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Psychological distress and coping strategies among health sciences students: a focus on dentistry[1]

Sofrimento psíquico e estratégias de enfrentamento em estudantes de saúde: um enfoque na odontologia

Sufrimiento psíquico y estrategias de afrontamiento en estudiantes de ciencias de la salud: un enfoque en odontología

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ABSTRACT

Introduction: Psychological distress may be experienced by health sciences students throughout their formative process, as they face different challenges with repercussions that may even lead to dropping out of their degree programs. Objective: To describe psychological distress among health sciences students, with an emphasis on dental students, within the context of their academic education. Method: This is a narrative literature review. The virtual databases used were the Virtual Health Library (VHL), which comprises several bibliographic databases in the health sciences, PubMed, and the Google Scholar search engine. For data assessment, descriptive analysis and the development of categories were performed, and the findings were discussed in light of the scientific literature. Results: The findings showed that the traditional pedagogical model and pressure for productivity generate psychological distress, with somatization rates reaching up to 63.6% among dental students. This chronic stress manifests as physical health problems, such as fatigue, headaches, gastrointestinal disturbances, and facial or musculoskeletal pain. Psychological distress is exacerbated by socioeconomic vulnerabilities, weak support networks, and everyday discrimination within the university. Final considerations: Psychological distress among dental students is a multifactorial phenomenon that affects not only mental health but also physical health, academic performance, and students' well-being.

Keywords: University Student. Emotional Exhaustion. Teaching-Learning Process.

RESUMO

Introdução: O sofrimento psíquico pode ser vivenciado por estudantes da área da saúde durante seu processo formativo, uma vez que esses atravessam diferentes desafios com repercussões que podem levá-los, inclusive, a evasão do curso. Objetivo: Descrever o sofrimento psíquico de acadêmicos da área de saúde com ênfase em odontologia no contexto de sua formação acadêmica. Método: Trata-se de uma revisão narrativa da literatura. As bases de dados virtuais utilizadas foram: Biblioteca Virtual em Saúde (BVS) - que reúne várias bases de dados bibliográficas em ciências da saúde, PubMed e o buscador Google Acadêmico. Para a avaliação dos dados foi realizada a análise descritiva e construção de categorias, que foram discutidas à luz da literatura científica. Resultados: Evidenciou-se que o modelo pedagógico tradicional e a pressão por produtividade geram sofrimento psíquico, com índices de somatização que atingem até 63,6% dos acadêmicos de Odontologia. Esse estresse crônico se converte em agravos físicos, como fadiga, cefaleias, alterações gastrointestinais e dores faciais ou musculoesqueléticas. O sofrimento é potencializado por vulnerabilidades socioeconômicas, fragilidade nas redes de apoio e discriminações cotidianas na universidade. Considerações finais: O sofrimento psíquico de acadêmicos de Odontologia constitui um fenômeno multifatorial, impactando não apenas a saúde mental, mas também a saúde física, o desempenho acadêmico e o bem-estar dos discentes.

Palavras-chave: Estudante Universitário. Esgotamento Emocional. Processo de Ensino-Aprendizagem.

RESUMEN

Introducción: El sufrimiento psíquico puede ser experimentado por estudiantes del área de la salud durante su proceso formativo, ya que atraviesan diferentes desafíos con repercusiones que incluso pueden llevarlos a abandonar el curso. Objetivo: Describir el sufrimiento psíquico de estudiantes universitarios del área de la salud, con énfasis en odontología, en el contexto de su formación académica. Método: Se trata de una revisión narrativa de la literatura. Las bases de datos virtuales utilizadas fueron: la Biblioteca Virtual en Salud (BVS), que reúne diversas bases de datos bibliográficas en ciencias de la salud, PubMed y el buscador Google Académico. Para la evaluación de los datos, se realizó un análisis descriptivo y la construcción de categorías, las cuales fueron discutidas a la luz de la literatura científica. Resultados: Se evidenció que el modelo pedagógico tradicional y la presión por la productividad generan sufrimiento psíquico, con índices de somatización que alcanzan hasta el 63,6 % de los estudiantes de Odontología. Este estrés crónico se convierte en problemas físicos, como fatiga, cefaleas, alteraciones gastrointestinales y dolores faciales o musculoesqueléticos. El sufrimiento se ve potenciado por vulnerabilidades socioeconómicas, la fragilidad de las redes de apoyo y las discriminaciones cotidianas en la universidad. Consideraciones finales: El

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sufrimiento psíquico de los estudiantes de Odontología constituye un fenómeno multifactorial que afecta no solo la salud mental, sino también la salud física, el rendimiento académico y el bienestar de los estudiantes.

Palabras clave: Estudiante Universitario. Agotamiento Emocional. Proceso de Enseñanza-Aprendizaje.

INTRODUCTION

The study focuses on the mental health of health students, addressing the psychological distress experienced by health sciences students, with an emphasis on dental students throughout their formative process.

The context in which psychological distress occurs among health sciences students has been evidenced by previous synthesis studies, such as systematic reviews (SRs), which indicate its significant occurrence among university students in the health sciences, associated with factors such as academic overload, clinical stress, and performance pressure (Almansoof *et al.,* 2024).

In another previous SR, addressing stress among dental students, the authors identified that the main stressors include constant assessments, clinical demands, fear of technical failures, academic overload, and relationships with professors (Alzahem *et al*., 2011). More specifically, among dental students, stress has been associated with multiple causes, such as examinations, grades, and other factors (Alotaibi *et al.*, 2025). Similarly, Anishchuk and Seery (2025) found an association between higher levels of Burnout Syndrome, particularly emotional exhaustion and depersonalization, and reduced empathy throughout the formative process. In the same direction, a SR on stress among dental students found that they frequently experience increased levels of stress, anxiety, and emotional exhaustion (Elani *et al*., 2014).

These factors were exacerbated by the effects of the COVID-19 pandemic, as demonstrated by an SR that included 23 studies and observed a significant increase in anxiety, depression, and stress, particularly among female students and those in the clinical stages of their undergraduate education, highlighting the urgency of organizational prevention plans (Gunewardena *et al*., 2025).

Another systematic review on psychological distress among dental students in Saudi Arabia highlighted significant prevalences of anxiety, depression, and stress, in addition to discussing coping strategies used by students to deal with academic demands (Khanagar *et al*., 2021).

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In the context of educational training, these analyses suggest that students' psychological distress is not restricted to individual experiences, but is related to the social determinants present in academic life, which may produce, maintain, and even silence such distress (Figueiredo *et al.*, 2026).

The objective of the study is to describe psychological distress among health sciences students, with an emphasis on dental students, within the context of their academic education.

METHODOLOGY

This is a narrative literature review on the process of psychological distress among health sciences students, with an emphasis on dental students.

For this purpose, the following guiding question was formulated: How does psychological distress manifest among health sciences students, with an emphasis on dental students, within the context of their academic education?

The databases used to search for studies were the Virtual Health Library (VHL) which comprises several bibliographic databases in the health sciences, PubMed, and the Google Scholar search engine.

Articles that met the following eligibility criteria were selected. Studies addressing psychological distress among health sciences students, in Portuguese, Spanish, and English, were included. Editorials, protocols, letters, and studies unrelated to the topic were excluded.

The selected descriptors and keywords are presented in Table 1, in which the PCC acronym (P -participant / C - concept / C - context) was used, based on which search strategies were developed using the Boolean operators OR and AND.

Table 1- Descriptors and keywords for the retrieval of studies from the databases.

Acronym	Descriptors and keywords
P - participant	Students; University Student; Health Sciences Student
C - concept	Psychological Distress; Psychological Anguish; Emotional Exhaustion; Emotional Distress; Psychological Suffering
C - context	Teaching; Teaching-Learning Process

Source: developed by the authors (2026).

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The selection of the articles was carried out by the researchers through the reading of titles and abstracts, followed by the preliminary selection of topics related to the object of the study.

After the search for materials in the databases, the articles were analyzed for the systematization of the manuscripts into categories for discussion, problematizing aspects proposed in the guiding question, while also removing duplicates and enabling the selection of those that met the study's eligibility criteria.

As this is a narrative literature review using data from publicly available articles, approval by the Research Ethics Committee was not required.

RESULTS AND DISCUSSION

Based on the analysis of the studies, it was observed that the literature addressing psychological distress among students discusses content related both to the multifactorial phenomenon associated with personal characteristics and to the structural conditions of higher education. The studies also address how psychological distress in these settings is co-produced through the articulation of avenues of oppression, such as gender, race, class, sexual orientation, and gender identity, producing unique forms of vulnerability and exclusion. In the specific field of dentistry, such distress has a high prevalence, highlighting the need to develop strategies for care and mental health promotion. Thus, based on the frequency with which these contents appeared, the following thematic categories were developed: a) Psychological distress among health science students; b) Intersectionality in the production of vulnerabilities in higher education; c) Psychological distress among dental students; and d) Care strategies for dental students.

Psychological distress among health sciences students

In health sciences programs, the psychological distress experienced by students is a prevalent reality both nationally and worldwide. First, regarding the profile of affected students, all primary studies reported a predominance of female students among the participants, as well as a young age, with the most frequent mean ages ranging from 21 to 22 years. Data from Costa and Jeunon (2024) show that more than half of the students live with relatives, work, and sleep between five and seven hours per night, which would be

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classified as insufficient sleep for four out of every ten participants. In addition, the study showed that 45% did not engage in physical exercise.

Other issues worth highlighting include students' lack of recognition of their own vulnerability, combined with other factors present in their lives and described in study reviews, such as financial insecurity, the absence of a support network that provides security, a personal and family history of depression, and overload resulting from the desire for academic performance (Justino; Leitão; Siqueira, 2025; Mesquita; Praxedes; Nascimento, 2021). All these factors were presented as issues with the potential to contribute to psychological distress among students from different health sciences programs.

Within the context of university education, numerous factors affect students' mental health, with the educational structure itself also producing forms of oppression related to various factors, such as pressure originating from the academic environment. This environment is strongly shaped by neoliberal logic and characterized by constant demands for productivity and high performance, which foster competitiveness, isolation, and a sense of inadequacy. In addition, the transition from secondary education to university, the number of activities and rigorous assessments, and the often-exhausting workload are identified as factors contributing to physical and mental overload.

Additionally, distress is exacerbated by the health sciences educational process, which involves exposure to morbidity and death, an authoritarian and repressive attitude on the part of professors and other authorities, as well as personal factors such as low family income, the need to work and study simultaneously, disrupted support networks, and pre-existing conditions (Justino; Leitão; Siqueira, 2025; Lima; Rabelo; Machado, 2023).

Such evidence also demonstrates the limitations of higher education in addressing this issue, often subjectively constructing collective pacts of silence and individual blame for psychological distress (Figueiredo *et al*., 2026).

In the review by Lima, Rabelo, and Machado (2023), a mean incidence of 33.8% was found among medical undergraduates, which stands out from that of the general population, ranging from 3% to 25%. Within this group, imposter syndrome appears as a characteristic of the preclinical period, when, despite being academically competent, students feel unprepared and insecure about their own abilities and knowledge. In the scoping review by Sperling and Hulett (2025), which focused on the issue of somatization

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and included studies from 29 countries, the weighted mean showed that 34.4% of students experienced somatization, ranging from 5.7% to 85.2% in Medicine, 41% to 63.6% in Dentistry, and 25% to 28.2% in Nursing. Furthermore, regarding manifestations of psychosomatic distress, the findings showed that, in one study conducted in Saudi Arabia, 39% of students were at high risk for associated disorders, while 50.8% of British students already had severe or moderate somatization, characterized by more intense physical symptoms accompanied by anxiety and depression. In Peru, 75% of students reported psychosomatic symptoms. Finally, a study involving 46 Biomedical Sciences undergraduates used the Perceived Stress Scale (PSS), with mean scores for the items "frustration," "incompetence," "impatience," "anxiety," "tension," and "helplessness" ranging from 3.1 to 3.7, whereas positive aspects such as "resilience," "satisfaction," "self-control," and "balance" ranged from 1.8 to 2.4. These findings place the students at a moderate level of stress, although the authors emphasize the complexity of the problem, which extends beyond its quantification (Cavalcante; Gonçalves; Leite, 2024).

Symptoms often manifest through somatization, a condition in which stress and psychological exhaustion are converted into physical problems, which, together with sleep disturbances, constant fatigue, and headaches, constitute the main manifestations. In addition, there are widespread reports of pain in the cervical region, shoulders, and lower back, demonstrating a musculoskeletal impact. Other physiological dysfunctions are also observed, such as palpitations, tachycardia, and muscle tremors, as well as gastrointestinal problems such as irritable bowel syndrome, temporomandibular disorders, facial pain, and stress-related dermatological conditions, such as excoriation disorder (Biork *et al*., 2026; Sperling; Hulett, 2025). However, beyond symptoms and their effects on the body, distress that threatens psychosocial health may also lead students to experience a desire to die and suicide, representing the most severe outcome and requiring integrated action between education and the public mental health policies of the Brazilian Unified Health System.

Intersectionality in the production of vulnerabilities in higher education

According to Feitosa (2025), identities that deviate from the social norm are, in most cases, ignored in the university curriculum. This gap demonstrates that intersectionality is a limited topic in university debates, which not only perpetuates the exclusion of historically

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minoritized groups but also directly affects the psychological distress experienced by these students.

In addition, the traditional pedagogical model tends to structure a hierarchical relationship between professors and students, restricting spaces for dialogue, listening, and the exchange of experiences. This rigid structure creates an environment of intense competitiveness at the expense of welcoming and solidarity, in which the pursuit of idealized performance disregards individual differences and needs. In practice, transgender students, for example, face distinct structural barriers and cannot be subjected to the same demands without adequate institutional support. By ignoring these specific needs and closing the doors to inclusive debate, the traditional curriculum hinders academic development and severely compromises the mental health of these individuals.

One of the studies analyzed, based on interviews with LGBTQIAPN+ students, showed how the university perpetuates discriminatory experiences from the school and family environment, proximity being identified as the space where violence occurs most frequently due to its constant proximity to conservatism. This contradicts the expectations of many undergraduate students who sought greater freedom regarding their own identities but found themselves facing repression from peers and professors. The university thus maintains and reinforces heteronormativity, particularly through subtle and everyday acts, as well as through documentary issues and inappropriate approaches to the topic within the educational environment. This experience forces individuals to adapt to the system, whether they are more or less activist and engaged with these issues, by joining groups and seeking their first LGBTQIAPN+ references, while repressing themselves, and the profound psychological impact may even trigger suicidal thoughts (Moretti-Pires; Vieira; Finkler, 2022).

Intersectionality, a concept developed by Kimberlé Crenshaw, recognizes that social markers such as gender, race, social class, sexual orientation, and disability intersect simultaneously, producing specific forms of vulnerability and exclusion. From this perspective, analyzing psychological distress requires recognizing that the interaction among these different markers exacerbates inequalities related to access to education, healthcare, and support networks, directly affecting students' experiences. Consistent with this understanding, Vieira and Torrenté (2022) state that intersectionality represents an important analytical framework for interpreting the experiences of students who face

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psychological distress and other mental health challenges in higher education. According to these authors, factors such as race, gender, social class, and sexuality jointly shape possibilities for retention, belonging, and access to care within the university context, highlighting the importance of institutional policies aimed at equity, inclusion, and welcoming the different needs of the student community.

Corroborating this approach, Vieira and Torrenté (2022) emphasize that intersectionality constitutes a fundamental analytical tool for understanding the reality of students experiencing psychological distress or mental health issues in higher education. The authors argue that social markers such as race, gender, class, and sexuality simultaneously influence opportunities for retention, belonging, and care within the university environment, reinforcing the need for institutional policies that promote equity, inclusion, and responsiveness to students' different needs.

Psychological distress among dental students

The mental health of university students has become an increasingly important focus in scientific research, particularly among those enrolled in health sciences programs, whose education is marked by high academic, emotional, and professional demands. In this context, Dentistry stands out as a program that brings together characteristics capable of increasing vulnerability to psychological distress, including an extensive workload, intense integration between theory and practice, frequent assessments, the development of complex psychomotor skills, and early contact with patients (Smolana; Loster; Loster, 2022; Ali *et al*., 2025; Fang *et al*., 2025; Gunewardena *et al*., 2025; Başkan; Başkan, 2026; Boehm *et al*., 2026).

Although the term "psychological distress" is widely used in Brazilian scientific literature, national and international literature, with a more biomedical and psychiatric focus, tends to describe this phenomenon through specific constructs related to mental health, such as stress, anxiety, depression, burnout, and psychological well-being. From this perspective, psychological distress can be understood as a state characterized by emotional and psychological changes that negatively affect students' academic performance and personal lives. On the other hand, authors such as Frantz Fanon (2020) understand psychological distress as a collective web permeated by social, economic, and political dimensions. This broader understanding of distress makes it possible to consider

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that it is not limited to the level of students' symptoms, but is also related to the determinants present within the university and in the society in which they live.

Recent studies indicate that dental undergraduates constitute a group particularly susceptible to these manifestations due to the interaction among academic, clinical, financial, and social factors present throughout academic education (Ali *et al*., 2025; Gunewardena *et al*., 2025; Chauca-Bajaña *et al*., 2025).

In a multicenter study conducted with students from 14 dental schools in Pakistan, Ali *et al.* (2025) identified significant impairment of mental health, evidenced by the high occurrence of symptoms of anxiety, depression, and stress. The authors found that factors such as academic overload, economic difficulties, characteristics of the educational environment, personal issues, and interpersonal relationships directly influence the psychological well-being of undergraduates. These findings reinforce that students' mental health results from the interaction of multiple factors present within the university context, rather than solely from individual characteristics.

Among the most frequently described manifestations, stress stands out as one of the main repercussions of psychological distress during undergraduate education. Evidence from systematic reviews indicates that dental students experience high levels of stress throughout their formative process. In the systematic review with meta-analysis conducted by Smolana, Loster, and Loster (2022), involving studies from different countries, assessments, clinical activities, and interpersonal relationships were found to be among the main factors triggering this condition. Similarly, Alotaibi *et al.* (2025), when investigating dental students in the United Kingdom, observed a high prevalence of stress, associating it mainly with fear of failure, intense pressure for academic performance, and the competitive environment characteristic of academic education.

Similar results were found by Başkan and Başkan (2026) in an investigation conducted with Turkish students undergoing clinical training. The authors observed greater intensity of psychological manifestations during periods of transition to more complex clinical activities, suggesting that increasing responsibility for patient care, combined with academic demands and uncertainties regarding the professional future, increases psychological vulnerability at this stage of undergraduate education. Similarly, Fang *et al.* (2025) identified a high frequency of anxiety, depression, and stress among graduating

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students in mainland China, emphasizing that the challenges characteristic of the final stage of the program may intensify these outcomes.

The COVID-19 pandemic also represented an important factor affecting the mental health of dental students. In the systematic review conducted by Gunewardena *et al*. (2025), which brought together evidence from different countries, social isolation, suspension of in-person clinical activities, adaptations imposed on teaching, and uncertainties related to professional education contributed to the worsening of symptoms of anxiety, depression, and stress. In addition, the authors found that female students showed greater vulnerability to psychological impairment during this period, a finding consistent with that observed in other studies involving university students in the health sciences.

The greater susceptibility of women to psychological distress has also been reported in recent research. Muniz *et al*. (2022) identified a higher prevalence of anxiety and stress among female students, while Freitas *et al*. (2023) observed a higher frequency of depressive symptoms in this group. Although there is still no consensus regarding the mechanisms responsible for this difference, biological, psychosocial, and gender-role-related factors have been identified as possible explanations, without the available evidence allowing a causal relationship to be established.

Another relevant manifestation of psychological distress among dental students is **burnout**. Although initially investigated among health professionals, this syndrome has also been frequently described during university education. In the systematic review by Anishchuk and Seery (2025), burnout was associated with different psychosocial aspects of dental education, indicating that factors such as emotional exhaustion, intense academic pressure, and difficulties adapting to the university environment contribute to its development. These findings are reinforced by the multicenter study conducted by Chauca-Bajaña *et al*. (2025) in Ecuador, which identified a high prevalence of emotional exhaustion and depersonalization among students undergoing clinical training. The authors also found an association between burnout and physical manifestations, such as fatigue, headaches, and musculoskeletal pain, demonstrating that the impacts of psychological distress extend beyond the emotional sphere and also affect the physical health of undergraduates.

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Despite the high frequency of factors associated with psychological distress, the literature also describes elements capable of reducing students' vulnerability to mental distress. Among these factors, resilience has received increasing attention. Maragha *et al.* (2023), when investigating students at the Faculty of Dentistry of the University of British Columbia, Canada, observed that individuals with greater capacity for adaptation and coping presented better mental health indicators in the face of adversities inherent to academic education. According to the authors, resilience plays an important protective role by minimizing the negative effects of stress and promoting more effective adaptation to the demands of dental education.

At the same time, interest in institutional interventions aimed at mental health promotion and the prevention of psychological distress has been increasing. In the scoping review conducted by Boehm *et al.* (2026), which brought together studies conducted in different countries, strategies based on stress management, the provision of psychological support, strengthening coping skills, and developing resilience showed promising results for improving students' well-being. However, the authors emphasize the need for further research investigating the long-term effectiveness of these interventions, as well as their systematic incorporation into Dentistry curricula.

In general, the evidence currently available encompasses different sociocultural contexts, including research conducted in Asia, North America, South America, and several European countries. This body of research demonstrates that psychological distress among dental students represents a global challenge, although its magnitude and forms of manifestation are influenced by the characteristics of educational systems and the socioeconomic conditions of each context.

The manifestations of psychological distress among dental students can be understood as a phenomenon encompassing different emotional and psychological manifestations that may negatively affect students' academic lives, social relationships, and personal spheres. Its main manifestations include symptoms related to stress, anxiety, depression, and Burnout Syndrome. Within the context of dental education, these conditions have been associated with the intense demands of the program, entry into clinical activities, constant pressure for performance, and responsibilities arising from patient care, constituting an important challenge to health throughout the formative process (Smolana; Loster; Loster, 2022; Ali *et al.*, 2025; Gunewardena *et al.*, 2025).

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Stress represents an adaptive response of the organism to situations perceived as demanding or threatening, involving emotional, cognitive, and physiological changes. When this response persists for prolonged periods, it may contribute to the emergence of disorders such as anxiety, characterized by persistent worry, a state of tension, and constant anticipation of negative events, as well as depression, characterized by depressed mood, decreased interest or pleasure in usual activities, and significant impairment in daily activities. Among dental undergraduates, these manifestations occur frequently and become more evident during the clinical care period and the final stage of undergraduate education (Smolana; Loster; Loster, 2022; Fang *et al.*, 2025; Başkan; Başkan, 2026).

Another condition frequently described in the literature is academic burnout, characterized by emotional exhaustion, depersonalization, and reduced perception of personal accomplishment. Emotional exhaustion corresponds to exhaustion resulting from the demands imposed by academic routines, while depersonalization manifests itself through attitudes of detachment, coldness, or cynicism in relationships with patients, peers, and professors. Recent evidence demonstrates that higher levels of burnout are associated with decreased empathy, impaired academic performance, and worsening psychological distress. Given this scenario, institutional actions aimed at stress management, strengthening resilience, and expanding psychological assistance have been identified as relevant strategies for promoting mental health during dental education (Anishchuk; Seery, 2025; Chauca-Bajaña *et al.*, 2025; Boehm *et al.*, 2026).

Care strategies for dental students

In view of the academic and clinical challenges faced during undergraduate education, dental students adopt different strategies to cope with the stress and anxiety resulting from the demands of the program. Among the most relevant non-pharmacological approaches is the use of instructional videos before performing clinical activities. These resources allow students to become familiar with the procedures to be performed in advance, providing a better understanding of the technical steps, expected professional conduct, and appropriate ways of interacting with patients. In addition, videos can assist in visualizing real clinical situations, reducing uncertainty and fear associated with the first contact with dental practice.

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Early familiarization with the clinical environment contributes to increased self-confidence and a greater sense of professional preparedness, factors that are directly related to reduced levels of anxiety. Thus, the use of instructional videos can be considered a simple, accessible, and effective strategy for promoting well-being and improving the academic performance of undergraduate dental students (Lopes *et al*., 2025).

In this context, when provided by the university, mental health support offers a safe space for the expression of feelings, questions, and difficulties, assisting students in understanding the causes of emotional distress and developing coping strategies. In addition, welcoming and qualified listening promotes self-awareness, emotional regulation, and the development of skills necessary to deal with challenging situations in academic and professional life.

According to Ferreira and Cruz (2022), psychological support plays a fundamental role in promoting the mental health of dental students, contributing to the reduction of psychological distress and better adaptation to the demands of the program. Thus, qualified professional listening constitutes an important tool for care, prevention, and mental health promotion during university education.

Despite the benefits associated with professional mental health support, the demand for this type of support remains low among university students. Studies show that the proportion of students experiencing symptoms of anxiety, stress, or depression is significantly higher than the number of those who actually seek specialized care. This discrepancy suggests the existence of barriers that hinder engagement with mental health services.

Factors that may explain the low demand for professional support include the stigma associated with mental disorders, fear of social judgment, and difficulty recognizing the need for professional help. As a consequence, many students continue to face emotional difficulties without adequate support, which may compromise not only their mental health but also their academic performance, interpersonal relationships, and quality of life. The low demand for care becomes even more concerning considering that distress may intensify throughout undergraduate education, especially in health sciences programs characterized by a high workload and intense pressure for results (Soares; Lima; Santos, 2024).

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On the other hand, it is also important to highlight students' lack of knowledge regarding the availability of mental health services within the Psychosocial Care Network of the Brazilian Unified Health System, as well as barriers to accessing services within the universities themselves, as pointed out by the study by Romanini e Oporto Gumucio (2023), which investigated eleven higher education institutions in Brazil.

Thus, access barriers may interfere with students' seeking mental health support, pushing them toward the medicalization and psychiatrization of distress. Although non-pharmacological strategies are widely recommended for mental health promotion, some dental students resort to pharmacological treatment when symptoms of anxiety or depression become more severe and impair daily functioning. In such cases, medication may be indicated by health professionals as part of the treatment, particularly when psychological distress interferes with the student's academic performance, interpersonal relationships, and quality of life. Therefore, pharmacological approaches should not represent the primary coping strategy used by university students, but rather a therapeutic alternative employed in situations requiring specialized care (WHO, 2023).

Regarding the use of medication for the treatment of mental disorders, it was observed that 9.6% of students used or had previously used antidepressants, while the majority of participants denied using this type of medication. Among the medications reported were fluoxetine, sertraline, paroxetine, citalopram, fluvoxamine, and nortriptyline, which mainly belong to the antidepressant class. In addition to these medications, the use of alprazolam, an anxiolytic frequently prescribed to control anxiety-related symptoms, was also identified. These findings demonstrate that, although the use of psychotropic medications is not predominant among students, a proportion of university students require pharmacological treatment to assist in the management of mental disorders diagnosed during undergraduate education (Carvalho *et al.,* 2017).

In addition to interventions directly aimed at treating psychological distress, the literature highlights the importance of protective factors in promoting mental health among university students. Recent studies demonstrate that characteristics such as emotional intelligence, resilience, sense of coherence, and social support are associated with lower levels of anxiety, stress, and depression. Another aspect frequently highlighted in the literature is the role of social support, particularly that provided by family, peers, and the educational institution itself. The presence of a strong support network facilitates coping

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with everyday difficulties and reduces feelings of loneliness, significantly contributing to the protection of students' mental health (Viana; Lins-Kusterer, 2025).

FINAL CONSIDERATIONS

The evidence analyzed in this review indicates that psychological distress among dental students constitutes a complex phenomenon resulting from the interaction between academic demands, clinical activities, individual vulnerabilities, socioeconomic conditions, and characteristics of the university environment. The most frequently described manifestations include stress, anxiety, depression, burnout, and somatic symptoms, with repercussions that extend beyond mental health and also compromise students' physical health, academic performance, and quality of life.

The studies included reinforce that mental illness should not be interpreted solely as a consequence of individual characteristics, but rather as the result of a formative process permeated by intense demands and, frequently, insufficient institutional support. In this regard, it is essential to strengthen actions aimed at mental health promotion, recognition of diversity, and development of support networks, fostering a more humanized and inclusive educational process committed to the well-being of future dental surgeons.

The findings of this review also highlight the need to expand scientific production related to psychological distress and coping strategies during dental education, particularly through research that supports the implementation of evidence-based institutional interventions. Likewise, it is recommended that curricular frameworks and pedagogical projects be continuously reviewed and updated, incorporating mental health promotion, inclusion, and the development of socioemotional competencies as cross-cutting actions.

Although Resolution CNE/CES No. 3, of June 21, 2021, remains the current National Curriculum Guideline for undergraduate Dentistry programs, its implementation should be monitored and periodically reassessed in light of social transformations, changes in the educational landscape, and advances in scientific evidence, ensuring an educational process aligned with the contemporary needs of students and society.

The limitations of this study include the exclusion of gray literature, the scope of the descriptors used in the search strategy, and the still limited number of national publications on the topic, particularly those investigating biological aspects related to psychological distress, such as biomarkers.

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