

The catastrophizing of chronic pain in Amazonian elderly people*

A catastrofização da dor crônica em pessoas idosas amazônidas

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ABSTRACT

Objective: to analyze the relationship between sociodemographic and clinical factors and the catastrophizing of chronic pain in older adults in the Amazon region. **Methods:** a cross-sectional study was conducted with 60 older adults with chronic pain who were treated at a primary care clinic. Sociodemographic and clinical data were collected; the Short Physical Performance Battery was used to assess physical performance; and the Pain Catastrophizing Scale was administered. The analysis included descriptive statistics, the "t-test" for independent samples, and "Pearson's correlation," with a significance level of 5%. **Results:** higher levels of pain catastrophizing were observed among women, with differences in the magnification and rumination domains and in the total score. Age showed a negative correlation with the magnification domain. Having a partner was associated with higher rumination scores, whereas the presence of a support network was associated with higher scores in the magnification domain and the total catastrophizing score. **Conclusion:** pain catastrophizing was associated with sociodemographic factors, particularly gender, age, having a partner, and a support network. **Contributions to practice:** these findings can guide the planning of nursing care and individualized interventions in the management of chronic pain in older adults, contributing to aging with quality of life.

Descriptors: Chronic Pain; Catastrophization; Aged; Social Support; Primary Health Care.

RESUMO

Objetivo: analisar a relação entre fatores sociodemográficos e clínicos com a catastrofização da dor crônica em pessoas idosas amazônidas. **Métodos:** estudo transversal, realizado com 60 pessoas idosas com dor crônica atendidas em uma unidade básica de saúde. Foram coletados dados sociodemográficos e clínicos, usado *Short Physical Performance Battery* para avaliar o desempenho físico, e aplicado a Escala de Catastrofização da Dor. A análise incluiu estatística descritiva, "teste t" para amostras independentes e "correlação de Pearson", adotando-se nível de significância de 5%. **Resultados:** observou-se maior catastrofização da dor entre mulheres, com diferenças nos domínios ampliação e ruminação e no escore total. A idade apresentou correlação negativa com o domínio ampliação. Ter companheiro associou-se à maiores escores de ruminação, enquanto a presença de rede de apoio esteve relacionada a escores mais elevados no domínio ampliação e no escore total de catastrofização. **Conclusão:** a catastrofização da dor esteve associada a fatores sociodemográficos, com destaque para sexo, idade, presença de companheiro e rede de apoio. **Contribuições para a prática:** os achados podem orientar o planejamento do cuidado de enfermagem e de intervenções individualizadas no manejo da dor crônica em pessoas idosas, contribuindo para o envelhecimento com qualidade de vida.

Descritores: Dor Crônica; Catastrofização; Idoso; Apoio Social; Atenção Primária à Saúde.

Introduction

Aging is associated with physiological and functional changes that can compromise the functional capacity of older adults, making them more susceptible to developing multimorbidity⁽¹⁾. Among these conditions, chronic pain stands out; it is characterized as a persistent sensory and emotional experience lasting longer than three months, capable of interfering with activities of daily living and social participation, and may lead to isolation and emotional distress⁽²⁾.

It is estimated that, annually, approximately 10% of the world's population is diagnosed with chronic pain. Although this condition can affect individuals of different ages and genders, its prevalence tends to be higher in socially vulnerable populations⁽³⁾. In Brazil, the situation is also noteworthy, as approximately 36.9% of people over the age of 50 report experiencing chronic pain⁽⁴⁾. This adverse condition is significantly associated with gender and age, being particularly prevalent among women and older adults, and is also associated with depressive symptoms⁽⁵⁾.

Epidemiological studies on the prevalence of chronic pain in Brazil have focused on the Central-West and Southeast regions. In contrast, the North region still lacks research on this topic, especially among the elderly population⁽⁶⁾, highlighting the need to expand scientific research in this regional context.

Demographic projections indicate that the Northern Region is expected to experience significant growth in its elderly population over the coming decades. By 2026, the region is estimated to have approximately 18,929,341 inhabitants, with about 11.5% being people aged 60 or older. By 2030, an increase of approximately 381,000 older adults is projected in just four years⁽⁷⁾. This scenario points to an increase in chronic conditions related to aging, including chronic pain.

During the aging process, somatosensory changes can alter pain perception. However, because pain is a subjective experience, its manifestation is influenced by social, emotional, and cognitive factors⁽⁸⁾. Among

these, pain catastrophizing stands out; it is defined as a cognitive pattern characterized by recurrent negative thoughts, excessive preoccupation with the painful stimulus, and a sense of inability to cope with pain⁽⁹⁾.

Research on pain catastrophizing in older adults has focused primarily on clinical and psychological factors, such as anxiety, depression, pain intensity, and functional performance⁽¹⁰⁾. These conditions show a consistent association with catastrophizing and with outcomes related to chronic pain. However, sociodemographic characteristics, such as gender and age, have been less directly explored in relation to specific domains of pain catastrophizing, such as rumination, magnification, and helplessness⁽⁹⁾.

In this context, population aging poses challenges for the healthcare system, particularly in the management of chronic pain. Understanding the socio-demographic and clinical factors associated with the catastrophizing of pain can contribute to the planning of more appropriate care strategies tailored to the needs of the elderly population⁽¹⁾.

Generating evidence on the catastrophizing of chronic pain in the Northern Region is necessary, given the scarcity of studies focused on the elderly population of the Amazon, highlighting a significant gap in scientific knowledge. Thus, investigating this phenomenon can broaden the scientific discussion on the topic, foster new research, and strengthen knowledge production about chronic pain in Amazonian contexts. Furthermore, the findings may benefit nurses and other health professionals by broadening understanding of the factors involved in the catastrophizing of pain among older adults, thereby promoting a more comprehensive clinical practice that is sensitive to the social, cultural, and territorial specificities of the Amazonian population, as well as contributing to scientific discussions at the national and international levels.

Thus, the present study aims to analyze the relationship between sociodemographic and clinical factors and the catastrophizing of chronic pain in older adults in the Amazon region.

Methods

Study design and location

A cross-sectional study, following the recommendations of the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) initiative. The study was conducted at a primary health care center affiliated with a public institution of higher education in a municipality in the state of Pará. The site was chosen because it had a large number of older adults and because Family Health Strategy teams were available at the center.

Population

The study population consisted of older adults registered at the primary health care center and belonging to two Family Health Strategy teams. The inclusion criteria were: age 60 years or older, of either sex, experiencing chronic pain for more than three months, and able to travel to the data collection site, with or without assistance from others. Exclusion criteria included: significant neurological or cognitive impairment that prevented interaction with researchers; severe, advanced disease; or palliative care.

Sample size calculation

The estimated finite population of the two Family Health Strategy teams, consisted of 158 registered older adults. Considering an expected prevalence of 45% for chronic pain^(6,11), the target population was estimated at 71 older adults. For the sample calculation, a 95% confidence level and a 5% margin of error were adopted, resulting in an estimated minimum sample size of 60 participants. Initially, 140 older adults were contacted using the records available at the health clinic. After applying the eligibility criteria and obtaining consent to participate in the study, 60 older adults with chronic pain comprised the final sample analyzed in this study.

Measurement instruments

The sociodemographic and clinical variables analyzed in the study were: age (in years), sex (female or male), presence of a partner (yes or no), educational attainment (in years of schooling), household income (numeric value), number of self-reported chronic conditions, presence of a support network (yes or no), history of smoking (yes or no), history of alcohol abuse (yes or no), and level of physical activity, measured using the short version of the International Physical Activity Questionnaire (IPAQ) and classified into the categories very active, active, irregularly active, and sedentary⁽¹²⁾.

The dependent variable was pain catastrophizing, measured using the Brazilian Portuguese Pain Catastrophizing Scale (BP-PCS), which comprises 13 items on a 5-point Likert scale assessing the intensity and frequency of pain-related thoughts. The instrument is divided into three domains: helplessness, referring to the perception of an inability to cope with pain; magnification, related to the tendency to exaggerate the severity or consequences of the painful experience; and rumination, characterized by recurrent and persistent negative thoughts about pain. Scores for the three domains are obtained by summing the corresponding items (helplessness: items 1 through 5 and 12; rumination: items 8 through 11; magnification: items 6, 7, and 13). The total score corresponds to the sum of the three domains, ranging from 0 to 52 points, with scores above 30 indicating a clinically relevant degree of catastrophizing⁽¹³⁾.

The Short Physical Performance Battery (SPPB) was used to assess physical performance; it consists of three physical tests that evaluate static balance, walking speed, and muscle strength. The score for each test ranges from zero (poorest performance) to four points (best performance). The total score is the sum of the three tests, ranging from 0 to 12 points, with the following classification: disability or poor performance (0 to 3); low performance (4 to 6); moderate performance (7 to 9); good performance (10 to 12)⁽¹⁴⁾.

Data collection

Data collection took place between June and December 2025 and was conducted in two stages. In the first stage, potential participants were contacted by phone using the numbers listed in the physical medical records at the primary care clinic. The calls were made by one of the researchers to conduct an initial screening and verify that participants met the inclusion criteria. Once interest in participating in the study was confirmed, a date and time were scheduled for in-person data collection at the health center. An examination room was reserved for the interviews, ensuring adequate privacy, comfort, and the availability of materials necessary to conduct the research.

In the second stage, participants were briefed on the study's objectives and procedures. After reading and signing the Informed Consent Form, in-person interviews began; these lasted an average of 20 minutes and involved the collection of sociodemographic and clinical data.

Next, the SPPB was administered, taking an average of 10 minutes, following a preliminary assessment of the older adult's functional capacity to ensure the safe performance of the proposed activities without health risks, such as falls or fractures.

Data analysis

The collected data were double-entered into *Microsoft Excel®* spreadsheets, validated, and subsequently exported to SPSS software, version 22.0. The prevalence of chronic pain was estimated based on the total number of older adults interviewed (n=140). The remaining analyses were performed exclusively on the subgroup of older adults who reported chronic pain (n=60), which constituted the final sample. Sociodemographic and clinical data were analyzed using descriptive statistics, with absolute and relative frequencies, except for income and the number of chronic diseases, which were described using measures of central tendency (mean) and dispersion (standard deviation, minimum, and maximum). In the bivariate

analysis, Student's t-test and Pearson's correlation were used. A significance level of 5% ($p \leq 0.05$) was adopted in all analyzes.

Ethical considerations

This study was approved by the Ethics Committee of the *João de Barros Barreto* University Hospital at the Federal University of Pará, in compliance with all ethical guidelines, with Certificate of Submission for Ethical Review No. 87662225.0.0000.0017 and Opinion No. 7.659.983/2025.

Results

Among the 140 older adults initially contacted, 60 reported chronic pain, corresponding to a prevalence of 42.9% (95% CI: 34.7–51.1). Among the subgroup of older adults with chronic pain (n=60), there was a predominance of females, those aged 60 to 69 years, and those without a partner. Regarding educational attainment, most had completed 5 to 8 years of schooling, and the majority had a support network (Table 1). The mean income was R\$ 1,579.95 (standard deviation = R\$ 1,119.35), with a minimum of R\$ 0.00 and a maximum of R\$ 8,000.00, indicating wide variability in the socioeconomic status of the sample.

Table 1 – Sociodemographic characterization of the elderly people participating in the study (n= 60). Belém, PA, Brazil, 2025

Variables	n (%)
Gender	
Female	41 (68.3)
Male	19 (31.7)
Age (years)	
60 to 69	35 (58.3)
70 to 79	19 (31.7)
≥ 80	6 (10.0)
Has a partner	
Yes	20 (33.3)
No	40 (66.7)
Education (years)	
Illiterate	3 (5.0)
1 to 4	13 (21.7)
5 to 8	26 (43.3)
≥ 9	18 (30.0)
Support network	
With support	42 (70.0)
Without support	18 (30.0)

Among the clinical characteristics, a prevalence of former smoking was observed, while former alcohol abuse was not reported by the majority of participants. Regarding physical activity levels, according to the IPAQ, participants classified as active predominated. As for physical performance, as assessed by the SPPB, the majority had moderate performance (Table 2). Regarding clinical conditions, participants had an average of 2.37 chronic diseases (standard deviation = 1.44), ranging from 0 to 6 diseases, indicating a frequent presence of multimorbidity among older adults.

Table 2 – Clinical characteristics of the elderly people (n=60). Belém, PA, Brazil, 2025

Variables	n (%)
Ex-smoking	
Yes	33 (55.0)
No	27 (45.0)
Ex-Alcoholism	
Yes	11 (18.3)
No	49 (81.7)
IPAQ*	
Sedentary	13 (21.7)
Irregularly active	16 (26.7)
Active	28 (46.7)
Very active	3 (5.0)
SPPB†	
Inability or poor performance	1 (1.7)
Low performance	9 (15.0)
Moderate performance	33 (55.0)
Good performance	17 (28.3)

*IPAQ: International Physical Activity Questionnaire; †SPPB: Short Physical Performance Battery

Table 3 presents a descriptive analysis of the scores on the Pain Catastrophizing Scale (BP-PCS), including the subdomains. The rumination subdomain had the highest mean score, followed by the helplessness and magnification subdomains. The total BP-PCS score reached a maximum of 48 points.

Table 3 – Distribution of the mean scores of the domains and the overall score of the Pain Catastrophizing Scale (n=60). Belém, PA, Brazil, 2025

Variables	Average ± Standard Deviation	Minimum-Maximum
Helplessness	9.57 ± 4.00	(2 – 16)
Amplification	6.08 ± 3.14	(0 – 12)
Rumination	11.67 ± 4.98	(2 – 23)
BP-PCS* total	27.32 ± 10.45	(7 – 48)

*BP-PCS: Pain Catastrophizing Scale

When comparing the BP-PCS with sociodemographic and clinical variables, it was observed that gender was associated with statistically significant differences in pain catastrophizing scores. Older women had significantly higher scores in the amplification and rumination domains, as well as in the total BP-PCS score, when compared to men.

Regarding the presence of a partner, a statistically significant difference was found only in the rumination domain, with higher scores among older adults who had a partner. The support network variable showed statistically significant differences in the amplification domain and in the total BP-PCS score, with higher scores among older adults who reported having a support network. No statistically significant associations were observed for the ex-smoking and ex-alcoholism variables (Table 4).

Table 4 – Comparison of the Pain Catastrophizing Scale with the sociodemographic and clinical data of the elderly (n=60). Belém, PA, Brazil, 2025

Variables	Helplessness	Magnification	Rumination	BP-PCS* total
	p-value† (CI‡)	p-value (CI)	p-value (CI)	p-value (CI)
Gender	0.221 (-3.58 / 0.84)	0.001 (-4.41 / -1.22)	0.035 (-5.58/-0.21)	0.013 (-12.63/-1.53)
Has a partner	0.620 (-1.66/2.76)	0.313 (-0.84/2.59)	0.010 (0.87/6.07)	0.087 (-0.73/10.53)
Support network	0.336 (-1.16/3.35)	0.003 (0.92/4.23)	0.128 (-0.63/4.92)	0.047 (-0.07/11.56)
Ex-smoking	0.359 (-3.04/1.12)	0.194 (-2.76/0.57)	0.719 (-3.07/2.13)	0.356 (-7.96/2.90)
Ex-alcoholism	0.854 (-2.44/2.94)	0.760 (-1.79/2.44)	0.807 (-2.77/2.17)	0.938 (-6.76/7.31)

*BP-PCS: Pain Catastrophizing Scale; †T-test for independent samples; ‡CI: Confidence interval

The correlation analysis revealed a negative and statistically significant association between age and the “Amplification” domain of the BP-PCS, indicating that older age was associated with lower scores in this domain. No statistically significant correlations

were observed between income and the domains or the total score. Similarly, the number of chronic diseases did not show a significant correlation with the scale’s domains, the total score, or physical performance as assessed by the SPPB (Table 5).

Table 5 – Correlation between the domains of the Pain Catastrophizing Scale and the sociodemographic and clinical data of the elderly (n=60). Belém, PA, Brazil, 2025

Variables	Helplessness		Amplification		Rumination		BP-PCS* Total	
	p-value	r†	p-value	r	p-value	r	p-value	r
Age	0.155	-0.186	0.024	-0.290	0.737	-0.044	0.170	-0.180
Income	0.726	-0.046	0.890	-0.018	0.639	-0.062	0.689	-0.053
Chronic diseases	0.495	0.090	0.167	0.181	0.074	0.233	0.126	0.200
SPPB‡	0.677	-0.055	0.428	-0.104	0.250	-0.151	0.344	-0.124

*BP-PCS: Pain Catastrophizing Scale; †r: Pearson's correlation coefficient; ‡SPPB: Short Physical Performance Battery

Discussion

Analysis of the relationship between sociodemographic and clinical factors and the catastrophizing of chronic pain in older adults in the Amazon region revealed an association with gender, age, having a partner, and a support network. Pain catastrophizing involves negative thoughts and emotions in response to the painful experience, such as rumination, exaggeration of the threat associated with pain, and feelings of helplessness—aspects that can influence how a person perceives and experiences chronic pain⁽¹⁵⁾. Thus, discussing the factors associated with catastrophizing is important for understanding chronic pain during aging.

The results of this study indicate an association between gender and catastrophizing of chronic pain, with higher scores among women. This finding is consistent with evidence pointing to a higher prevalence of chronic pain and greater pain sensitivity in women^(2,16). It was observed that women exhibited significantly higher levels of pain catastrophizing compared to men, suggesting that this pattern may contribute to higher levels, particularly in the “amplification” domain, since women tend to report greater intensity, frequency, and duration of pain, as well as worse pain-related outcomes⁽¹⁶⁾.

Hormonal changes throughout the aging process may influence pain sensitivity differently between the sexes. In women, menopause reduces estrogen levels, which can compromise bone mineral density and contribute to the onset of musculoskeletal symptoms—one of the leading causes of chronic pain in this population. In men, although declining testosterone levels also affect bone health, this change tends to be less pronounced. Furthermore, testosterone appears to exert a modulating effect on pain sensitivity, which may contribute to a lower perception of pain in men. Thus, the effects of hormonal aging on the pain experience tend to be greater among women⁽¹⁷⁾.

There is evidence among older adults that higher scores in the rumination and helplessness domains are associated with a more unpleasant perception of pain. In this context, it is argued that although older women may employ cognitive strategies to reframe pain, they still tend to exhibit greater rumination, while men frequently adopt cognitive and emotional avoidance strategies⁽⁹⁾. Despite these observations, evidence regarding gender differences in pain catastrophizing among older adults remains scarce, and the small sample sizes of studies involving this population limit the generalizability of the findings⁽¹⁶⁻¹⁷⁾.

Regarding age, data revealed significant findin-

gs related to catastrophic thoughts, with an emphasis on the “Magnification” domain of the BP-PCS. It was observed that older adults had lower scores on pain catastrophizing compared to younger individuals. This difference may be related to lower emotional reactivity to pain, the use of more effective coping strategies, and greater emotional control. Furthermore, it has been suggested that greater exposure to stressful events throughout life may influence how older adults perceive and interpret these experiences, contributing to lower scores in the “Magnification” domain. However, the mechanisms underlying this association have not yet been fully elucidated⁽⁹⁾.

The results presented here differ from those most frequently reported in studies using the Pain Catastrophizing Scale; in previous studies, the results have focused primarily on the “Rumination” and “Helplessness” subscales, with little emphasis on the “Magnification” domain^(9,15). In a clinical study analyzing chronic pain within the domains of catastrophizing, “Helplessness” was identified as the predominant factor, just as “Rumination” is frequently highlighted in similar investigations. However, “Magnification” appears only sporadically as a dimension associated with pain perception⁽¹⁸⁾.

Recent evidence reinforces the notion that chronic pain in older adults cannot be understood solely in terms of chronological aging. In older adults, social and psychological factors also contribute to the experience of pain. Loneliness has been associated with a higher likelihood of chronic low back pain, and the combination of loneliness and social isolation has amplified this effect⁽¹⁹⁾.

Furthermore, older adults with chronic low back pain exhibited psychological factors related to pain; however, when analyzed with other baseline characteristics, these factors did not show a consistent independent association with outcomes over time, suggesting that the persistence of pain in this population depends on a broader set of biopsychosocial factors⁽²⁰⁾.

When investigating differences in the intensity of chronic pain between adults and older adults,

the results revealed a direct correlation between age and increased pain intensity, with a more pronounced perception among individuals in developing countries compared to those in developed countries. However, when clinical and social variables were incorporated into the analysis, the magnitude of this association changed, demonstrating that pain perception should not be analyzed solely by age group but rather from the perspective of the individual’s broader context⁽²¹⁾.

In contrast to some previous studies, the results indicated that the support network was associated with a greater tendency toward pain catastrophizing. However, this factor has been described as a protective element, capable of reducing the impact of pain and promoting adaptation to this condition⁽²²⁻²⁴⁾.

It is observed that people cope better with pain when they have a support network, since the absence of this resource can intensify the perception of chronic pain and increase levels of catastrophizing. In this context, the support network, characterized by a sense of belonging and acceptance, acts as an emotional regulator, alleviating pain and reducing isolation. Minimizing negative emotional states can directly reduce catastrophic thoughts^(23,25).

A support network also promotes self-efficacy, self-care, and treatment adherence in older adults with chronic pain, in addition to helping reduce pain focalization and catastrophic thoughts. Fostering a sense of belonging and positive interactions is expected to act as a protective factor against anxiety and depression^(24,26). However, these findings contrast with the results of the present study, in which the presence of a support network was associated with higher scores in the “amplification” domain and greater catastrophizing of pain, suggesting that the support network does not exert a protective effect and may even reinforce behaviors of dependence, hypervigilance to pain, and centralization of the pain experience. Thus, more than the mere presence of a support network, the quality of interactions and the type of support offered appear to influence how older adults perceive and cope with chronic pain.

From this perspective, it was observed that, in the community-based management of chronic pain, high levels of catastrophizing may lead to excessive dependence on the support network, contributing to maladaptive behaviors and compromising older adults' ability to manage pain independently. Thus, this finding is consistent with the data from this study, which strongly suggests that the support network can have ambiguous effects on the pain experience, since certain types of support may contribute to greater pain centralization, a perception of disability, and increased suffering, rather than promoting adaptive coping⁽²⁶⁾.

In the results presented, the presence of a partner was associated with higher scores in the rumination domain, suggesting that marital dynamics may intensify cognitive focus on the pain experience. In this regard, it is observed that, in couples where one partner experiences chronic pain, responses such as validation, empathy, and concern may have distinct effects on pain- and relationship-related outcomes, depending on how they are expressed in the couple's interaction, especially when the patient is male⁽²⁷⁾.

Furthermore, greater empathic accuracy was associated with increased emotional distress and reduced social activity. These observations suggest that marital interactions, when marked by excessive validation, maladaptive empathy, or emotional distancing from the partner, may promote rumination on pain by keeping the individual cognitively focused on the symptom and the associated relational tensions⁽²⁸⁾.

A partner's interactions during the process of adapting to chronic pain can adversely impact the well-being of the person experiencing pain. Behaviors of excessive solicitude, even when unintentional, can contribute to the subtle invalidation of the painful experience, thereby increasing pain catastrophizing, pain intensity, interference with daily activities, and pain-related behaviors⁽²⁹⁾. Furthermore, the partner's solicitude was associated with greater concern and cognitive focus on pain, which is consistent with the findings of the present study, in which the presence of a partner was related to higher scores in the rumination domain⁽²⁸⁾.

In this context, the importance of nursing in the clinical management of chronic pain in older adults is highlighted through evidence-based practices and multidimensional assessments that address the physical, emotional, cognitive, and social aspects of the pain experience. Because nurses maintain continuous and direct contact with patients throughout the course of care, they are more attuned to their needs, demands, and clinical changes, which facilitates the early identification of signs of chronic pain and the communication of this information to the multidisciplinary team⁽³⁰⁾. Thus, knowledge of the factors involved in catastrophizing pain contributes to the development of individualized interventions and to improved clinical and functional outcomes.

Aging is a continuous and unique process. In certain cultures, pain is interpreted as a condition inherent to old age, which may lead individuals to downplay the actual intensity of the symptom in favor of resilient coping. In other contexts, the expression of suffering may be perceived as a sign of strength, encouraging greater expression of pain. In addition to social aspects, clinical factors, such as anxiety levels and biological changes, also influence this experience. Because it is a multifactorial and subjective experience, the precise measurement of pain remains a challenge for the scientific literature. Although some studies identify patterns in homogeneous groups, the way each older adult perceives and reacts to pain remains unique.

Study limitations

The cross-sectional design, small sample size, and recruitment of participants from a single Primary Health Care Unit prevent the generalization of the findings to the elderly population as a whole. Regarding the nature of the phenomenon, the study focused exclusively on chronic, spontaneous physical pain and excluded pain induced by clinical or experimental instruments, thereby limiting the scope of the analysis. Furthermore, using the Pain Catastrophizing Scale as the sole assessment tool is a limitation, given that catastrophizing is a complex, multidimensional phe-

nomenon that a single scale may not fully capture. In addition, the absence of multivariate analysis affected the control of confounding variables.

Contributions to practice

The findings contribute to clinical practice by reinforcing the need for a multidimensional approach to pain in older adults, considering the influence of sociodemographic and clinical factors on the catastrophizing of chronic pain. The results encourage further research focused on the catastrophizing of chronic pain in this population, while also highlighting the importance of assessing these domains in future studies. In the field of nursing, the data can aid in more comprehensive pain assessments, promoting more holistic and individualized care for older adults with chronic pain.

Conclusion

An association was found between sociodemographic factors and pain catastrophizing, particularly among females, especially in the domains of magnification and rumination. An inverse association was observed between age and pain magnification. The support network was associated with higher levels of catastrophizing and the amplification of catastrophic thoughts, while the presence of a partner was related to greater pain rumination. The results contribute to expanding knowledge about the catastrophizing of chronic pain among older adults in the Amazon region and reinforce the importance of considering sociodemographic and clinical factors in the assessment and care planning for the elderly population.

Authors' contributions

Conception and design or analysis and interpretation of data; final approval of the version to be published and agreement to be responsible for ensuring that all aspects of the manuscript related to the accuracy or

integrity of any part are properly investigated and resolved: Rosário ICC, Fernandes DS. Drafting of the manuscript or relevant critical review of the intellectual content: Rosário ICC, Castro CC, Aguiar VFF, Costa AR, Martins WM, Rocha AF, Fernandes DS.

Data availability

The entire dataset is available upon request from the corresponding author.

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