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Risco de transtorno alimentar e preocupações com a imagem corporal em mulheres com deficiência visual

Eating disorder risk and body image concerns in visually impaired women

Abstract

Visually impaired individuals may have difficulty perceiving their bodies and may develop body image and eating disorders. The main purpose of this original research was to assess body image concerns and risk behaviors for eating disorders (ED) in visually impaired women. The Body Shape Questionnaire (BSQ), Body Checking Questionnaire (BCQ) and Eating Attitudes Test-26 (EAT-26) were used, in addition to determining nutritional status and collecting information on physical exercise, autonomy in the acquisition of supplies and preparation of meals, and the use of social media. Thirty-seven visually impaired women participated in the study, with a mean age of 41.4 ± 13.9 years. It was observed that 78.3% of the participants were overweight, 23.3% had some degree of body image dissatisfaction, and 45.9% had ED risk. Half of the women with low vision had risky behaviors for ED and a mean score on the EAT-26 of 23.1 ± 14.4. In the group with total blindness, direct correlations were observed between the EAT-26 and BCQ (r=0. 542; p=0.013) and BSQ and BCQ (r=0.738; p<0.001) whereas in the low vision group, direct associations were observed between the EAT-26 and BSQ (r=0.581; p=0.018), EAT-26 and BCQ (r=0.643; p=0.007), and BSQ and BCQ (r=0.568; p=0.002). Risk behaviors for ED and low body dissatisfaction were identified among visually impaired women. Further studies are needed to expand the knowledge on this subject in this population.

Keywords: Vision disorders. Visually impaired person. Body image. Body dissatisfaction. Eating disorder.

Resumo

Indivíduos com deficiência visual podem ter dificuldades para perceber seus corpos e acabar desenvolvendo questões em relação a imagem corporal e perturbações no comportamento alimentar. O objetivo principal deste trabalho original foi avaliar a presença da (in)satisfação com a imagem corporal e a presença de comportamentos de risco para transtornos alimentares (TA) em mulheres com deficiência visual. Foram aplicados o *Body Shape Questionnaire* (BSQ), *Body Checking Questionnaire* (BCQ) e *Eating Attitudes Test* 26 (EAT-26), além da determinação do estado nutricional e coleta de informações sobre exercícios físicos, autonomia na aquisição de insumos e

preparo de refeições e uso de mídias sociais. Participaram da pesquisa 37 mulheres com deficiência visual e média de idade de 41,4 ± 13,9 anos. Foi observado que 78,3% têm excesso de peso, 23,3% das participantes apresentaram algum grau de insatisfação com a imagem corporal e 45,9% apresentaram comportamentos de risco para TA. Metade das mulheres com baixa visão apresentou comportamentos de risco para TA e uma pontuação média no EAT-26 de 23,1 ± 14,4. No grupo com cegueira total, associações diretas foram observadas entre o EAT-26 e BCQ (r=0,542; p=0,013)e BSQ e BCQ (r=0,738; p<0,001); e no grupo com baixa visão, associações diretas entre EAT-26 e BSQ (r=0,581; p=0,018), EAT-26 e BCQ (r=0,643; p=0,007) e BSQ e BCQ (r=0,568; p=0,002). A presença de comportamentos de risco para transtornos alimentares e baixa insatisfação corporal foi identificada entre as mulheres com deficiência visual. Há necessidade de mais estudos que possam ampliar o conhecimento sobre o tema nessa população.

Palavras-chave: Deficiência visual. Portadores de deficiência visual. Imagem corporal. Insatisfação corporal. Transtorno Alimentar.

INTRODUCTION

Around 2.2 billion people worldwide live with visual impairment or blindness.[1] Studies indicate that women of all ages are at greater risk of visual impairment than men, mainly because they have a longer life expectancy and due to lack of access to health services in economically disadvantaged groups. Therefore, women and girls represent 55% of visually impaired people worldwide.[2,3]

Visually impaired people are "people who are totally unable to see, and those in whom vision impairment is at levels that disable them from performing routine tasks, despite having certain degrees of residual vision".[2] The most commonly used classifications involve the age of onset of disability (congenital or acquired visual impairment), and level of visual acuity (blind and low-vision individuals).[2,3]

The construction of body image (BI) begins in childhood. During this phase, exploration of the body occurs, providing experiences that enable human development and BI formation.BI is a multifaceted and social phenomenon and is defined as the figure that an individual constructs based on the size, contour, and shape of their body, including their feelings about it.[4]

Body image is divided into two dimensions: perceptual and attitudinal. The perceptual dimension refers to the mental picture of our body and the accuracy with which an individual is able to assess the total body size or some physical dimension. The attitudinal dimension refers to behaviors, feelings, thoughts, and beliefs related to the body. Impairment of BI dimensions leads to distortions in body size estimation and negative evaluations, such as shame and disgust, avoidance or checking behavior, and body dissatisfaction.[5]

For visually impaired people, BI is formed through experiences and sensations involving the remaining senses.[6] This disability may lead to limitations in the way people perceive their bodies, which can lead to BI issues.[7] Some studies have reported that this population has difficulties perceiving their bodies in terms of physical and motor aspects, as well as having a distorted perception of their body schema.[6–8] The inability to see oneself and others can stimulate the development of distorted body images and eating disorders (ED), especially in women.[9,10]

Body dissatisfaction can be associated with low self-esteem, stress, social isolation, or even depression, regardless of age, sex, and nutritional status.[11] However, greater dissatisfaction is observed in women, who tend to compare themselves with others and worry more about their body appearance.[12,13] This can contribute to the emergence of ED in susceptible individuals. Body image disorders are often associated with dysfunctional eating behaviors.[14–16]

Visually impaired women also face pressure from society, family, and friends to meet the ideal standards of beauty imposed and demanded by sighted society, which can contribute to BI dissatisfaction, and, consequently, changes in eating behavior.[17] Compared with visually impaired men, women have reported greater dissatisfaction with their BI.[18] In addition to the pressure to achieve aesthetic standards, visual impairment can trigger or accentuate various psychological problems, which can contribute to the development and maintenance of ED.[10,19]

Considering the relevance of the topic and the scarcity of studies carried out with this population, the aim of this study was to assess concerns with BI and the presence of risk behaviors for ED in visually impaired women.

METHODS

Population and study design

This descriptive observational cross-sectional study was conducted at the Escola Municipal Especializada Doutor Hilton Rocha (Volta Redonda) e Instituto Benjamin Constant (Rio de Janeiro), in the state of Rio de Janeiro, between July and December 2022, with visually impaired women, aged ≥ 18 years and < 60

years. Both institutions specialize in the education and care of blind and low-vision people of all ages, contributing to their social reintegration and achievement of autonomy.

As these were visually impaired women, the aim of the study was explained when they were approached. For those who agreed to participate, the informed consent form was read by the researchers involved, and any doubts were simultaneously clarified. Each participant received a copy of the consent form, signed by the researcher in charge. The sampling was non-probabilistic. This study was approved by the Human Research Ethics Committee of the Centro Universitário de Volta Redonda (UniFOA) under CAAE registration number 58872122.3.0000.5237.

The questions and respective answer options for all the questionnaires mentioned below were carefully read by the researchers, enabling the participants to respond appropriately.

Nutritional status

Body weight was measured using a digital scale and height was measured using a stadiometer attached to the scale. Weight (kg) and height (m) were used to determine the body mass index (BMI). Nutritional status was classified according to the cutoff points proposed by the World Health Organization (2000).[20]

Body image concerns

The Body Shape Questionnaire - BSQ[21] was used in the version translated and validated for theBrazilian population.[22] A score ≤110 corresponds to the absence of body dissatisfaction; >110 and ≤138 correspond to mild dissatisfaction; >138 and ≤167 correspond to moderate dissatisfaction, and >167 correspond to severe dissatisfaction. It was necessary to adapt question 29 of the BSQ, "Does seeing your reflection (for example, in a mirror or store window) make you feel bad about your physique?" to "Does perceiving your body make you feel bad about your physique?".

Body checking behaviors

The Body Checking Questionnaire - BCQ[23] translated and validated for the Brazilian population[24] was used. The total score ranged from 12 to 60. The higher the score, the more checking behaviors occur. It was necessary to replace the verb "see" with "perceive" in questions 7 and 11 of the BCQ.

Eating disorders risk

The Eating Attitudes Test 26 (EAT-26)[25] was used in the version translated and validated for the Brazilian population.[26] A score ≥ 21 (positive score) corresponded to the presence of ED risk.

In addition to the questionnaires mentioned above, the following information was collected: current age, type of visual impairment (congenital or acquired), level of visual acuity (low vision or total blindness), whether they exercised, whether they had autonomy in the purchase of supplies and/or preparation of daily meals, and whether they used social media. In the case of women who reported acquired visual impairment, information was collected on changes in feelings towards the body.

Statistical analysis

After confirming normal distribution, continuous variables were presented as means and standard deviations (SD). Associations between numerical variables were assessed using Pearson's correlation coefficient (r). Differences between means were determined using the Student's t-test. Categorical variables were presented as absolute and relative frequencies (%). The Chi-Square test (χ^2) was used to compare frequencies. The level of statistical significance adopted was 5%, and values of $p<0.05$ were considered statistically significant. The Statistical Package for the Social Sciences (SPSS) software version 21.0 was used.

RESULTS

Thirty-seven visually impaired women with a mean age of 41.4 ± 13.9 years were included. The mean BMI observed (31.0 ± 7.3 kg/m²) was consistent with obesity, which was the most prevalent classification (43.2%; n=16). When adding up the percentages of overweight and obesity, most participantswere overweight (78.3%; n=29) (Table 1).

Table 1. Description of visually impaired women (n=37) in relation to age, BMI, type of visual impairment and level of visual acuity. Volta Redonda and Rio de Janeiro, Rio de Janeiro, 2022.

	Mean ± SD
Age (years)	41.4 ± 13.9
BMI (kg/m²)	31.0 ± 7.3
	% (n)
BMI classification	
Healthy Weight	21.6 (8)
Overweight	35.1 (13)
Obesity	43.2 (16)
Type of visual impairment	
Congenital	62.2 (23)
Acquired	37.8 (14)
Level of visual acuity	
Low vision	44.4 (16)
Total blindness	55.6 (20)

BMI: Body Mass Index; Numerical variables presented as means and standard deviations (SD); Categorical variables presented as relative (%) and absolute frequencies.

Regarding the type of visual impairment, 62.2% (n=23) had congenital impairment and 37.8% (n=14) had acquired impairment (Table 1). The mean age of patients with acquired disabilities was 32 ± 13.3 years. When asked about changes in their feelings about their body after acquiring the disability, 35.7% (n=5) denied that there had been such changes, while 64.2% (n=9) described changes in their feelings about their body after acquiring the disability:33.3% (n=3) reported feeling sad, 22.1% (n=2) reported other feelings but could not describe them, 22.2% (n=2) reported feeling fat, ugly and insecure, 11.1% (n=1) reported feeling worried about the appearance of signs that they could not identify by touch and 11.1% (n=1) reported feeling disproportionate and worthless.

Concerning the level of visual acuity, 55.6% (n=20) were women with total blindness, and 44.4% (n=16) had low vision. Of the total blind population, 65% (n=13) had congenital visual impairment and 35% (n=7) had

acquired visual impairment, while in the low-vision population, 56.3% (n=9) had congenital and 43.8% (n=7) had acquired impairment (Table 1).

More than half of the participants did not exercise regularly (51.4%; n=19), reported having autonomy in acquiring supplies and preparing meals (59.5%; n=22), and almost all used social media (97.3%; n=36), particularly Instagram (42.3%; n=11).

With regard to the investigation of body image concerns, the mean BSQ score was consistent with the absence of body dissatisfaction, but 23.3% (n=9) of the participants had some degree of body dissatisfaction (mild or moderate). With respect to EAT-26, the mean score was consistent with the presence of risk behaviors for ED, which were present in almost 46% (n=17) of the women (Table 2).

Table 2. Description of visually impaired women (n=37) in relation to ED risk, BI concerns and body checking behaviors. Volta Redonda and Rio de Janeiro, Rio de Janeiro, 2022.

	Mean ± SD
EAT-26	21.1 ± 11.4
BSQ	82.7 ± 34.6
BCQ	23.2 ± 9.2
	% (n)
EAT-26 classification	
With risk behaviors	45.9 (17)
Without risk behaviors	54.1 (20)
Body image concerns	
No dissatisfaction	75.7 (28)
Mild dissatisfaction	18.9 (7)
Moderate dissatisfaction	4.4 (2)

EAT-26: Eating Attitudes Test 26; BSQ: Body Shape Questionnaire; BCQ: Body Checking Questionnaire; ED: Eating Disorders; Numerical variables presented as means and standard deviations (SD); Categorical variables presented as relative (%) and absolute frequencies.

To identify whether a low level of visual perception is capable of interfering with body image, eating behavior and body checking, the sample was stratified into women with low vision (they can see light, shapes, and objects) and those with total blindness. One of the participants did not provide her level of visual acuity, therefore, stratified analyses were performed on a total of 36 women.

Most participants with low vision, as well as those with total blindness, were overweight according to the BMI classification (81.3%; n=13 and 75%; n=15, respectively), reported autonomy in purchasing supplies and preparing meals (62.5%; n=10 and 55%; n=11, respectively), and used social media (100%; n=16 and 95%; n=19, respectively). On the other hand, the majority of the low-vision group exercised regularly (68.8%; n=11), whereas most of the total blindness group did not exercise regularly (70%; n=14).

The mean BSQ score in each group was consistent with the absence of body dissatisfaction. However, 31.5% (n=5) of the women with low vision had a score compatible with some degree of body dissatisfaction (mild or moderate), while in the total blindness group, this frequency corresponded to 15% (n=3). With regard to body checking behaviors, the mean score for the low vision group was 25.0 ± 10.0 and the mean score for the participants with total blindness was 21.8 ± 8.3.

When comparing age, BMI, and the mean scores of the BSQ, BCQ, and EAT-26 between the groups, there was no statistically significant difference. However, it is important to highlight that the mean EAT-26 scores were consistent with ED risk in the low vision group (EAT-26 = 23.1 ± 14.4) and absence of ED risk in the total blindness group (Table 3).

Table 3. Description of participants with low vision and total blindness in relation to age, BMI, ED risk, BI concerns, body-checking behaviors, autonomy in the acquisition of supplies/preparation of meals, physical exercise, and social media use. Volta Redonda and Rio de Janeiro, Rio de Janeiro, 2022.

	Low Vision (n=16)	Total Blindness (n=20)	
	Mean ± SD		p-value*
Age (years)	40.5 ± 15.8	41.3 ± 12.5	0.862
BMI (kg/m²)	30.1 ± 6.2	31.3 ± 8.0	0.688
EAT-26	23.1 ± 14.4	18.8 ± 8.1	0.295
BSQ	86.0 ± 34.0	77.9 ± 34.7	0.488
BCQ	25.0 ± 10.6	21.8 ± 8.3	0.332
	% (n)		p-value**
BMI classification			
Overweight	81.3 (13)	75.0 (15)	0.709
Not overweight	18.8 (3)	25.0 (5)	
EAT-26 classification			
With risk behaviors	50.0 (8)	40.0 (8)	0.737
Without risk behaviors	50.0 (8)	60.0 (12)	
BI concerns			
BI dissatisfaction (mild or moderate)	31.3 (5)	15.0 (3)	0.422
No BI dissatisfaction	68.8 (11)	85.0 (17)	
Autonomy in the purchase of supplies/preparation of meals			
Yes	62.5 (10)	45.0 (9)	0.741
No	37.5 (6)	55.0 (11)	
Regular exercise			
Yes	68.8 (11)	30.0 (6)	0.042
No	31.3 (5)	70.0 (14)	
Social media use			
Yes	100.0 (16)	95.0 (19)	1
No	0.0 (0)	5.0 (1)	

BMI: Body Mass Index; EAT-26: Eating Attitudes Test 26; BSQ: Body Shape Questionnaire; BCQ: Body Checking Questionnaire; ED: Eating Disorders; Numerical variables presented as means and standard deviations (SD); Categorical variables as relative (%) and absolute frequencies; *T-test, p-value < 0.05 considered statistically significant; **Chi-square (χ^2), p-value<0.05 was considered statistically significant.

Furthermore, the low vision group was more physically active than the total blindness group (68.8%; n=11 vs. 30.0%; n=6; p=0.042), indicatingthat a higher level of visual perception influences regular exercise (Table 3).

Table 4 shows the correlations between age; BMI; and BSQ, BCQ, and EAT-26 mean scores. There were no correlations between BMI and other variables, and there were no correlations between age and other variables in either group. In the total blindness group, the EAT-26 mean score showed a direct correlation with the BCQ mean score (r=0.542; p=0.013), which indicates that more risky behaviors for ED may be

accompanied by more body checking. The BSQ mean had a strong direct correlation with the BCQ (r=0.738; p<0.001), showing that the greater the body dissatisfaction, the more body-checking behaviors occur.

In the low vision group, a correlation was identified between the EAT-26 and BCQ (r=0.643; p=0.007) and between the EAT-26 and BSQ (r=0.581; p=0.018), demonstrating that higher ED risk was associated with greater body dissatisfaction and body checking behaviors. In addition, BSQ and BCQ were directly associated, indicating that greater body dissatisfaction is accompanied by more body-checking behaviors (r=0.568; p= 0.022) (Table 4)

Table 4. Correlations between age, BMI, EAT-26, BSQ, and BCQ mean scores in the total blindness and low vision groups. Volta Redonda and Rio de Janeiro, Rio de Janeiro, 2022.

Total Blindness										
	Age		BMI		EAT-26		BSQ		BCQ	
	r	p-value	r	p-value	r	p-value	r	p-value	r	p-value
Age	-	-	-0.189	0.424	-0.104	0.663	0.005	0.983	-0.222	0.346
BMI	-0.189	0.424	-	-	-0.132	0.578	0.358	0.121	0.170	0.474
EAT-26	-0.104	0.663	-0.132	0.578	-	-	0.394	0.086	0.542	**0.013**
BSQ	0.05	0.983	0.358	0.121	0.394	0.086	-	-	0.738	**0.000**
BCQ	-0.222	0.346	0.170	0.474	0.542	**0.013**	0.738	**0.000**	-	-
Low Vision										
	Age		BMI		EAT-26		BSQ		BCQ	
	r	p-value	r	p-value	r	p-value	r	p-value	r	p-value
Age	-	-	-0.022	0.936	0.325	0.219	-0.042	0.878	-0.153	0.571
BMI	-0.022	0.936	-	-	0.112	0.680	0.461	0.072	0.115	0.671
EAT-26	0.325	0.219	0.112	0.680	-	-	0.581	**0.018**	0.643	**0.007**
BSQ	-0.042	0.878	0.461	0.072	0.581	**0.018**	-	-	0.568	**0.022**
BCQ	-0.153	0.571	0.115	0.671	0.643	**0.007**	0.568	**0.022**	-	-

BMI: Body Mass Index; EAT-26: Eating Attitudes Test 26; BSQ: Body Shape Questionnaire; BCQ: Body Checking Questionnaire; r: Pearson's correlation coefficient, p-values < 0.05 indicate statistical significance.

DISCUSSION

Body image is constructed according to perceptions, ideas, and emotions regarding the body and its experiences. Body image dissatisfaction is a common feature among women and is associated with the emergence of ED risk. The aim of this study was to assess whether relationships with their bodies and eating habits are affected by visual impairment.

When analyzing the results of all participants, there was a high frequency of women classified as overweight or obese and a low frequency of women dissatisfied with their BI (mild or moderate dissatisfaction). Nevertheless, the EAT-26 mean score was higher than 21, and almost 46% of the participants presented ED risk. Previous research has shown the presence of inadequate eating attitudes among visually impaired women; however, compared to sighted women, they showed significantly lower levels.[17,27]

Regarding BI dissatisfaction, these results are similar to those of studies on visually impaired individuals, which have identified low BI dissatisfaction.[17,18,27–29] Previous research reported that visually impaired people

perceive and experience their bodies in a more natural way, which suggests that they feel less pressured by an ideal body model pre-established by society, in contrast to sighted people.[30] However, studies have shown that particular characteristics of visual impairment, such as assumptions about one's own physical appearance and that of others, and the absence of corrective visual feedback, can make these people more susceptible to severe BI disorders, which are important factors in the onset and maintenance of ED.[10,31]

When analyzing the low vision and total blindness groups in relation to the EAT-26 mean score, it was possible to identify in 50% of women with low vision the presence of risk behaviors for ED. In the total blindness group, the frequency corresponding to ED risk reached 40%. As for body dissatisfaction, more than 30% of women with low vision had some degree of dissatisfaction, while this percentage was 15% in women with total blindness. In a similar study of women with congenital or acquired blindness and sighted women, a significant linear trend was found: the lower the visual impairment, the greater the body dissatisfaction.[17] The occurrence of ED in the visually impaired population as a result of BI dissatisfaction is less frequent. However, studies have described BI disorders and the occurrence of ED in this population.[9,10,31–33] It has been reported that individuals with visual impairment and ED develop this disorder to compensate for their own disability.[32]

In terms of their autonomy in acquiring supplies and preparing meals, no difference was found between participants with low vision and those with total blindness. Of all participants, 59.5% reported that they were independent when it came to acquiring supplies and preparing meals. These findings differ from those of some studies, which show that daily living activities, such as shopping and preparing meals, are major obstacles for visually impaired people, requiring the support of others,[34,35] which can affect nutritional status and contribute to obesity or malnutrition in this population.[34]

With regard to regular physical exercise, the group with total blindness exercised less than the low-vision group. This result indicated that greater vision influences the frequency of physical exercise. These results are in line with the findings of previous studies, which found that the greater the severity of visual impairment, the less physical activity is performed.[36,37] Some studies have indicated that visually impaired women perceive more barriers to physical exercise. They report a lack of physical ability and feel affected by the perception of negative social stereotypes in relation to their disability.[38–40]

More than 70% of the participants were overweight and 51.4% did not exercise regularly. Exercise helps increase self-confidence and self-esteem in the visually impaired women, since this disability can lead to less independence, less ability to carry out daily activities and dissatisfaction with life, which are factors that favor the development of overweight and obesity.[28,41] Physical inactivity in the visually impaired population also contributes to negative judgments about their bodies.[36]

Another result worth noting is that almost all participants used social media, particularly Instagram. Research have found that visually impaired people are not directly influenced by visual media, as their disability reduces the extent to which their bodies can be compared with those disseminated by the media.[17,27] However, exposure to non-visual media and conversations about physical appearance are important sources for disseminating sociocultural ideals of thinness, success and feminine beauty, which contribute to the development of ED in visually impaired women.[9] In addition, like sighted women, visually impaired women are susceptible to internalizing harmful messages related to socio cultural standards of attractiveness, and it is assumed that they use language as a tool to adopt contemporary standards of appearance and thinness.[42] A case report of anorexia nervosa in a girl with total blindness showed that, although she could not see the people around her, the standard of "being thin" was adopted as an important aspect of her self-concept.[33]

When analyzing the correlations, it was found that more risk behaviors for ED were accompanied by more body checking in both groups, making it possible to point to the use of these behaviors as a way of verifying bodily changes, based on the adoption of abnormal eating patterns. The use of frequent tactile body checking as a way of controlling weight and noticing bodily advances has already been demonstrated in visually impaired women with ED, who practiced dietary restriction, self-induced vomiting, and diuretic abuse.[9,10,33] Moreover, correlations indicating that more BI dissatisfaction was accompanied by greater body-checking behaviors were found in both groups. In participants with low vision, greater image dissatisfaction was associated with higher EAT-26 score. Such associations among sighted women are well-established.[43,44] No associations were found between BMI and risk behaviors for ED or BI dissatisfaction, contrary to previous studies conducted with sighted individuals.[45,46] The literature on visually impaired people is scarce.

This study has some limitations. As this was a cross-sectional study, causality could not be assessed. The number of participants was small, but it was a very specific group and not very accessible. There are no specific instruments to assess risk behaviors for ED and body image concerns among visually impaired. However, this limitation was overcome by adapting the specific items to the questionnaire. An additional difficulty encountered was the lack of current scientific literature on the subject, which limited discussion of the results. However, it is important to point out that this is one of the few studies to assess BI and eating behavior of visually impaired women, a group that has not been widely studied.

CONCLUSION

The risk of eating disorders is high among visually impaired women. However, these women had lower BI dissatisfaction levels. Among women with low vision, the EAT-26 score indicated ED risk, unlike participants with total blindness. There was also a tendency for those with low vision to have a higher frequency of BI dissatisfaction. These results point to the possibility that the greater ability to visualize one's own body may be accompanied by greater dissatisfaction and more risky behaviors for ED. As among sighted women, greater dissatisfaction with their own BI is accompanied by more body-checking behaviors and risk behaviors for ED. Additionally, greater BI dissatisfaction is associated with more risky behaviors for ED, especially among women with low vision.

Finally, we highlight the need to expand knowledge about body dissatisfaction and ED risk in the visually impaired population.

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Silva SEAF participation in the conception and idealization of the study design, data collection, writing, review and approval of the final version; Abreu JD participation in the data collection, review and approval of the final version; Portugal MRC participation in the design, data collection and analysis, writing, translation, revision and approval of the final version.

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