

EATING DISORDERS AND THEIR RISK FACTORS IN UNIVERSITY STUDENTS: AN INTEGRATIVE REVIEW

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ABSTRACT

Introduction: Eating disorders are psychiatric disorders that lead to biopsychosocial impairment with high rates of morbidity and mortality in the population. The prevalence of eating disorders in college students is quite significant, especially in health and female courses, associated with poor diet, and the influence of the media on the perfect body, becoming a social problem and public health that should be addressed in the daily lives of health professionals. **Objectives:** Analyze in literature the risk factors in college students for eating disorders. **Methodology:** The research took place in the CAPES Periodicals, PubMed and VHL Regional Portal. **Descriptors** were the terms: "Eating Disorders and Food Intake", "Risk Factors" and "Students". **Articles published between 2014 and 2018 were included. Results:** Of the 3287 articles found, only eleven were included in the review. Evidence was found that eating disorders may result from personal body perception associated with poor diet and excessive alcohol consumption. It can be expressed through the personal need to satisfy the physical image with the psychological, almost always unreachable. Evidence was also found that eating disorders are associated with higher parental education, living in urban areas, eating outside the home and the first two years after college entry. **Conclusion:** The literature on the interaction between eating disorders and risk factors is still incipient to the detriment of the complexity and scope of the phenomenon. It is also highlighted the need for further investigations on diagnostic and therapeutic teaching strategies of health professionals in order to reduce the morbidity arising from these events.

Keywords: Feeding and Eating Disorders, Risk Factors, Students.

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How to cite this article:

Lívia Lócio Rosado de Oliveira; William Barros Agrelli Girão; Eduardo Tomilheiro de Farias; Mateus Cotias Filizola, Wirley Matias Alves Martins Duarte; Edmundo de Oliveira Gaudêncio. EATING DISORDERS AND THEIR RISK FACTORS IN UNIVERSITY STUDENTS: AN INTEGRATIVE REVIEW. International Journal of Food and Nutrition Research, 2020; 4:36.

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INTRODUCTION

Health is a state, said to be complete, of physical, mental and social well-being and not just the absence of disease or illness, in contrast Mental Disorders affect people of all nations and at all levels¹. In the sphere of mental health, Eating Disorders are behaviors that lead to biopsychosocial impairment, with high morbidity and mortality rate in the population, resulting from inadequate eating habits. They have a multifactorial etiology, composed of genetic predispositions, sociocultural factors, biological determinants and psychological conditions². People with high dissatisfaction with their body image may be more susceptible to the development of these disorders³.

According to Vieira, VCR, in a study conducted in 2002, with 185 adolescents between 18 and 19 years old, showed evidence that young people are increasingly vulnerable to behavioral changes by approaching and / or entering the university environment, which, providing new relationships social, can generate anxiety, expressed in the form of eating disorders⁴.

Eating disorders affect over 70 million people worldwide⁵. When we observe these data in the university context, alarming results are perceived, pointing to the first year of University Courses also as a critical time for the development of eating disorders⁶.

In this sense, it is asserted that knowledge about the relationship between eating disorders and college students may point to the need for new and more abundant research on the subject and for the formation of specialized professionals to face this problem. Thus, the present study aims to analyze in the specialized literature. the incidence / prevalence of eating disorders and their risk factors among college students.

MATERIAL AND METHODS

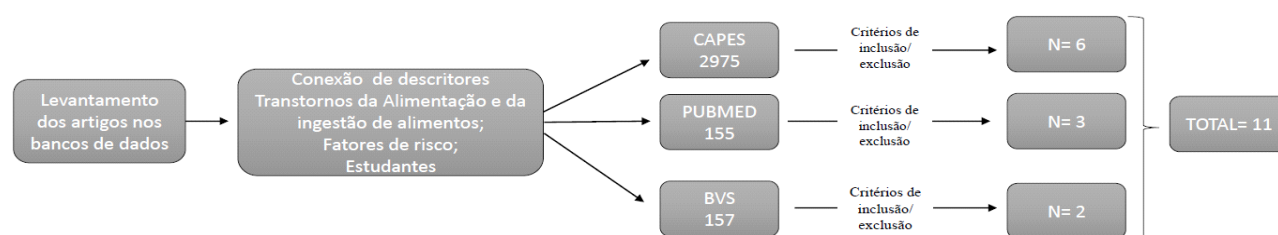
For the study, an integrative literature review was performed, which, according to Mendes and Silveira⁷, corresponds to an analysis undertaken from secondary sources of information in order to gather and synthesize research results on a

delimited theme or question. The search was performed in three stages, the first related to the choice of databases and descriptors. Three databases were chosen that supported the research: Portal of Journals of the Higher Education Personnel Improvement Coordination CAPES / MEC; PubMed International Database and Virtual Health Library (VHL) Regional Portal. The descriptors selected for the research were extracted by consulting the bank Descriptors in Health Sciences (DeCS), considering: "Eating Disorders and Food Intake", "Risk Factors" and "Students", which were used in Portuguese or English, through the boolean operator "AND". The selection was restricted to articles published in Portuguese, English or Spanish 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 had no relationship between eating disorders and college students.

In the third stage it was decided to read, analyze and interpret the full 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 five researchers. When disagreements were observed between them, a reading was performed together, in order to form agreement on whether or not to include the article. At the end, 3287 articles were identified and the most relevant basis for the work was the CAPES Periodicals, with 2975 texts. However, after analyzing these publications, only 11 articles were included in the review. The flowchart below (Figure 1) presents the process of bibliographic survey and the selection of articles for this review.

Figure 1 - Schematic representation of bibliographic survey and article selection

(Source: The Authors, 2019)

RESULTS AND DISCUSSION

Table 1 summarizes the information regarding the articles included in this review. All selected articles showed correlations between eating disorders, taking into account their risk factors, and college students.

According to O'HARA, in a cross-sectional study with a sample of 420 female university students from the United Arab Emirates, whose objective was to analyze the relationship of eating disorders and students' self-esteem, the presence of positive symptoms for such disorders occurred in about 30% of participants. In addition, weight and body-related shame and guilt were the most predictive predictors of eating disorder, which was positively correlated with the fact that students are often bothered by teasing from family and friends. These data corroborate the strong relationship between these disorders and the university context, and social pressure and the need for acceptance are the predisposing factors for the development of the clinical condition analyzed in that study⁸.

YU J. concluded in a cross-sectional study that college students whose parents have a higher education, especially graduates and postgraduates, are more likely to develop eating disorders. These groups coincidentally also had higher rates when residing in urban areas compared to rural areas. There was no significant difference between males and females⁹.

REIS relates personal perception with overweight or lack of weight to the ability to develop eating disorders, and one of the main predisposing factors is the need to meet

aesthetic-social standards, together with the programmatic-educational and curricular requirements in force in academia, to which the university students are subjected. Among those students at higher risk of developing such disorders, there are students from the Health Area, especially Physical Education, Nutrition, Nursing and Medicine, where physical appearance has the greatest impact. Inadequate nutritional status was also associated with the risk of developing eating disorders, with a prevalence of 34.4% in the university public, while for the public who had adequate nutritional status, it was 16%. The EAT-26 (Eating Attitudes Test) resulted in 4.0% of college students at high risk of developing eating disorders, 21.0% at low risk and 75.0% at no risk for eating disorders¹⁰.

The influence of eating out and psychological disorders on eating disorders was analyzed by AL-THANI M.A. Their study concluded that psychological determinants strongly influenced the increase of eating disorders and higher body mass index (BMI). Surprisingly, only the "eating out more often a week" category was not significantly related to higher BMI. Female students are among the most likely to develop eating disorders because when eating out they tend to worsen food quality and increase caloric intake because of the psychological pressure related to their multiple social roles¹¹.

Based on this, it is observed that the literature published in the last 5 years, correlating eating disorders, risk factors and students, is not conflicting. Nevertheless, many health professionals have difficulty in approaching and directing these patients, from the pedagogical-food attention in medical outpatient clinics and

nutritional consultations in isolated approaches. Therefore, multidisciplinary training in health is recommended in Continuing Education Courses on the relationship between eating disorders and the university context, focusing on their risk factors. This way, professionals will be able to

optimize an integrated approach thanks to the implementation of the necessary nutritional education along with the psychological, medical and pedagogical approach of university students who need it.

Chart 1 - Analysis of the content of the publications by authors, year of publication, translated title, study design / place, and considerations presented by the authors of the studies not yet presented.

Author / year	Title	Study Design / Site	Authors' Considerations
Criostato T. et al.; 2016 (12)	Academic burnout and eating disorder among Monash University students, Malaysia	Cross-sectional study / Malaysia	This one-year study examined the relationship between academic burnout and eating disorder among Monash college students. One hundred and thirty-two participants were recruited for the study. Partial associations between academic exhaustion and eating disorder were evidenced.
Yu Z., et al.; 2016 (13)	Disordered eating behaviors and food addiction among nutrition students.	Cross-sectional study / USA	The objective of the study was to evaluate disordered eating behaviors and food addiction among Nutrition students. A total of 967 students enrolled in a public university were evaluated. About 10.3% of respondents met the food addiction criteria. In addition, 4.5% of respondents had a co-occurrence of risk of eating disorder and risk of food dependence.
WOLLENBERG G., et al.; 2015 (14)	Comparison of disordered eating symptoms and emotional regulation difficulties between college and non-athlete athletes.	Cross-sectional study / USA	The study reported that the association between female gender, self-esteem and body satisfaction may increase the occurrence of eating disorders, pointing out that athletes are more protected against eating disorders than non-athletes. The data came from the analysis of data collected from 527 students, 151 athletes.
GROPPER S. S., et al.; 2014 (15)	Associations between dietary regulation and body mass index, weight and body fat in college students: the moderating role of gender.	Prospective Cohort Study / USA	The study concluded that there was an increase in BMI, weight and body fat percentage at the end of the second year of college in students with low autonomous motivation index.
González L. M., et al.; 2014 (16)	Prevalence of eating disorders Spanish college students and associated factors; uniHcos project	Cross-sectional study / Spain	In this study, the prevalence of risk for eating disorder was 19.5% in the students, the observed prevalence was higher among women than among men.
Peltzer K., et al.; 2014 (17)	Risk of eating disorders among Bangladeshi college students	Cross-sectional study / Bangladesh	The study found that factors such as distorted body image, high religious involvement and alcohol consumption were identified as risk factors for eating disorder.
TAVOLACCI MP., et al.; 2015 (18)	Eating disorders and associated health risks among college students.	Cross-Sectional Study / France	The authors report that risk factors for eating disorders include female gender, stress, depression, alcohol abuse problems and risk of cyber addiction in a total of 3457 students. They recommended screening among college students to evaluate such disorders.

CONCLUSION

Despite the importance of the theme, it is considered that the specialized literature on the correlation between eating disorders, their risk factors and university students is still incipient. Few Brazilian texts have been found published in recent years on the research platforms. However, there was agreement between the international and national literature analyzed.

In sum, evidence was found of the close relationship between anxiety and distress caused by college life and eating disorders, as well as alcohol abuse, cyber addiction disorder, body satisfaction / self-esteem and self-esteem. Social pressure from family and / or friends, as well as a higher education level of parents, was relevant in the etiology of eating disorders. In relation to the University, the first two years were

those in which the greatest increase in weight, BMI and body fat occurred.

We also highlight the need for multiprofessional teams to monitor academics with eating disorders, since, only with the presence of these specialists from various areas of health, such as psychologists, nutritionists, physical educators and doctors, the prevention of disorders eating habits can be carried out, and only then can the necessary interdisciplinary follow-up of people with eating disorders and their clinical consequences be performed.

In addition, further research on university-promoted teaching strategies is essential to reduce the morbidity and mortality induced, directly or indirectly, among university students, by didactic-pedagogical practices that can lead to eating disorders as an expression of stress, indirectly or directly, can lead to death.

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