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Symptoms of anxiety and depression among individuals with visual impairment in Brazil: a cross-sectional study

Sintomas de ansiedade e depressão em pessoas com deficiência visual no Brasil: um estudo transversal

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KEYWORDS:

Visual impairment; Anxiety; Depression; Mental health; Rehabilitation; Brazil.

ABSTRACT

Purpose: To investigate the prevalence of anxiety and depression symptoms and their associated sociodemographic and clinical factors among individuals with visual impairment in Brazil. **Methods:** This cross-sectional study included 730 individuals aged 18-80 years with visual impairment. Symptoms of anxiety and depression were assessed using the Hospital Anxiety and Depression Scale. Associations between psychological symptoms and sociodemographic and clinical characteristics, including severity and duration of visual impairment and participation in rehabilitation programs, were analyzed. **Results:** Clinically significant anxiety symptoms were identified in 56% of participants, whereas depressive symptoms were observed in 40.8%. Anxiety symptoms were significantly associated with female sex, widowhood, low vision, a recent diagnosis of visual impairment, and lack of participation in rehabilitation. Depressive symptoms were associated with female sex, widowhood, older age, disability retirement, blindness, duration of visual impairment between 5 and 10 years, and absence of rehabilitation. **Conclusions:** Anxiety and depressive symptoms were highly prevalent among individuals with visual impairment. Anxiety was more common among participants with less severe and more recently diagnosed visual impairment, whereas depression was associated with more severe and longer-standing impairment. Participation in rehabilitation appeared to be protective against both conditions, underscoring the importance of expanding access to rehabilitation services and integrating mental health care into vision rehabilitation programs.

PALAVRAS-CHAVE:

Deficiência visual; Ansiedade; Depressão; Saúde mental; Reabilitação; Brasil.

RESUMO

Objetivos: Analisar a prevalência de ansiedade e depressão e seus fatores sociodemográficos e clínicos associados em pessoas com deficiência visual no Brasil. **Métodos:** Estudo transversal realizado com 730 pessoas com deficiência visual, entre 18 e 80 anos. Os sintomas de ansiedade e depressão foram avaliados pela Escala Hospitalar de Ansiedade e Depressão (HADS). Foram investigadas associações com variáveis sociodemográficas e clínicas, incluindo gravidade da deficiência visual, tempo de diagnóstico e participação em reabilitação. **Resultados:** Sintomas clinicamente relevantes de ansiedade foram identificados em 56% dos participantes e sintomas depressivos em 40,8%. A ansiedade associou-se ao sexo feminino, viuvez, baixa visão, diagnóstico recente e ausência de reabilitação. A depressão associou-se ao sexo feminino, viuvez, idade mais avançada, aposentadoria por invalidez, cegueira, tempo de deficiência entre cinco e dez anos e ausência de reabilitação. **Conclusões:** Sintomas sugestivos de ansiedade e depressão apresentaram elevada prevalência entre pessoas com deficiência visual. A ansiedade predominou em casos menos graves e de início recente, enquanto a depressão esteve associada à maior gravidade e duração da deficiência. A reabilitação mostrou-se fator protetivo, reforçando a necessidade de ampliar seu acesso e integrar estratégias de saúde mental ao cuidado da deficiência visual.

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INTRODUCTION

Visual impairment, defined by the World Health Organization (WHO) as an alteration of visual function resulting from anatomical, physiological, or optical factors affecting the visual system and its functions, represents a major global health condition[1]. The WHO classifies visual impairment into two main categories: blindness, characterized by best-corrected visual acuity in the better eye of less than 6/120 or a visual field of less than 10°; and low vision, corresponding to best-corrected visual acuity between 6/18 and 6/120 or a visual field between 10° and 20°[2,3]. This distinction is important because the needs and experiences of individuals who are blind and those with low vision may differ significantly, substantially influencing their interaction with the environment and their psychosocial well-being[4].

The main causes of visual impairment worldwide include unoperated cataract, uncorrected refractive errors, age-related macular degeneration, glaucoma, and diabetic retinopathy[1,5,6]. The prevalence of visual impairment is higher in low- and middle-income regions, where access to preventive and treatment services is limited, and is estimated to be up to four times higher than that in high-income regions[1]. In Brazil, the 2022 Demographic Census conducted by the Instituto Brasileiro de Geografia e Estatística reported that 7.9 million Brazilians had great difficulty seeing, highlighting the magnitude of this condition in the country[7,8].

Vision loss has a profound impact on individuals' quality of life by limiting autonomy in activities of daily living, mobility, social participation, and engagement in productive activities[9,10]. Studies have shown that people with visual impairment have significantly lower quality-of-life scores than the general population[11-13]. This reduction in quality of life is frequently associated with an increased risk of developing mental disorders, particularly anxiety and depression[14,15].

A systematic review and meta-analysis revealed that the prevalence of depression among people with visual impairment is approximately 27%, considerably higher than the 17% reported in the general population[16]. Similarly, the prevalence of anxiety disorders is also higher, with studies indicating that individuals with visual impairment are twice as likely to develop an anxiety disorder as those without visual impairment[17,18].

The association between visual impairment and mental disorders is multifactorial, involving not only the practical difficulties imposed by sensory loss but also the psychosocial effects of stigma, social isolation, and loss of social roles. Adaptation to vision loss is a complex and individualized process that may be influenced by the severity and cause of the impairment, duration of the condition, access to rehabilitation services, and perceived social support[19,20]. Rehabilitation has been associated with a lower prevalence of anxiety and depressive symptoms, as well as better mental health outcomes and quality of life, by promoting the development of adaptive skills and social reintegration[21,22]. However, access to these services remains a challenge for a large proportion of the population with visual impairment in Brazil.

Despite the robust international literature on this topic, the Brazilian context may differ considerably from that of developed countries. Brazil has marked regional inequalities that directly affect the distribution and quality of healthcare services. Access to visual rehabilitation is uneven and is often concentrated in large urban centers, placing individuals in peripheral and rural regions at a disadvantage. Furthermore, socioeconomic disparities and structural limitations of the Unified Health System (Sistema Único de Saúde) in providing continuous and comprehensive visual rehabilitation may further increase the psychosocial vulnerability of these individuals. Understanding these local characteristics is essential for contextualizing the impact of visual impairment on the mental health of the Brazilian population[22].

Given the high prevalence of visual impairment in Brazil and its impact on mental health and quality of life, studies investigating the prevalence of anxiety and depression and their associated factors in this population are warranted. Such evidence is important for informing public policies and developing more effective interventions to promote mental health and psychosocial well-being among people with visual impairment.

Therefore, this study aimed to investigate the prevalence of anxiety and depression symptoms among individuals with visual impairment in Brazil and to analyze the associations of these outcomes with sociodemographic and clinical variables, including age, sex, income, education, marital status, geographic region, employment status, severity of vision loss, time since the onset of impairment, cause of impairment, and participation in a rehabilitation program.

METHODS

This quantitative, cross-sectional, analytical, and observational study was conducted to investigate the prevalence of anxiety and depression symptoms and their associated factors among individuals with visual impairment in Brazil. The study was approved by the Research Ethics Committee of H.Olhos Paulista (Approval No. 7.814.027).

Sample

The sample consisted of 730 participants with self-reported visual impairment (blindness or low vision) residing across all geographic regions of Brazil. Participants were recruited using nonprobability convenience sampling. The final sample included individuals who met the eligibility criteria and completed all study instruments.

Inclusion and exclusion criteria

The inclusion criteria were as follows: (a) age ≥18 years; (b) self-reported visual impairment, classified as blindness or low vision; (c) residence in Brazil; and (d) provision of electronic informed consent.

The exclusion criteria were (a) incomplete questionnaire responses that precluded analysis of the primary outcomes (anxiety and depression), (b) absence of self-reported visual impairment, and (c) the presence of another disability that could confound the analysis of the impact of visual impairment.

Instruments

Data were collected using a structured online questionnaire consisting of two sections.

1. **Sociodemographic and Clinical Questionnaire:** This questionnaire was developed by the researchers to characterize the study sample. The sociodemographic variables included age (years), sex (female or male), income (number of minimum wages per person), educational level (elementary school, high school, higher education, etc.), marital status (married, single, separated, or widowed), employment status (employed, student, retired, unemployed, etc.), and geographic region of residence in Brazil (North, Northeast, Central-West, Southeast, or South).

   The clinical variables included severity of visual impairment (low vision or blindness), time since onset of the impairment (1 year to >10 years), cause of impairment (congenital or acquired, with specification of etiology), and previous participation in a visual habilitation or rehabilitation program (yes or no).
2. **Hospital Anxiety and Depression Scale (HADS):** The HADS was used to assess the presence and severity of anxiety and depression symptoms. This instrument has been validated for use in the Brazilian population[23] and is widely used in clinical practice and research. It consists of 14 items, divided into two seven-item subscales: the HADS-Anxiety (HADS-A) and HADS-Depression (HADS-D) subscales. Each item is scored on a four-point Likert scale (0-3), yielding a total score ranging from 0 to 21 for each subscale. Scores were classified as follows: 0-7, unlikely (normal); 8-10, possible (mild); and 11-21, probable (moderate to severe) anxiety or depression[24].

Procedures

The study protocol was approved by a Research Ethics Committee (Approval No. 6.260.956). Data were collected online using Google Forms between February and October 2025. The questionnaire link was widely distributed through social media, online discussion groups, and partnerships with organizations supporting individuals with visual impairment throughout Brazil, including Bengala Verde Brasil, Retina Brasil, Tocando em Frente, Grupo Virtual Stargardt, and Associação de Deficientes Visuais e Amigos.

The first page of the questionnaire contained the electronic Informed Consent Form, which described the study objectives, procedures, potential risks and benefits, and measures to ensure participant anonymity and data confidentiality. Participation was voluntary, and completion of the questionnaire was considered to indicate informed consent.

Data analysis

The data were entered into and analyzed using IBM SPSS Statistics version 25.0. Descriptive analyses were performed to characterize the study sample, and categorical variables are presented as absolute (n) and relative (%) frequencies.

For the inferential analyses, Pearson's chi-square test or Fisher's exact test (when the expected frequency was <5 in more than 20% of the contingency table cells) was used to evaluate the associations between the sociodemographic and clinical variables (independent variables) and the anxiety and depression outcomes (dependent variables), categorized as unlikely, possible, and probable. Statistical significance was defined as $p<0.05$. A multivariable logistic regression analysis was initially considered; however, the low frequency of observations across several categories prevented adequate model fitting, resulting in an unstable and uninterpretable model.

RESULTS

The sample consisted of 730 individuals with visual impairment. The majority of participants were female (61.9%), with a mean age of 45.6 years (SD=15.2). Regarding marital status, most participants were single (40.1%), followed by married (35.5%), separated/divorced (15.0%), and widowed (9.4%). With respect to employment status, the largest proportion of participants were retired (38.8%), followed by unemployed (25.1%), self-employed (15.3%), formally employed (12.2%), and students (8.6%). Participants were recruited from all five geographic regions of Brazil, with the highest proportion residing in the Southeast (45.1%), followed by the Northeast (23.5%), South (15.8%), Central-West (9.9%), and North (5.7%).

Regarding educational attainment, 26.7% of participants had completed higher education, 25.8% had completed postgraduate education, and 22.1% had completed high school. The remaining participants had incomplete higher education (12.6%), incomplete postgraduate education (2.7%), incomplete high school (3.6%), completed elementary school (2.2%), or incomplete elementary school (4.4%).

Regarding monthly per capita income, 27.9% of participants reported earning between 2 and 5 minimum wages. In addition, 24.9% earned up to 1 minimum wage, 24.2% earned between 1 and 2 minimum wages, 13% earned between five and 10 minimum wages, and 9.9% earned more than 10 minimum wages.

Regarding the clinical characteristics, low vision was slightly more common than blindness (54.6% vs. 45.4%). Most participants (59%) had been living with visual impairment for 10 years or longer. An additional 18.4% had experienced visual impairment for 5-10 years, 18.4% for 1-5 years, and 4.2% for less than 1 year. Acquired visual impairment accounted for 78.2% of cases, with diabetic retinopathy (22.5%), glaucoma (18.9%), and age-related macular degeneration (15.4%) being the most common etiologies. Congenital causes accounted for 21.8% of the sample. Only 48.8% of participants reported having undergone habilitation or rehabilitation, indicating that more than half had not participated in these services (Table 1).

Analysis of the Hospital Anxiety and Depression Scale (HADS) scores revealed a high prevalence of anxiety and depression symptoms in the study sample.

For the anxiety subscale (HADS-A), 30.4% of participants scored in the probable range (≥11 points), indicating clinically significant anxiety symptoms. An additional 25.5% were classified as possible (8-10 points), whereas 44.1% were classified as unlikely (0-7 points). Overall, approximately 56% of participants had anxiety symptoms ranging from possible to probable.

For the depression subscale (HADS-D), 18.2% of participants were classified as probable (≥11 points), suggesting clinically significant depressive symptoms. In addition, 22.6% were classified as possible (8-10 points), whereas 59.1% were classified as unlikely (0-7 points). Overall, approximately 41% of participants had depressive symptoms ranging from possible to probable (Table 2).

The association analysis revealed statistically significant associations between anxiety symptoms and several sociodemographic and clinical variables. A significantly higher prevalence of probable anxiety was observed among females (39.6%) than among males (18.6%; $p<0.001$). Regarding marital status, widowed individuals showed the highest prevalence of probable anxiety (46.9%; $p=0.026$). Participants with low vision were more likely to present probable anxiety symptoms than those with blindness (27.8% vs. 24.2%; $p=0.003$). Time since the onset of visual impairment was also significantly associated with anxiety, with the highest prevalence observed among individuals diagnosed within the previous year (40.5%), followed by a gradual decrease over time ($p=0.006$). Finally, individuals who had not participated in a rehabilitation program had a significantly higher prevalence of probable anxiety than those who had participated (30.2% vs. 22.5%; $p<0.001$).

Table 1. Sociodemographic and clinical characteristics of the sample.

Variable	Frequency (%)
General data	
Sample size	
730 individuals	100.0
Mean age	
45.6 years (SD=15.2)	—
Gender	
Female	61.9
Male	38.1
Marital status	
Single	40.1
Married	35.5
Separated/Divorced	15.0
Widowed	9.4
Productive life status	
Retired	38.8
Unemployed	25.1
Self-employed	15.3
Formally employed	12.2
Student	8.6
Geographic distribution	
Southeast	45.1
Northeast	23.5
South	15.8
Central-West	9.9
North	5.7
Education level	
Completed higher education	26.7
Completed postgraduate studies	25.8
Completed high school	22.1
Incomplete higher education	12.6
Incomplete high school	3.6
Incomplete elementary/middle school	4.4
Completed elementary/middle school	2.2
Incomplete postgraduate studies	2.7
Monthly income per person	
Between 2 and 5 minimum wages	27.9
Up to 1 minimum wage	24.9
Between 1 and 2 minimum wages	24.2
Between 5 and 10 minimum wages	13.0
Above 10 minimum wages	9.9
Severity of visual impairment	
Low vision	54.6
Blindness	45.4
Duration of impairment	
10 years or more	59.0
5 to 10 years	18.4
1 to 5 years	18.4
0 to 1 year	4.2
Origin of visual impairment	
Acquired	78.2
Congenital	21.8
Most common etiologies	
Diabetic retinopathy	22.5
Glaucoma	18.9
Age-related macular degeneration	15.4
Participation in rehabilitation	
Did not participate	51.2
Yes, participated	48.8

Table 2. Anxiety and depression scores in the sample.

Scale	Score range	Frequency (%)
Anxiety (HADS-A)		
Probable	≥11 points	30.4
Possible	8–10 points	25.5
Unlikely	0–7 points	44.1
Possible to Probable (Combined)	8–21 points	56.0
Depression (HADS-D)		
Probable	≥11 points	18.2
Possible	8–10 points	22.6
Unlikely	0–7 points	59.1
Possible to Probable (Combined)	8–21 points	40.8

No statistically significant associations were found between anxiety symptoms and age group (p=0.201), geographic region (p=0.625), income (p=0.062), or employment status (p=0.452; Table 3).

The analysis of depressive symptoms also identified several significant associations. Females had a significantly higher prevalence of probable depression than males (20.5% vs. 13.6%; p=0.014). Regarding age, participants aged 61 years or older had the highest prevalence of probable depression (24.4%), followed by those aged 51-60 years (20.8%) and 41-50 years (20.3%), with a significant association between age and depression (p=0.002). Regarding marital status, widowed participants showed the highest prevalence of probable depression (40.6%), followed by separated/divorced participants (24.3%; p=0.006). With respect to employment status, individuals receiving disability retirement benefits (25.0%) and those who had never worked (23.5%) had the highest prevalences of probable depression (p=0.010).

Regarding the severity of visual impairment, participants with blindness had a higher prevalence of probable depression than those with low vision (20.1% vs. 17.1%; p=0.031). Time since the onset of visual impairment was also significantly associated with depressive symptoms, with the highest prevalence observed among participants with a duration of impairment of 5-10 years (23.9%), followed by those with 1-5 years (21.7%; p=0.022). Finally, participants who had not undergone habilitation or rehabilitation had a significantly higher prevalence of probable depression than those who had participated in these services (24.3% vs. 21.1%; p<0.001, Table 4).

Table 3. Significant associations with anxiety symptoms.

Variable	Probable anxiety (%)	p value
Sex		
Female	39,6	<0,001*
Male	18,6	
Marital status		
Widowed	46,9	0,026*
Separado	29,9	
Single	26,1	
Married	22,3	
Severity of VI		
Low vision	27,8	0,003*
Blindness	24,2	
Time since the onset of VI		
0–1 year	40,5	0,006**
1–5 years	31,7	
5–10 years	31,7	
10 years or more	22,0	
Rehabilitation		
No	30,2	<0,001*
Yes	22,5	

Table 4. Significant associations with depressive symptoms.

Variable	Probable depression (%)	*p* value
Gender		
Female	20.5	
Male	13.6	
Age group		*p*=0.002*
18 to 30 years	7.6	
31 to 40 years	8.9	
41 to 50 years	20.3	
51 to 60 years	20.8	
61 years or older	24.4	
Marital status	40.6	0.006*
Widowed	24.3	
Divorced	16.4	
Single	15.5	
Married		
Employment status		*p*=0.01*
Never worked	23.5	
Receives BPC/LOAS (social assistance benefit)	20	
Retired due to disability	25	
Retired based on length of contribution	20.9	
Self-employed	12.1	
Formal employee	11.9	
Student	0	
Public servant	11.9	
Severity of visual impairment		
Low vision	17.1	0.031*
Blindness	20.1	
Duration of visual impairment		
0 to 1 year	16.2	0.022**
1 to 5 years	21.7	
5 to 10 years	23.9	
10 years or more	15.5	
Rehabilitation		
No	24.3	<0.001*
Yes	21.1	

DISCUSSION

The present study provides an overview of the mental health of individuals with visual impairment in Brazil, demonstrating a high prevalence of clinically relevant symptoms of anxiety and depression, including both possible and probable cases according to the HADS criteria. These rates exceed those reported in the general population and are consistent with international estimates. A particularly important finding of this study is the association between the absence of rehabilitation and higher prevalences of anxiety and depression. This may represent the most clinically relevant finding, highlighting the potential role of rehabilitation not only in functional adaptation but also in improving mental health outcomes among individuals with visual impairment.

The sample, predominantly composed of retirees and individuals with acquired visual impairment, reflects a context of vulnerability characterized by disrupted work trajectories and the loss of social and economic roles, which are well-established risk factors for psychological distress among individuals with disabilities[9].

Unemployment and unplanned retirement have been associated with poorer mental health outcomes, including increased rates of anxiety and depression, potentially mediated by reduced social participation and financial stress[15]. Furthermore, the predominance of chronic and progressive conditions may contribute to uncertainty and persistent stress, reinforcing the concept of vision loss as a dynamic process that requires continuous adaptation and may gradually deplete psychological resources over time[25-27].

Despite the relatively high educational level of the sample, no significant association was found between educational attainment and anxiety or depression.

This finding suggests that, although education may enhance cognitive resources and coping strategies, it may not offset the psychosocial impact of structural barriers such as unemployment and social exclusion. Similarly, income was not significantly associated with anxiety, raising the possibility that income stability may be more important than absolute income. Therefore, the relationship between socioeconomic status and mental health in this population appears to be complex and potentially nonlinear[25-27].

The prevalence rates identified in this study were higher than those reported for the Brazilian general population, with more than half of the participants screening positive for anxiety symptoms and approximately 41% screening positive for depressive symptoms when possible and probable HADS classifications were considered. These findings are consistent with international studies demonstrating an increased risk of anxiety and depression among individuals with visual impairment across different settings[16-18]. In Brazil, these outcomes may be further exacerbated by barriers to healthcare and rehabilitation services, particularly in low- and middle-income settings[5,9].

The analysis of associated factors revealed a multifactorial pattern. The higher prevalence of anxiety and depression among women is consistent with previous studies, suggesting a combined effect of gender-related inequalities and disability-related barriers, which may increase social isolation and reduce access to opportunities. Widowhood also emerged as an important associated factor, reflecting the loss of social support and the increased vulnerability to psychological distress[28,29].

Distinct patterns were observed for anxiety and depression. Anxiety was more strongly associated with low vision and a recent diagnosis, whereas depression was associated with blindness and a longer duration of visual impairment. This difference deserves further consideration. Higher anxiety among individuals with low vision may be related to fear of disease progression, uncertainty regarding future vision loss, and the functional instability associated with this condition, resulting in a persistent state of vigilance[30]. In contrast, the higher prevalence of depression among individuals with blindness may reflect incomplete adaptation or the cumulative effects of severe functional limitations, restricted social participation, and persistent daily challenges[22,31]. Recent reviews have emphasized that psychosocial adaptation to vision loss is a continuous and complex process influenced by both clinical and emotional factors[32].

As noted above, participation in rehabilitation was consistently associated with better mental health outcomes, with lower prevalences of both anxiety and depression. This finding agrees with previous evidence showing that rehabilitation improves not only functional capacity but also psychological well-being and quality of life[21]. By promoting autonomy, coping skills, and social participation, rehabilitation may address key mechanisms involved in the development of mental disorders. However, the possibility of reverse causality and selection bias should be considered. Individuals with greater psychological resilience or more favorable baseline mental health may be more likely to seek rehabilitation services. Therefore, rehabilitation alone cannot be assumed to explain the better psychological outcomes observed[32]. Moreover, only about half of the participants reported having undergone rehabilitation, highlighting an important gap in service provision and a missed opportunity for prevention and comprehensive care[9,22].

This study has several limitations that should be acknowledged. First, because of its cross-sectional design, causal relationships cannot be established, and reverse causation cannot be excluded. Second, the use of convenience sampling and online data collection may have introduced selection bias and limited the generalizability of the findings. Third, reliance on self-reported information without clinical confirmation may have affected measurement accuracy. Finally, the predominance of female, retired participants from the Southeast region may further limit the applicability of the findings to other populations.

Four methodological limitations deserve particular emphasis. First, the study relied on self-reported visual impairment without objective clinical confirmation of visual acuity, visual field, or ophthalmologic diagnosis. Participants may have interpreted technical terms such as *low vision*, *blindness*, and *visual impairment* differently, potentially introducing heterogeneity in the classification of visual impairment severity.

Second, participants were recruited through organizations such as Bengala Verde Brasil, Retina Brasil, Grupo Virtual Stargardt, and other patient associations. This recruitment strategy may have favored individuals who were more actively engaged in support groups, social media, or healthcare services and those with higher educational attainment. Consequently, the sample may not fully represent the broader Brazilian population with visual impairment, potentially overestimating social support while underestimating

the prevalence of mental health disorders among more socially isolated individuals.

Third, although multivariable logistic regression analysis was considered, the sample size and sparse distribution of observations across several categories prevented adequate model fitting, resulting in unstable parameter estimates. Consequently, the findings are based on univariate analyses and could not be adjusted for potential confounding factors.

Finally, all causes of visual impairment were analyzed together. Different ophthalmologic conditions, such as retinitis pigmentosa, Stargardt disease, glaucoma, optic neuropathies, and diabetic retinopathy, may have distinct psychosocial effects. Future studies should investigate these conditions separately, as they may require tailored mental health interventions and rehabilitation strategies.

Future studies should adopt longitudinal designs and representative samples to better understand causal pathways and long-term outcomes. Despite these limitations, the present findings underscore the importance of integrated approaches that combine rehabilitation, mental healthcare, and social inclusion strategies to reduce the burden of anxiety and depression among individuals with visual impairment in Brazil.

In conclusion, this study demonstrated a high prevalence of clinically relevant anxiety and depression symptoms, including both possible and probable HADS cases, with rates exceeding those reported for the general Brazilian population and consistent with international findings. These results highlight the need for greater clinical and public health attention to the mental health of individuals with visual impairment.

The associated factors suggest a risk profile that combines sociodemographic characteristics, including female sex, widowhood, and labor inactivity, with clinical factors such as the severity and duration of visual impairment. Two distinct patterns were identified: an anxiety profile associated with low vision and recent diagnosis, and a depression profile associated with blindness, longer disease duration, and older age. Recognizing these patterns may facilitate risk stratification and the development of targeted interventions.

Participation in rehabilitation was consistently associated with a lower prevalence of anxiety and depressive symptoms. Its potential benefits extend beyond improving visual function to supporting autonomy and psychosocial adaptation. However, the relatively low participation rate highlights an important, missed opportunity for prevention and comprehensive care.

Integrating rehabilitation with psychosocial support services and implementing systematic mental health screening from the time of diagnosis may facilitate the early identification of individuals at risk, improve access to appropriate care, and ultimately promote better mental health outcomes and quality of life for people with visual impairment in Brazil.

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