition to greater substance abuse. (7) Similarly, ACKERMAN (2019) reported that students of the second year of medical internship had a higher prevalence of burnout than those of the first year of internship. (8) Another study by YAZDI (2018) showed a higher prevalence of burnout at the end of the medical internship. (9) Thus, there is an evident association between medical study and student mental exhaustion.

MONROUXE (2017) significantly related anxiety disorder to crises of professional and / or personal identity with Burnout syndrome in the young physician. (10) Accordingly, the study by AZAD (2017) showed a high prevalence of

psychopathological findings among medical students, with anxiety, classified as moderate to severe, present in 19% of them, also relating the duration of exposure to the course. a higher prevalence of mental disorders. (11)

As an anxiety therapy, WILD (2014) presented relevant results: students practicing relaxation techniques showed a decline in Burnout's cognitive and emotional stress and, consequently, reduced the intensity of the anxiety state. (12)

Based on this, it is observed that the literature in the last five years, correlating anxiety disorders, medical students and Burnout, is not conflicting. Nevertheless, many higher education institutions still show frank difficulty in dealing with the personal needs of medical students. Therefore, it is recommended to raise the awareness of Managers, Coordinators and Teachers regarding the relevance of mental health in the student's personal and professional life. Thus, students will optimize their learning without being subjected to stressors that reduce their quality of life and / or may generate mental disorders, while society will gain healthier professionals and, consequently, more competent for the full exercise. activities, generating better quality of health care to society.

Chart 1 - Analysis of the content of the publications by authors, year of publication, translated title, study design / place, and the authors' considerations obtained in each study.

Author / year	Título	Study Design / Site	Authors' Considerations
TALIH, Farid et al.; 2017	Examining Burnout, Depression, and Attitudes Regarding Drug Use Among Lebanese Medical Students During the 4 Years of Medical School	Cross-sectional study / Lebanon	Overall, 23.8% of medical students reported depressive symptoms, with 14.5% presenting suicidal ideations. Forty-three percent were diagnosed with Burnout Syndrome. Those who tested positive for Burnout were mostly male, living away from family, having experienced a stressful event over the past year. With the exception of Burnout, there was no significant difference in the prevalence of depression or anxiety between the four years of medical school. There was a significant difference in alcohol use, illicit substance use, and marijuana use during the four years of medical school.
ACKERMAN, Roberto., et al.; 2019	Burnout syndrome prevalence during internship in public and private hospitals: a survey study in Mexico	Data Collection Study / Mexico	The study aimed to determine the prevalence of Burnout syndrome in medical trainees and to establish the relationship between this condition and the time and type of hospital students worked in during the medical internship. Reports a higher prevalence of Burnout syndrome during the second semester of internship. Students who interned in a public hospital had higher scores on emotional exhaustion and depersonalization than those who interned in a private hospital.
YAZDI, Zohreh, et al.; 2018	Prevalence of Burnout Syndrome in the Beginning and End of Internship Course in Medical Students of Qazvin University of Medical Sciences	Cross-sectional study/ Iran	The prevalence of burnout was significantly higher at the end of the stage ($P < 0.05$, $X^2 = 24.09$). Regarding the Burnout components, the scores of the participants in the three Burnout questionnaire subscales were significantly higher after the internship compared to before it (emotional exhaustion $t = -3.25$, $P = 0.01$; depersonalization $t = -3.98$, $P < 0.05$, personal accomplishment $t = -2.11$, $P = 0.036$).
MONROUXE, Lynn., et al.; 2017	Association of professional identity, gender, team understanding, anxiety and workplace learning alignment with burnout in junior doctors: a longitudinal cohort study	Longitudinal cohort study / UK	Self-reported anxiety, professional identity, and psychological distress related to patients' suffering were stable, while staff understanding, personal and work-related distress increased. Three linear mixed-effect models (personal, patient-related and work-related burnout) showed that men reported significantly less personal burnout but higher when related to the patient. Anxiety and professional identity were significantly related to burnout.
AZAD, Nadia, et al.; 2017	Frequency of Anxiety And Depression in Medical Students of a Private Medical College	Cross-sectional study / Pakistan	Mild depression was observed in 37.46% and moderate to severe depression in 14% of students. About 19% of students had moderate to severe anxiety. In the second year, the assessment time was significantly related to depression and anxiety ($p < 0.000$). Women presented higher association with depression in the last year of the course ($p < 0.037$).
WILD, Katharina, et al.; 2014	Strategies against Burnout Anxiety in Medical Education – Implementation and Evaluation of a New Course on Relaxation Techniques (Relacs) for Medical Students	Cross-sectional study / Switzerland	The authors developed an elective course to teach relaxation techniques and examined the condition of students before and after the course. Participating students showed a significant decline in Burnout's cognitive and emotional stress and anxiety traits. In addition, they showed a reduction in anxiety levels and a noticeable decrease in depression.

CONCLUSION

Despite the importance of the subject, it is considered that the literature on the correlation between anxiety, burnout syndrome and medical students is still incipient and insignificant nationwide. However, agreement was observed between the analyzed international literature.

In sum, evidence has been found that Burnout Syndrome is a reality among medical students and that it is more present in the last years of the undergraduate course, with an increased prevalence in the last year of the internship compared to the first year, considering the sum of all the stressors experienced during the formative years.

It also highlights the need for further investigations into strategies to prevent Burnout Syndrome and anxiety disorders in medical students, such as the study by WILD, Katharina, et al., Which demonstrated that the introduction An elective course for teaching relaxation techniques to medical students was beneficial in reducing cognitive and emotional stress. Such strategies would be important in order to reduce the incidence of symptoms of psychological distress among medical students, favoring the mental health of college students and the training of good health professionals, which would be beneficial to society as a whole.

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