

EATING DISORDER RISK AMONG MEDICAL STUDENTS FROM NORTHERN PARANÁ, BRAZIL: PREVALENCE AND ASSOCIATED FACTORS**Beatriz Bonini Frare^{1*}, Cassia Regina Nogueira Guimarães², Carlos Eduardo Coral de Oliveira³**¹Medical Student, School of Medicine – Pontifícia Universidade Católica do Paraná (PUCPR), Londrina, Brazil.^{2,3}Faculty Member, School of Medicine – Pontifícia Universidade Católica do Paraná (PUCPR), Av. Jockey Clube, 485, Londrina-PR, Brazil.***Corresponding Author: Beatriz Bonini Frare**

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ABSTRACT

Eating disorders are severe psychiatric conditions characterized by dysfunctional eating behaviors, body image distortion, and significant physical and psychological impairment. The prevalence of these conditions has increased among university students, especially in health-related courses, due to factors such as academic stress, perfectionism, and aesthetic pressure. This study aimed to assess the prevalence and factors associated with the risk of developing eating disorders among medical students at an institution in northern Paraná, Brazil, using the Binge Eating Scale (BES), the Eating Attitudes Test-26 (EAT-26), and the SCOFF questionnaire. A total of 102 students participated, mostly female (83.33%), with a mean age of 22.7 years. Data were analyzed using descriptive and inferential statistics (chi-square test, $p < 0.05$). Results indicated that female participants showed greater vulnerability to disordered eating attitudes in the EAT-26 ($p = 0.018$) and SCOFF ($p = 0.016$) questionnaires, while no significant differences were observed between sexes in the BES ($p = 0.805$). No significant associations were found between age group and risk in any of the instruments, although higher scores were concentrated among students aged 18 to 23 years. A previous diagnosis of an eating disorder was strongly associated with risk scores, particularly in the BES ($p = 0.0018$), confirming the sensitivity of the scales for clinical and subclinical screening. The findings reveal a relevant presence of disordered eating behaviors among medical students, reinforcing the need for institutional policies on prevention, screening, and continuous psychological support.

KEYWORDS: Eating disorders; medical students; BES; EAT-26; SCOFF.**INTRODUCTION**

Eating disorders are severe psychiatric conditions characterized by persistent patterns of dysfunctional eating behavior, body image distortion, and significant physical, psychological, and social impairment. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), these conditions include, among others, anorexia nervosa, bulimia nervosa, and binge eating disorder, which are the most prevalent and clinically relevant forms. Anorexia is characterized by severe food restriction, intense fear of weight gain, and body image distortion; bulimia involves recurrent episodes of binge eating followed by compensatory behaviors; and binge eating disorder is marked by episodes of excessive food intake without compensatory

actions. Among women, the prevalence of anorexia nervosa is approximately 0.3%, bulimia nervosa around 1%, and binge eating disorder about 1.5%. Among men, the rates of anorexia and bulimia are considered negligible, while binge eating disorder shows a prevalence of approximately 0.3% (American Psychiatric Association, 2013; Balasundaram & Keski-Rahkonen, 2021).

Early identification of these disorders is facilitated by the use of standardized and validated instruments. Among them, the SCOFF Questionnaire, the Binge Eating Scale (BES), and the Eating Attitudes Test-26 (EAT-26) stand out. The SCOFF, proposed by Morgan, Reid, and Lacey (1999), has been established as a rapid, sensitive, and

low-cost tool for screening anorexia and bulimia, showing high sensitivity and specificity in meta-analyses (Kutz et al., 2020). In Brazil, its adapted version, the SCOFF-BR, demonstrated good validity and reliability in university populations (Teixeira et al., 2021).

The BES, developed by Gormally et al. (1982) and validated by Freitas et al. (2001), assesses the severity of binge eating and its emotional dimensions, correlating with body mass index and indicators of eating psychopathology (Duarte et al., 2015). The EAT-26, created by Garner et al. (1982) and widely applied across countries, is one of the most robust instruments for screening pathological eating attitudes (Janahi et al., 2024; Fortes et al., 2022; Bighetti, 2003).

Although distinct in focus and scope, these instruments are complementary and essential for population-based studies and early interventions. Several studies have revealed increasing rates of dysfunctional eating attitudes among university students, particularly women and health sciences students. Factors such as academic stress, high competitiveness, self-demand, and the idealization of thinness have been identified as triggers for the development of eating disorders in this group (Santos et al., 2021).

In this context, it is essential to develop studies that map the prevalence and associated factors of eating disorders among medical students, in order to support preventive

actions and institutional care strategies. Thus, the present study aims to evaluate the prevalence and factors associated with the development of eating disorders among medical students at a university in northern Paraná, Brazil, through the anonymous application of validated questionnaires.

MATERIALS AND METHODS

Scoring for the Analysis of the Binge Eating Scale (BES)

To assess binge eating behavior, the *Binge Eating Scale* (BES) was used, originally developed by Gormally et al. (1982) and adapted and validated for Portuguese by Freitas et al. (2001). The BES questionnaire consists of 16 descriptive items, each containing three to four alternatives that represent increasing degrees of severity of binge eating behavior.

Each response was scored according to the level of severity of the described symptom, as follows

- 0 points: absence of the behavior or symptom;
- 1 point: mild or occasional occurrence;
- 2 points: moderate manifestation of the symptom;
- 3 points: severe and frequent occurrence of the behavior, with evident loss of eating control.

The total score was obtained by summing the points assigned to the 16 items, resulting in values ranging from 0 to 46 points. Based on the final score, individuals were classified into categories of risk for binge eating, as shown in Table 1.

Table 1: Classification of participants according to the scores obtained on the Binge Eating Scale (BES).

Score	Classification	Interpretation
0 a 17	No significant binge eating behavior	Indicates eating behavior within the normal range
18 a 26	Moderate binge eating	Suggests the presence of occasional binge eating episodes
≥ 27	Severe binge eating	Indicates a high risk for binge eating disorder

Scoring for the Analysis of the Eating Attitudes Test (EAT-26)

To assess eating attitudes and the risk of developing eating disorders, the Eating Attitudes Test (EAT-26) was used, originally developed by Garner et al. (1982) and validated for Portuguese by Bighetti et al. (2004). The questionnaire consists of 26 items, each answered on a six-point Likert-type scale ranging from "Always" to "Never." The responses were converted into scores according to the scoring system established by the instrument, as described below:

- Always, Very often, and Frequently: scored as 3, 2, and 1 point(s), respectively;
- Sometimes, Rarely, and Never: scored as 0 point(s);
- Reverse item: presents an inverted scoring system, with Always = 0 and Never = 3.

The total EAT-26 score was obtained by summing the points assigned to the 26 items, resulting in values ranging from 0 to 78 points. Based on the final score, participants were classified according to their level of risk for eating disorders, as shown in Table 2.

Table 2: Classification of participants according to the scores obtained on the Eating Attitudes Test (EAT-26)

Score	Classification	Interpretation
< 20 points	No risk	Indicates eating attitudes within the normal range
≥ 20 points	Positive risk	Suggests a high risk for the development of eating disorders

The cutoff point of 20 was adopted according to the original recommendations by Garner et al. (1982) and is widely used in both international and national literature. Scores equal to or greater than this value indicate the

presence of dysfunctional eating attitudes and risk behaviors consistent with the most prevalent eating disorders.

Scoring for the Analysis of the SCOFF Questionnaire

The SCOFF questionnaire was originally developed by Morgan et al. (1999) and validated for Portuguese by Teixeira et al. (2021). In this method, each “Yes” response is scored as 1 point, while each “No” response is scored as 0 points.

The total score was obtained by summing the affirmative answers, ranging from 0 to 5 points. Higher values

indicate a greater likelihood of the presence of an eating disorder. According to the original criteria proposed by Morgan et al. (1999), the recommended cutoff point is ≥ 2 positive responses, indicating a positive risk for an eating disorder and the need for further clinical evaluation. The classification used in this study is presented in Table 3.

Table 3: Classification of participants according to the scores obtained on the SCOFF Questionnaire.

Score	Classification	Interpretation
0 or 1 point	Negative risk	Indicates the absence of eating attitudes compatible with eating disorders
≥ 2 points	Positive risk	Suggests the presence of attitudes and behaviors associated with eating disorder risk

Data Analysis Methodology

The data obtained were organized and analyzed using descriptive and inferential statistical procedures. Initially, descriptive statistics were applied to characterize the sociodemographic profile of the sample, encompassing variables such as age, sex, type of housing, academic period, and the presence of a previous diagnosis of eating disorder. The information was presented in terms of absolute and relative frequencies, means, and standard deviations, according to the nature of each variable.

For the analysis of the results from the BES, EAT-26, and SCOFF assessment instruments, contingency tables were constructed, and the Pearson chi-square test (χ^2) was applied to verify the existence of associations between the risk classifications obtained from each instrument and the participants' sociodemographic variables. The level of significance adopted for all analyses was 5% ($p < 0.05$).

RESULTS AND DISCUSSION

General Characteristics of the Sample

The study sample consisted of 102 medical students from different semesters of an undergraduate program at a university located in the northern region of the state of Paraná, Brazil. Regarding sex distribution, the sample was predominantly female, corresponding to 83.33% ($n = 85$) of respondents, while 16.67% ($n = 17$) identified as male. This significant difference in gender representation is consistent with the national profile of medical courses, in which there is a growing predominance of women, a phenomenon also observed in epidemiological studies on the student profile of Brazilian universities (CFM, 2023). The analysis of student participation by academic period showed a heterogeneous distribution among participants, with greater representation in the 8th (24.51%) and 9th (19.61%) semesters, followed by the 4th (13.73%) and 7th (13.73%) semesters. The remaining semesters showed lower percentages, highlighting the low participation of students in the initial (1st and 2nd) and final (11th and 12th) semesters. The participants' ages ranged from 18 to 35 years, with a predominance in the 20–25 age group, representing most of the sample. The mean age was $22.7 (\pm 2.9)$ years, with low dispersion, indicating a young and relatively homogeneous

population. When grouped by age range, 60.78% of students were between 20 and 23 years old, with the 22–23 age interval being the most representative (35.29%). The 18–19 (8.82%) and 24–25 (19.61%) age groups also showed relevant participation. The age profile observed is characteristic of medical students, as described in recent studies on the demographics of health science courses (CFM, 2023). Most students lived alone (48.04%) or with their families (45.10%), while a small portion lived with colleagues (4.90%) or with a spouse (1.96%). The vast majority of participants (93.14%) did not engage in professional activity concurrently with their studies, while 6.86% reported working and studying simultaneously. Approximately 17.65% of participants reported a previous diagnosis of an eating disorder, while 81.37% denied such a diagnosis and 0.98% preferred not to answer. This percentage is high compared to the general population average (approximately 4–6%, according to WHO, 2023), suggesting a higher prevalence among medical students. Studies have shown that factors such as aesthetic pressure, academic stress, and sleep deprivation contribute to the development of eating disorders in populations subject to high cognitive demands (WHO, 2023).

Analysis of the Results Obtained from the Application of the BES Questionnaire

The analyses were performed using contingency tables to verify the association between the risk of binge eating and the variables sex, age group, type of residence, and previous diagnosis of an eating disorder. Associations were tested using the Pearson chi-square test, with the Fisher's exact test applied when necessary.

Table 4 presents the responses by sex and the scores obtained according to the risk classification in the BES. It can be observed that although women showed a higher absolute number of cases classified as moderate risk ($n = 23$; 27.1%) and severe risk ($n = 14$; 16.5%) compared to men ($n = 4$; 23.5% and $n = 2$; 11.8%, respectively), the differences did not reach statistical significance. The Pearson chi-square test indicated no significant association between sex and the risk of binge eating ($\chi^2(2) = 0.43$; $p = 0.805$).

This result suggests that, in this sample, sex was not a determining factor for the presence of binge eating

symptoms according to the BES instrument.

Table 4: Distribution of participants according to sex and risk classification on the BES.

Sex	No risk (≤ 17)	Moderate risk (18 - 26)	Severe risk (≥ 27)
Female	48	23	14
Male	11	4	2

Although not statistically significant, the observed distribution maintains the trend widely described in the literature, according to which the female sex tends to show greater vulnerability to dysfunctional eating behaviors. Previous studies have demonstrated that women report a higher frequency of binge eating episodes and greater emotional distress associated with eating behavior, especially in academic and appearance-oriented contexts (Freitas *et al.*, 2001; Duarte *et al.*, 2015). Studies by Pivarunas *et al.* (2015) point to a reduction in gender differences, with a progressive increase in binge-eating symptoms among young men,

attributed to factors such as body image pressure, the pursuit of an idealized muscular physique, and academic stress. The results obtained in this sample therefore align with this trend toward risk homogenization between sexes, indicating that both men and women may exhibit behaviors consistent with binge-eating episodes. Table 5 presents the results of the relationship between participants' age group and the level of binge-eating risk according to the BES. It can be observed that the highest concentration of participants was in the 21–23-year age range ($n = 51$; 50%), followed by the 24–26-year range ($n = 24$; 23.5%).

Table 5: Distribution of participants according to age range and risk classification on the BES.

Age range	No risk (≤ 17)	Moderate risk (18 - 26)	Severe risk (≥ 27)
18 – 20	11	2	7
21 – 23	29	17	5
24 – 26	15	5	4
Over 26	4	3	0

Although the youngest age group (18–20 years) showed a relatively higher proportion of severe risk (35%), the Pearson chi-square test indicated no statistically significant association between age group and risk classification ($\chi^2(6) = 11.08$; $p = 0.086$). This result suggests that, in the analyzed sample, the risk of binge eating did not vary significantly among different age groups, although there was a trend toward greater vulnerability among younger participants. Studies by Freitas *et al.* (2001) and Duarte *et al.* (2015) indicate that adaptation to the university environment, increased stress, and exposure to rigid aesthetic standards may act as triggers for dysfunctional eating behaviors, particularly among younger students. Research by Keski-Rahkonen (2021) and Duarte *et al.* (2015) suggests that, with advancing age, there is a tendency toward a reduction in the severity of binge-eating symptoms. This decrease appears to be related to emotional maturation, the development of more effective stress-coping strategies, and the consolidation of a more stable self-image — factors that act as protective mechanisms against dysfunctional eating behaviors. Thus, although the results of this sample did not reveal statistically

significant differences between age groups, the observed trend among younger participants reinforces the importance of preventive and educational actions directed at university students in the early stages of their training, when psychological and social pressures may favor the emergence of inadequate eating attitudes.

Another analysis conducted was the relationship between participants who reported having a previous diagnosis and their BES scores. Table 6 presents the results of the relationship between a previous diagnosis of an eating disorder and the level of binge-eating risk assessed by the BES. It was observed that among participants who reported a positive previous diagnosis ($n = 18$), 77.8% ($n = 14$) were classified as moderate or severe risk on the BES. Conversely, among those without a diagnosis ($n = 83$), only 33.7% ($n = 28$) were classified in the same risk categories. The Pearson chi-square test confirmed a statistically significant association between previous diagnosis and the risk identified by the BES ($\chi^2(4) = 17.20$; $p = 0.0018$), indicating that the instrument was effective in detecting participants with a history of eating disorders.

Table 6: Distribution of participants according to previous diagnosis of eating disorder and risk classification identified by the BES.

Previous diagnosis	No risk (≤ 17)	Moderate risk (18 - 26)	Severe risk (≥ 27)
Yes	4	9	5
No	55	18	10

This means that the BES demonstrated good discriminatory capacity, correctly identifying most of the individuals previously diagnosed. This result shows agreement between clinical self-reporting and screening by the instrument, reinforcing its validity as a tool for identifying binge eating symptoms. However, it was observed that a small portion of participants without a prior diagnosis scored high, suggesting that the instrument was also able to signal possible undiagnosed cases. This finding reinforces the potential use of the BES as a preventive screening tool capable of identifying individuals who may benefit from further clinical evaluation. In summary, the results indicate that the BES was sensitive and effective in detecting previously diagnosed cases, while also identifying potential

subclinical cases, confirming its validity as a population screening instrument for binge eating behaviors.

Analysis of the results obtained from the use of the EAT-26 questionnaire

The use of the EAT-26 questionnaire made it possible to identify patterns of eating behavior among the students. To analyze the data, frequency and contingency tables were employed to verify the relationship between the instrument's scores and variables such as sex, age group, and history of eating disorders. Table 7 presents the results regarding the relationship between participants' sex and the risk of inappropriate eating attitudes, as assessed by the EAT-26 questionnaire.

Table 7: Distribution of EAT-26 scores according to participants' sex.

Sex	No risk (< 20)	Risk (≥ 20)
Female	29	56
Male	11	6

The chi-square test results indicated a statistically significant association between sex and risk classification ($\chi^2(1) = 5.56$; $p = 0.018$), demonstrating that the distribution of EAT-26 scores differed meaningfully between men and women. Additionally, the odds ratio analysis revealed that women were 3.5 times more likely to score at a risk level (≥ 20 points) than men, indicating greater female vulnerability to dysfunctional eating attitudes. These findings are consistent with the scientific literature identifying the female sex as a relevant risk factor for the development of disordered eating behaviors and eating disorders. International studies, such as those by Hoteit et al. (2022) and López-Gil et al. (2023), have reported significantly higher risk prevalences among women, explained by factors such as greater aesthetic pressure, body dissatisfaction, and internalization of thinness ideals. Similarly, Fernandes et al. (2024) observed a higher prevalence of inadequate eating attitudes among female university students, associated with negative self-image and the pursuit of body perfection. This relationship

suggests that young women and female college students may be more vulnerable to dysfunctional eating patterns, possibly mediated by psychological, sociocultural, and academic factors that reinforce restrictive body ideals and weight control behaviors.

Regarding age group, Table 8 presents the association between participants' ages and the classification of risk for inadequate eating attitudes, as assessed by the EAT-26 questionnaire. Pearson's chi-square test did not indicate a statistically significant association between age group and the risk of inadequate eating attitudes ($\chi^2(4) = 0.39$; $p = 0.984$). This result suggests that, within this sample, age was not a determining factor for the presence of risk, indicating a relatively homogeneous distribution of EAT-26 scores across different age groups. Most cases classified as positive risk (score ≥ 20) were concentrated in the 21–23-year (62.7%) and 24–26-year (22.6%) ranges, which together represented more than 85% of risk occurrences.

Table 8: Distribution of EAT-26 scores according to participants' age range.

Age range	No risk (< 20)	Risk (≥ 20)
18 – 20	8	12
21 – 23	19	32
24 – 26	10	14
27 – 29	2	2
Over 30	1	2

In the literature, there is conflicting evidence regarding the influence of age on eating attitudes. Studies involving university populations, such as those by Hoteit et al. (2022) and Wider et al. (2023), report that the risk tends to be more pronounced among younger age groups, possibly due to greater exposure to aesthetic standards and social pressure for the ideal body. However, research such as that by Souza et al. (2011) and Alvarenga et al. (2011) found no significant differences among age

groups, indicating that psychological, social, and academic factors may exert a more relevant influence than chronological age itself. Thus, the results of this study align with the latter line of evidence, suggesting that although the risk appears to be more concentrated among young adults aged 21 to 26 years, this difference does not reach statistical significance, indicating that the risk of inadequate eating attitudes may be relatively

evenly distributed among young adult university students.

Table 9 presents the results of the relationship between participants who reported a previous diagnosis and their risk classification on the EAT-26.

Table 9: Distribution of participants according to previous diagnosis of eating disorder and risk classification on the EAT-26.

Previous diagnosis	No risk (< 20)	Risk (≥ 20)
Yes	1	17
No	39	44

The analysis of the results revealed that 18 participants (17.6%) reported having been previously diagnosed with an eating disorder (Previous diagnosis = “Yes”), while the majority (81.4%) stated that they had no prior diagnosis. Among the diagnosed individuals, 17 out of 18 (94.4%) were classified as at risk according to the EAT-26 (score ≥ 20 points), whereas only one case (5.6%) did not reach the cutoff point. These results indicate that the instrument showed a high screening capacity for identifying participants previously diagnosed with eating disorders, suggesting good sensitivity of the EAT-26 within this sample.

Analysis of the results obtained from the use of the SCOFF questionnaire

The use of the SCOFF questionnaire aimed to screen for behaviors indicative of risk for eating disorders. Participants were classified according to the number of

affirmative responses, with a score equal to or greater than two “Yes” answers (≥ 2) considered indicative of risk. Table 10 presents the results of the relationship between participants’ sex and SCOFF risk classification. Statistical test results indicated a significant association between sex and the risk of eating disorders as assessed by the SCOFF instrument. The chi-square test ($\chi^2(1) = 5.80$; $p = 0.016$) revealed that the distribution of positive responses differed significantly between men and women. Moreover, the results showed that women were nearly four times more likely to have a positive SCOFF screening result compared to men, indicating greater female vulnerability to inadequate eating attitudes.

Table 10: Distribution of participants according to sex and SCOFF risk classification.

Sex	Negative (< 2 Yes)	Positive (≥ 2 Yes)
Female	33	52
Male	12	5

This finding is consistent with the medical and psychological literature, which identifies the female sex as one of the main risk factors for the development of eating disorders, particularly among young and university populations. Studies such as those by Stice and Bearman (2001) and Smolak and Thompson (2009) have demonstrated that women exhibit higher levels of body dissatisfaction, internalization of aesthetic ideals, and dietary restraint. In academic contexts, national studies such as those by Oliveira et al. (2019) and Almeida et al. (2021) have also identified significantly higher prevalences of disordered eating symptoms among female students, including those enrolled in health-related programs. Similarly, the meta-analysis by Fekih-Romdhane et al. (2022) reported a high prevalence of eating disorder symptoms among medical students. Furthermore, studies involving health science undergraduates have shown a greater frequency of positive screenings among women, associated with

factors such as negative body image and academic stressors (Hoteit et al., 2022; Rostad et al., 2021).

The results regarding the relationship between age group and SCOFF risk are presented in Table 11. The findings show no statistically significant association between age group and the risk of eating disorder as assessed by the SCOFF instrument. The chi-square test yielded a p-value of 0.754, indicating that the observed differences in the proportions of positive responses (≥ 2 “Yes”) among age groups may be due to chance. The absence of a significant association between age and eating disorder risk is consistent with the medical literature on university and, particularly, medical students. Most studies indicate that within the typical university age spectrum (18 to 30 years), age variations exert a limited impact on the predisposition to disordered eating behaviors, as risk is more closely related to psychological and contextual factors than to chronological age (Stice & Bearman, 2001; Smolak & Thompson, 2009).

Table 11: Distribution of participants according to age group and SCOFF risk classification.

Age range	Negative (< 2 Yes)	Positive (≥ 2 Yes)
8 – 20	9	11
21 – 23	21	30
24 – 26	13	11

27 – 30	1	3
Over 30	1	2

According to Porras-García *et al.* (2019), in a meta-analysis involving medical students from several countries, age-related differences were not significant, and the risk of eating disorders was found to be transversal across all stages of medical training. The study emphasizes that, although late adolescence and early adulthood represent critical periods for the onset of disordered eating behaviors, age itself is not an independent predictor when compared with factors such as aesthetic pressure, perfectionism, and academic stress. Brazilian studies, such as those by Alvarenga *et al.* (2011) and Santos *et al.* (2021), support this perspective, demonstrating that eating-related symptoms and body dissatisfaction tend to remain relatively stable throughout medical education, with no significant differences across age groups within the academic setting.

Finally, the analysis of the relationship between participants who reported a previous diagnosis and SCOFF risk is presented in Table 12. The results obtained from the SCOFF instrument revealed that, among the 18 participants who reported a prior diagnosis of an eating disorder, 16 (88.9%) were correctly classified as being at positive risk (≥ 2 “Yes” responses) by the screening method. Only two diagnosed participants (11.1%) did not reach the cutoff point and were therefore considered as no risk (< 2). These findings indicate that the SCOFF demonstrated high sensitivity in identifying previously diagnosed individuals, consistent with its original purpose as a rapid and effective screening tool (Morgan *et al.*, 1999).

Table 12: Distribution of participants according to previous diagnosis of eating disorder and SCOFF risk classification.

Previous diagnosis	Negative (< 2 Yes)	Positive (≥ 2 Yes)
Yes	2	16
No	43	39

Taken together, the analysis of the results obtained through the SCOFF screening test revealed a relevant pattern of risk for disordered eating behaviors among the participating medical students. Among the variables analyzed, only sex showed a statistically significant association with eating disorder risk, indicating greater vulnerability among women—a finding widely supported by both national and international literature.

CONCLUSION

The combined analysis of the three instruments (BES, EAT-26, and SCOFF) revealed consistent patterns regarding sex differences. While the BES did not show a statistically significant association between binge-eating risk and sex ($p = 0.805$), both the EAT-26 ($p = 0.018$) and SCOFF ($p = 0.016$) indicated greater vulnerability among women. These findings suggest that although binge-eating behaviors appear to be becoming more homogeneous between men and women, dysfunctional and restrictive eating attitudes still occur with a significantly higher prevalence in females.

The variable age did not show a statistically significant association with eating disorder risk in any of the instruments applied (BES $p = 0.086$; EAT-26 $p = 0.984$; SCOFF $p = 0.754$). Nevertheless, in all cases, higher scores were more frequent among students aged 18 to 23 years, corresponding to the early phases of medical training. This trend indicates that, although chronological age alone may not determine risk, the first years of medical education represent a critical period of psychological and social vulnerability.

A previous diagnosis of an eating disorder was strongly associated with higher risk scores across all three instruments, particularly the BES ($p = 0.0018$), and notably in the EAT-26 and SCOFF. In all cases, more than 85% of students who reported a prior diagnosis were classified as being at positive risk. These results demonstrate high sensitivity and concordance among the instruments and the self-reported clinical history, confirming their validity as population-level screening tools.

The findings of this study indicate that disordered eating behaviors and risks of eating disorders are significantly present among medical students, with higher prevalence in females and younger age groups. Given this scenario, it is recommended that universities implement institutional policies to promote mental and nutritional health, integrating educational initiatives, psychological support, and regular screening using standardized instruments such as the BES, EAT-26, and SCOFF.

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