FOOD AND NUTRITION IN COLLECTIVE HEALTH

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Assessment of body image distortion and dissatisfaction in students and healthcare professionals

Avaliação da distorção da imagem corporal e insatisfação corporal dos estudantes e profissionais de saúde

Abstract

Introduction: Eating disorders are behavioral syndromes that have a multifactorial etiology involving genetic, psychological, and sociocultural factors. The concern with body image and, as a consequence, the higher incidence of eating disorders has become a major burden among health professionals. Objective: Evaluate the distortion and dissatisfaction of body image and risk of eating disorder. *Methods*: Cross-sectional study, with 225 professionals and senior students in the health area, from the Southeast Region of Brazil. The distortion of body image and body dissatisfaction were measured by the scale of silhouettes and compared with the real body mass index. The risk of eating disorders was assessed using the Eating Attitude Test. Results: The prevalence of body image distortion of "perception of seeing oneself bigger" was 76.89%; 52.00% of participants wished to lose weight, with highest prevalence among women (78.63%). Some factors were determinant for these results, among them, being female, excess of body fat, increased waist circumference and BMI. When assessing the risk of developing ED, professionals who see themselves smaller (20.51%) and those who were satisfied with their body image (22.64%) have higher risk of develop ED. Conclusion: Distortion and dissatisfaction of body image were prevalent among health professionals, especially nutritionists. The waist circumference above or equal to 94 cm for men and 80 cm for women, and the increased BMI, increase the chances of distortion and dissatisfaction of body image.

Keywords: Body Image Dissatisfaction. Body Image Distortion. Eating Disorders. Waist Circumference. Body Mass Index.

Resumo

Introdução: Os distúrbios alimentares são síndromes comportamentais que têm uma etiologia multifatorial envolvendo fatores genéticos, psicológicos e socioculturais. A preocupação com a imagem corporal e, como consequência, a maior incidência de distúrbios alimentares, tornou-se um grande fardo entre os profissionais de saúde. Objetivo: Avaliar a distorção e insatisfação da imagem corporal e o risco de distúrbios alimentares. Métodos: Estudo transversal, com 225 profissionais e estudantes dos últimos dois anos de cursos da área de saúde, de um município da Região Sudeste do Brasil. A distorção da imagem corporal e a insatisfação corporal foram medidas pela escala de silhuetas e comparadas com o índice de massa corporal real. O risco de distúrbios alimentares foi avaliado por meio do Teste de Atitude Alimentar (EAT-26). Resultados: A prevalência da distorção da imagem corporal no nível "percepção de

ver-se maior" foi de 76,89%; 52,00% dos participantes desejavam perder peso, com a maior prevalência entre as mulheres (78,63%). Alguns fatores foram determinantes para estes resultados, entre eles, ser do sexo feminino, ter excesso de gordura corporal, maior circunferência da cintura e IMC. Ao avaliar o risco de desenvolver transtorno alimentar, os profissionais que se viam menores do que realmente são (20,51%) e aqueles que estavam satisfeitos com sua imagem corporal (22,64%) tinham o maior risco. *Conclusão*: Distorção e insatisfação com a imagem corporal foram altamente prevalentes entre os profissionais de saúde, especialmente os nutricionistas. A circunferência da cintura acima ou igual a 94 cm para homens e 80 cm para mulheres e o IMC elevado aumentaram as chances de distorção e insatisfação da imagem corporal.

Palavras-chave: Insatisfação da Imagem Corporal. Distorção da Imagem Corporal. Distúrbios Alimentares. Circunferência da Cintura. Índice de Massa Corporal..



INTRODUCTION

Eating disorders (ED) or eating behavior disorders (EBD) are behavioral syndromes that have a multifactorial etiology involving genetic, psychological, and sociocultural factors. These disorders are characterized as biopsychosocial since they interact with each other and start between the age groups corresponding to childhood and adolescence. 1,2

According to the American Psychiatry Association (APA),³ ED can be classified into anorexia nervosa (AN), bulimia nervosa (BN), and Binge Eating Disorder (BED), which are more frequent in young women. AN is characterized by severe dietary restrictions and/or prolonged fasting, caused by body image disorders, resulting in severe weight loss, which can lead to extreme thinness and even malnutrition. On the other hand, BN is characterized by alternation between food restriction, compulsion, and purging, with the maintenance of body weight or even a slight excess generally being observed due to the variability of caloric intake.4

The concern with body image and, as a consequence, the higher incidence of ED has become a major burden among health professionals and managers, due to the inadequate valuation imposed on these professionals according to their body image.^{5,6}

The distortion of body image, with feelings of depreciation, anger, and anxiety, generates the search for quick and inadequate mechanisms to achieve the desired body shape.⁷

According to Uzunian & Vitalle,² a high prevalence of ED has been described in university students in the health field, especially in Physical Education and Nutrition, and this indicator was associated with physical form, which in turn, was reported as an important attribute to achieve professional success. Given this context, this study aims to assess the factors associated with the risk of eating disorders, distortion, and dissatisfaction of body image among students and health professionals in a municipality in the southeast region of Brazil.

METHODS

Study population and data collection

This is an observational study with a cross-sectional design, carried out in a municipality in the southeast region of Brazil with the participation of 225 professionals and university students from the last two years of courses in the health area. The participants were informed about the research objectives and the methodology to be used and signed the Free and Informed Consent Form. This study was approved by the Human Research Ethics Committee of the Federal University of Viçosa (Ref. N ° 005/2011).

The sample comprised university students from Medicine, Nursing, Physical Education, Nutrition, Physiotherapy, Dentistry, Pharmacy, Biochemistry, Psychology, and related areas of the last two years of the course and professionals from the corresponding areas, aged between 20 and 59 years, from both the sexes. The exclusion criteria corresponded to the absence of anthropometric measurements of weight and height; being a lactating pregnant woman; individuals hospitalized or diagnosed with cancer in the past three years.

Data collection was carried out in two meetings with each participant. In the first meeting, questionnaires were delivered to assess the presence of changes in eating attitudes and, consequently, greater chances of developing ED through the Eating Attitudes Test (EAT-26) proposed by Garner and collaborators. 8 In the second meeting, the body image test was performed (silhouette scale validated for the Brazilian population in the study by Kakeshita and collaborators,⁹ and anthropometric and body composition assessments.

Anthropometric and body composition measures were measured using a scale with an accuracy of at least 0.1 kg; stadiometer with 0.1 mm precision; flexible and inelastic measuring tape, divided into centimeters and subdivided into

millimeters and horizontal tetrapolar electrical bioimpedance (BIA), using the Biodynamics model 310® apparatus, to obtain measurements of weight, height, waist circumference, BMI and percentage of body fat, respectively.

Weight was measured using a digital scale (Toledo © Brazil) with an accuracy of 50g, with the volunteer positioned in the center of the scale, with his back to the measurement indicator, with light clothing and barefoot, following the standardization described by the World Health Organization (WHO). Height was determined using a stadiometer (Seca 206 ®, Brazil, and Seca ® 713, Germany) with the patient standing, being read with an accuracy of 0.1 mm. The body mass index (BMI) was determined from the ratio between weight (kg) and height (m²) [(BMI = weight [kg]/height [m²]), based on the measurements taken by the researchers. This index was categorized according to WHO reference standards, had below 24.9 kg/m² are classified as underweight, BMI values above 18.5 kg/m² and below 24.9 kg/m² are classified as eutrophic, and individuals with BMI values equal to or above 25.0 kg/m² are classified as overweight. The waist circumference was measured with inelastic tape, divided into centimeters and subdivided into millimeters, in the middle point between the last rib and iliac crest and categorized according to the World Health Organization, he height for men and above or equal to 80cm for women. The 102cm for men and 88cm for women parameter was used to assess the substantial risk of metabolic complications. The fat percentage was assessed by bioimpedance (Biodynamics model 310®), and the values found were compared according to the following reference value, regardless of sex: <20% low-fat percentage; 20-30% eutrophic and greater than 30% excess body fat. Health

For the body image test, a scale with 15 images of silhouettes was used, according to the sex of the individuals. These scales were composed of figures represented in white, centered on a black background. Each figure corresponded to a BMI value that varied between 12.5 to 47.5 kg/m², with a constant difference of 2.5 points. The scales were presented to each participant in ascending order (first of their sex and then to the opposite sex) and asked to choose a silhouette, in the following sequence: "the figure that best represents your current size", "the figure that represents the size you would like to have", and "the figure that you would consider the ideal size for your proper sex in general". The cards of the opposite sex were presented and requested the choice of the "figure that would best represent the ideal for that sex in general", according to the methodology proposed by Kakeshita and collaborators. 9 The distortion of body image was estimated by the difference between the average BMI corresponding to the current image and the current measured BMI. Body dissatisfaction was calculated by subtracting the number corresponding to the silhouette that they wanted to have, by the silhouette of the current image. The raw values of the subtraction were considered for the analyses that aimed to assess the sense of distortion or dissatisfaction (more or less) and module values were considered when it was aimed to assess the sense of magnitude. The Eating Attitudes Test (EAT - 26) was used to assess the risk of developing ED, a selfadministered test used to identify abnormal eating patterns and, in turn, the risk of developing ED. This test has 26 questions with options for answers: 1) Never; 2) Rarely; 3) Sometimes; 4) Often; 5) Very often; 6) Always. Scores corresponding to the sum of each answer's points are assigned for the EAT classification (0 to 3). Above the total sum of 21 points, the individual is considered at risk for the development of ED.¹²

Statistical analysis

Statistical analyzes were performed using the Stata software, version 15.1. The variables were tested for normality by the Kolmogorov test and were worked out categorically and described as absolute and relative frequency, except for the BMI corresponding to the silhouette considered ideal, which was tested continuously. The differences between groups were tested using the Mann Whitney test.

For the comparison between exposures (EAT, distortion, and body image dissatisfaction) and the possible explanatory variables (profession, waist circumference, body fat percentage, and body mass index), a bivariate analysis was performed using the chi-square test of Pearson. The association between factors associated with the occurrence of distortion, and body image dissatisfaction (multivariate analysis) was expressed in Odds Ratio (OR) and



respective confidence intervals (95%CI), through logistic regression, using as reference individuals who see itself smaller and those who are satisfied with their body image. For all analyzes, a significance level of 5% was considered.

RESULTS

A total of 225 individuals were studied, 167 females (74.22%), with an average age of 28.96 ± 7.39 years and an average BMI of 22.67 ± 3.43 kg/m². Regarding nutritional status, 167 (74.22%) people were eutrophic, 47 (20.89%) were overweight, and only 11 (4.89%) were underweight, according to the WHO.¹⁰

Characterizing the sample according to the professions (Nutrition, Physical Education, and other health professions), there was greater participation of women among nutritionists, and greater involvement of men among physical education professionals. There was a relationship between age, risk of metabolic comorbidities (classified according to waist circumference), and body fat percentage, and the professions evaluated (Table 1).

The prevalence of body image distortion concerning the "perception of seeing oneself bigger" was 76.89%, which is higher among women (85.55%). About body image dissatisfaction, only 30.70% were satisfied with their current body, and 52.00% of participants wished to lose weight. The highest prevalence of the desire to lose weight was also found among women (78.63%).

Table 1. Characterization of the population regarding the profession among students and health professionals (n=225). Viçosa, MG, 2011.

	Health			
	Nutrition	Physical Education	Others	P-value
Sex n (%)				<0.001*
Male	9 (7.76)	34 (58.62)	15 (29.41)	
Female	107 (92.24)	24 (41.38)	36 (70.59)	
Age				<0.001*
< 27 years	68 (58.62)	34 (58.62)	7 (13.73)	
≥ 27 years	48 (41.38)	24 (41.38)	44 (86.27)	
Risk of metabolic complications				<0.001*
Without risk	89 (76.72)	52 (89.66)	32 (62.75)	
Incresed risk	16 (13.79)	5 (8.62)	7 (13.73)	
Substantially increased	11 (9.48)	1 (1.72)	12 (23.53)	
BMI (kg/m2)				0.070
Under weight	7 (6.03)	3 (5.17)	1 (1.96)	
Eutrophic	93 (80.17)	40 (68.97)	34 (66.67)	
Overweight	16 (13.79)	15 (25.86)	16 (31.37)	
Fat percentage				<0.001*
Low body fat	23 (19.83)	36 (62.07)	15 (29.41)	
Eutrophic	79 (68.10)	21 (36.21)	26 (50.98)	
Excess body fat	14 (12.07)	1 (1.72)	10 (19.61)	

^{*} Significant p values (<0.05) for the Chi - Pearson Square test

BMI: Body Mass Index

Table 2 shows the frequency of body image distortion and body dissatisfaction between professions, sex, and professional situation. Concerning the distortion of body image, there was a relationship between "seeing oneself smaller" and being a physical education professional. On the other hand, female sex was related to the fact of "seeing oneself bigger". No relationship was found between the professional situation (student or professional) and distortion, nor between variables and body dissatisfaction.

Table 2. Frequencies of body image distortion and body dissatisfaction regarding sex and profession, among students and health professionals (n=225). Viçosa, MG, 2011.

			Professions	rofessions		Sex		P value	Professional situation		P value
	Total n (%)	Nutrition	Physical Education	Others	_	Female	Male	_	Studant	Professional	
Distortion					0.002*			<0.001*			0.78
Sees smaller n (%)	52 (23.42)	18 (15.93)	23 (39.65)	11(21.57)		19 (11.38)	33 (56.89)		13 (24.53)	39 (22.67)	
Sees bigger n (%)	170 (76.58)	95 (84.07)	35 (60.34)	40(78.43)		148 (88.62)	25 (43.11)		40 (75.47)	133 (77.33)	
Dissatisfaction					0.42			0.107			0.74
Wishes to gain weight	39 (17.34)	21 (18.10)	12 (20.68)	6 (11.76)		24 (14.38)	15 (25.86)		11 (20.75)	28 (16.28)	
Satisfied	69 (30.66)	36 (31.04)	20 (34.49)	13(25.49)		51 (30.54)	18 (31.04)		16 (30.19)	53 (30.81)	
Wishes to lose weight	117 (52.00)	59 (50.86)	26 (44.83)	32(62.74)		92 (55.08)	25 (43.10)		26 (49.06)	91 (52.91)	

^{*} Significant p values (<0.05) for the Chi - Pearson Square test

When assessing the risk of developing ED (Table 3) and the distortion of body image, a significant relationship was observed between professionals who see themselves smaller than they are (20.51%) and the highest risk of developing ED. Furthermore, there was a significant relationship between professionals with the risk of developing ED, with predominance among those who were satisfied with their body image (22.64%). This relationship was similar to the participants that studies or have studied Physical Education (80.00%).

Table 3. Dissatisfaction and distortion of body image and risk of developing eating disorders in students and health professionals (n=225). Viçosa, MG, 2011.

	Eatting Attitudes Test			
	Risk of developing n (%)	No risk of developing n (%)	P value	
Body image distortion				
Professional			0.01*	
Sees smaller	8 (20.51)	31 (79.49)		
Sees bigger	15 (11.28)	118 (88.72)		
Student			0.69	
Sees smaller	2 (15.38)	11 (84.62)		
Sees bigger	8 (20.00)	32 (80.00)		
Courses				
Nutrition			0.64	
Sees smaller	6 (30.00)	24 (25.00)		
Sees bigger	14 (70.00)	72 (75.00)		
Physical Education			0.77	
Sees smaller	1 (20.00)	8 (15.09)		
Sees bigger	4 (80.00)	45 (84.91)		
Others			0.39	
Sees smaller	3 (37.50)	10 (23.26)		
Se vê maior	5 (62.50)	33 (76.74)		
Body image dissatisfaction				
Professional			<0.001*	
Satisfied	12 (22.64)	41 (77.36)		
Not satisfied	11 (9.24)	108 (90.76)		
Student			0.99	
Satisfied	0 (0.00)	16 (100.00)		
Not satisfied	10 (27.03)	27 (72.97)		
Courses				
Nutrition			0.71	
Satisfied	6 (30.00)	25 (26.04)		
Not satisfied	14 (70.00)	71 (73.96)		
Physical Education			0.04*	
Satisfied	4 (80.00)	18 (33.96)		
Not satisfied	1 (20.00)	35 (66.04)		
Others			0.67	
Satisfied	2 (25.00)	14 (32.56)		
Not satisfied	6 (75.00)	29 (67.44)		

^{*} Significant p values (<0.05) for the Chi - Pearson Square test

Some factors were determinant for body dissatisfaction and distortion of body image (Table 4). About body image distortion, it was associated with females (10.28 times more likely to see themselves bigger), regardless of age;



excess of body fat (72.00% less chance of seeing themselves bigger among those who had excess body fat) even after adjusting for age, but not after adjusting for sex; and waist circumference (6.82 times more likely to see themselves bigger), regardless of sex or age. Regarding body dissatisfaction, the factors associated with a greater chance of its development were the increased waist circumference (10.37 times greater chance of being dissatisfied in those at increased risk of metabolic comorbidities) and BMI (3.05 times greater chance to be dissatisfied in underweight or overweight individuals), regardless of sex or age.

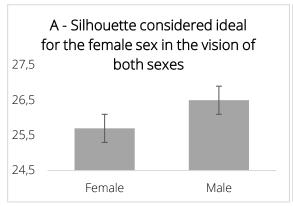
Table 4. Associated factors of body image dissatisfaction and body image distortion in students and health professionals (n=225). Viçosa, MG, 2011.

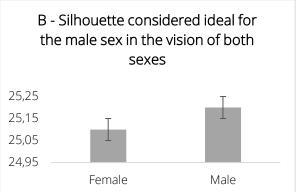
		Body image distortion		Body		
	Odds Ratio(IC95%)	Odds Ratio ^a (IC95%)	Odds Ratio ^b (IC95%)	Odds Ratio (IC95%)	Odds Ratio ^a (IC95%)	Odds Ratio ^b (IC95%)
Sex						
Male	1	-	1	1	-	1
Female	10.28 (5.07-20.8)	-	11.82 (5.62-24.84)	1.02 (0.53 -1.95)	-	1.03 (0.54 -1.98)
Course						
Others	1	1	1	1	1	1
Nutrition	1.49 (0.64-3.45)	0.75 (0.28-2.00)	1.83 (0.74-4.53)	0.76 (0.36 -1.59)	0.76 (0.35 – 1.64)	0.77 (0.35 – 1.70)
Physical Education	0.42 (0.18-0.97)	0.73 (0.27-1.93)	0.51 (0.20-1.25)	0.65 (0.28 – 1.49)	0.64 (0.27 – 1.51)	0.66 (0.27 -1.58)
Body fat						
Normal	1	1	1	1	1	1
Excess	0.28 (0.15-0.55)	0.57 (0.27-1.21)	0.28 (0.14-0.54)	0.80 (0.45 -1.41)	0.77 (0.42 – 1.43)	0.79 (0.45 – 1.41)
Risk of comorbidities						
No risk	1	1	1	1	1	1
Increased substantially Increased risk	6.82 (1.83-25.41)	7.51 (1.91-26.84)	6.69 (1.79-25.06)	10.37 (3.11 -34.62)	10.49 (3.13 – 35.07)	11.05 (3.26- 37.44
BMI						
Eutrophic	1	1	1	1	1	1
Non-eutrophic	1.39 (0.66-2.93)	4.81 (1.79-12.93)	1.36 (0.64-2.88)	3.05 (1.40 – 6.64)	3.38 (1.50 – 7.61)	3.03 (1.39 – 6.62)
Professional situation						
Student	1	1	1	1	1	1
Professionals	0.902 (0.439 – 1.85	4) 0.948 (0.458 – 1.960	0.876 (0.400 – 1.917)) 1.029 (0.527 – 2.012) 1.00 (0.510 – 1.967)	1.25 (0.609 – 2.599)

Note: BMI: Body Mass Index; IC95%: 95% Confidence Interval; Odds Ratio^a - Odds Ratio adjusted by sex; Odds Ratio^b Odds Ratio adjusted by age

The participants were asked about the silhouette that they considered ideal for women and men, and this was converted into an approximate BMI value. Concerning the male silhouette, men and women did not differ from what they considered an "ideal" silhouette. However, they differed about the female silhouette, and women believed that an "ideal" silhouette was smaller than in the male view (tab).

Figure 1. Comparison between the BMI proposed as ideal between females and males in a sample of health professionals.





DISCUSSION

The present study aimed to assess the risk of eating disorders, distortion, and dissatisfaction with body image among students and professionals from different health area courses. Similarly, some studies have identified body image distortion in health professionals and mainly in women. 13-18

Among the three groups of professions evaluated (Nutrition, Physical Education, and other courses in the health area), there was a great predominance of individuals who wished to lose weight, being more expressive among students and nutrition professionals.

Some professions, especially in Nutrition, are at high risk for developing eating disorders. 19,20 This is due to the pressure on the false perspective of professional success linked to body image. However, the results of this study show that this association seems to be more related to the female sex in the Nutrition course, than to the course itself. The same happens for physical education professionals, who were less dissatisfied and saw themselves smaller than they were. Similar to the result observed in the Nutrition course, this result seems to be more related to the predominance of males than to the course. The discontent of body image, in the case of women, can encourage the adoption of mechanisms for rapid weight loss and development of eating disorders such as anorexia and bulimia.²¹

In a study by Sopezki and Vaz,²² the relationship of self-esteem of women with ED was assessed and found that anorexia and bulimia nervosa in women were related to low self-esteem was accentuated by dissatisfaction and distortion of body image. In this study, most women saw themselves as bigger than they were. This can occur due to the overvaluation of thinness influenced by the media, which exalt the thin model, exerting a negative influence on eating behavior, especially in females.²¹

Sociocultural norms have linked the stereotype of the association between thinness and beauty among women, making a thin body considered ideal. On the other hand, the male beauty standard makes men desire a

bigger, voluminous, and muscular body²³ This is so frequent that when the silhouette considered ideal for women was evaluated, they declared that the perfect body for the female sex has a smaller BMI/silhouette than in the male opinion, as observed in this study.

The media has always been a significant influencer of beauty standards, which are previously disseminated by magazines or television, and nowadays by digital and social media. Lira and collaborators²⁴ assessed the relationship between media influence, the use of social networks, and body image dissatisfaction in teenage girls. They observed that most of them, even eutrophic, were dissatisfied with their body image and wished to have a smaller silhouette. Besides, this study pointed out that teenagers who accessed social media daily were more likely to be dissatisfied with their bodies, and concluded that although the media is not the only factor influencing body dissatisfaction, it seems to be the main and negative influencer of this public. Although the present study did not evaluate the use of social media and its impact, a similar result can be inferred, that even though the population studied is predominantly eutrophic, there was a high prevalence of distortion and dissatisfaction with body image.

Alvarenga and collaborators ²⁰ identified that 26.1% of Brazilian university students of the health field, present risk factors for the development of ED, with excessive concern with food and weight. In 2017, Nunes and collaborators, ²⁵ when reviewing the risk factors related to the development of ED, obtained as a result that the dissatisfaction and distortion of the body image, being female, studying Nutrition or Physical Education, to attend the university environment, being overweight or obesity and age are directly linked to an increased risk of developing ED. However, in the present study, this relationship was controversial, showing that there was a relationship between body satisfaction and risk of ED. This indicates that even in the absence of body dissatisfaction, individuals in the health area present risks for the development of ED, which may be related to the massive exposure to information related to food and health, generating greater concerns about it.^{5,26}

Likewise, about distortion, it was observed that professionals who saw themselves as smaller were associated with the risk of ED. The same was observed for physical education professionals, a course related to the risks of developing eating disorders, even though they had less body dissatisfaction. This contradicts our hypothesis and common sense that people who see themselves as bigger are more susceptible to develop AN and BN 2. However, it has to consider the emergence and increase of other ED cases, which have not yet been validated by APA, such as vigorexia, a body dysmorphic disorder characterized by constant dissatisfaction with the body, by which the desire to be bigger and more muscular is pronounced. 5,27-29 Another important finding of the study is that people with a fat percentage above the recommendation, are less likely to see themselves bigger than they are, reinforcing the concept of the presence of ED in satisfied individuals and even those who see themselves smaller than they are, as reported by Moreira and collaborators. 30

Concerning body image dissatisfaction and associated factors studied (sex, course, body fat percentage, waist circumference, BMI, and professional situation), the present study found that only the waist circumference and the BMI were associated with a higher risk of dissatisfaction with body image. This study's findings corroborate the results of a similar study.²³ This study found that people with altered BMI are 3.05 times more likely to be dissatisfied with their body image. Similarly, Martins and collaborators assessed the correlation between body image dissatisfaction and nutritional status from the BMI and body fat percentage.²³ They observed that body dissatisfaction increased as these parameters increased. In this sense, also individuals with a waist circumference above the recommendation (higher than or equal to 94cm for men and 80cm for women) are 10.37 times more likely to be dissatisfied with their body image. Silva and collaborators ³¹ had similar results in their research, with a similar age group sample.

The findings of the present study reinforce the idea that the assessment of the risk of developing ED in health professionals and students is critical since health professionals are a susceptible population to distortions and dissatisfaction body image. This can be reflected not only about personal risk but also in the advice given to their patients.



CONCLUSION

Data from the present study allow us to conclude that the greatest distortion of body image and body dissatisfaction occurs among Nutrition professionals and other health professions, concomitantly with women, that see themselves bigger, unlike men, who see themselves smaller than they are. Besides, there is a greater risk of developing eating disorders among professionals in the evaluated courses. The waist circumference (above or equal to 94cm for men and 80cm for women), and higher BMI, increase the chances of body image distortion and dissatisfaction in this population.

These findings highlight the importance of working on the individual/food/body relationship in the curriculum components of health courses to reduce the risk of eating disorders in this population and the respective patients.

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Lopes LFS and Coletro HN - participated in analysis and interpretation of data, and writing and review of the paper; Guimarães NS participated in analysis of data and review of the paper; Chaves LO and Vidigal FC participated in analysis of data and review of the paper; Bressan J, coordination, design study, management of financial resources, data analysis and interpretation, and review of the paper; Carraro JCC - coordination of the present study, design study, management of financial resources, data analysis and interpretation, and review of the paper.

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