

RESEARCH ARTICLE (ORIGINAL)

Prevalence of Self-Reported Memory Loss After COVID-19 and Associated Factors

Prevalência da Perda de Memória Autorreferida após a COVID-19 e Fatores Associados

Prevalencia de la Pérdida de Memoria Autorreferida Tras la COVID-19 y Factores Asociados

Letícia Cristina Farias Pinheiro ¹

 <https://orcid.org/0000-0003-3031-7247>

Ana Cristina de Oliveira e Silva ²

 <https://orcid.org/0000-0001-8605-5229>

Rubenilson Caldas Valois ³

 <https://orcid.org/0000-0001-9120-7741>

Daiane de Souza Fernandes ¹

 <https://orcid.org/0000-0001-6629-4222>

Renata Karina Reis ⁴

 <https://orcid.org/0000-0002-0681-4721>

Marília de Fátima Vieira de Oliveira ¹

 <https://orcid.org/0000-0003-4303-9434>

Glenda Roberta Oliveira Naiff Ferreira ¹

 <https://orcid.org/0000-0002-8206-4950>

¹ Federal University of Pará, Nursing School, Belém, Pará, Brazil

² Federal University of Paraíba, Postgraduate Program in Nursing, João Pessoa, Paraíba, Brazil

³ State University of Pará, Postgraduate Program in Nursing, Belém, Pará, Brazil

⁴ University of São Paulo, Ribeirão Preto Nursing School, Ribeirão Preto, São Paulo, Brazil

Corresponding author

Glenda Roberta Oliveira Naiff Ferreira

E-mail: glenda@ufpa.br

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Abstract

Background: Identifying memory loss following the acute phase of SARS-CoV-2 infection is important for planning care because of its potential impact on activities of daily living.

Objective: To determine the prevalence of self-reported memory loss among individuals with the post-COVID-19 condition and identify the factors associated with this symptom.

Methodology: A quantitative, observational, cross-sectional study was conducted among residents of Northern Brazil aged 18 years or older who self-reported a laboratory-confirmed SARS-CoV-2 infection and met the criteria for the post-COVID-19 condition. Data were collected using an adapted online questionnaire.

Results: The prevalence of self-reported memory loss associated with the post-COVID-19 condition was 53.3% ($n = 366$). Memory loss was significantly associated with age, sex, the year of the first laboratory-confirmed SARS-CoV-2 infection, COVID-19 diagnosis before the first vaccine dose, the number of confirmed SARS-CoV-2 infections, and the use of antibiotics, antivirals, ivermectin, or homemade remedies to treat COVID-19.

Conclusion: Early screening is essential to support care delivery for the affected population and to promote self-care.

Keywords: memory; COVID-19; post-acute COVID-19 syndrome; SARS-CoV-2; prevalence

Resumo

Enquadramento: A identificação da perda de memória após a fase aguda da infecção por SARS-CoV-2 é importante para a gestão dos cuidados, devido ao impacto nas atividades da vida diária.

Objetivo: Determinar a prevalência da perda de memória autorreferida em pessoas com condição pós-COVID-19 e identificar os fatores associados.

Metodologia: Estudo quantitativo, observacional e transversal, cujos dados foram recolhidos junto de residentes do Norte do Brasil com 18 ou mais anos que autorreferiram diagnóstico comprovado por exame de infecção por SARS-CoV-2 e condição pós-COVID-19. Foi aplicado um questionário online adaptado.

Resultados: A prevalência da perda de memória autorreferida após a COVID-19 foi de 53,3% (366), estando associada à idade, ao sexo, ao ano do primeiro exame confirmativo da infecção por SARS-CoV-2, ao diagnóstico de COVID-19 antes da primeira vacina, ao número de infeções por SARS-CoV-2 e aos medicamentos usados para tratar a COVID-19, como antibióticos, antivirais, ivermectina e remédios caseiros.

Conclusão: O rastreio precoce é importante para orientar o cuidado e o autocuidado da população afetada.

Palavras-chave: memória; COVID-19; síndrome de pós-COVID-19 aguda; SARS-CoV-2; prevalência

Resumen

Marco contextual: La detección de la pérdida de memoria tras la fase aguda de la infección por el SARS-CoV-2 es importante para la gestión de la atención sanitaria, debido a su impacto en las actividades de la vida diaria.

Objetivo: Identificar la prevalencia de la pérdida de memoria autorreferida en personas con secuelas de la COVID-19 y los factores asociados.

Metodología: Estudio cuantitativo, observacional transversal, mediante encuesta web, cuyos datos se recopilaron entre residentes del norte de Brasil mayores de 18 años que indicaron haber recibido un diagnóstico de SARS-CoV-2 mediante pruebas y encontrarse en una situación de pos-COVID-19. Se aplicó un cuestionario adaptado.

Resultados: La prevalencia de la pérdida de memoria autorreferida tras la COVID-19 fue del 53,3 % (366) y se asoció con la edad, el sexo, el año de la primera prueba que confirmó la infección por el SARS-CoV-2, un diagnóstico de COVID-19 antes de la primera vacuna, el número de infecciones por el SARS-CoV-2 y los medicamentos para tratar la COVID-19, como antibióticos, antivirales, ivermectina y remedios caseros.

Conclusión: La detección precoz es importante para orientar la atención sanitaria y el autocuidado de la población afectada.

Palabras clave: memoria; COVID-19; síndrome agudo pos-COVID-19; SARS-CoV-2; prevalencia



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Introduction

SARS-CoV-2 infection has had a substantial impact on global public health. During the acute phase, the disease primarily affected the respiratory system. However, among individuals who recovered from the infection, persistent symptoms involving multiple organ systems have been reported (Talhari et al., 2023). The World Health Organization (WHO) has termed this persistence the post-COVID-19 *condition*. In adults, it is defined as a condition that “occurs in individuals with a history of probable or confirmed SARS-CoV-2 infection, usually 3 months from the onset of COVID-19, with symptoms lasting for at least 2 months and that cannot be explained by an alternative diagnosis” (Soriano et al., 2022). Other terms, such as post-COVID-19 syndrome and long COVID, are also commonly used (Greenhalgh et al., 2024). The diagnosis of the post-COVID-19 condition does not require a minimum number of symptoms (Soriano et al., 2022). A study conducted in Brazil found that, among 6,958 participants with confirmed SARS-CoV-2 infection, 83.2% (5,791) reported at least one persistent symptom 12 weeks after the acute phase of the infection. Hair loss was the most frequently reported symptom (49.4%), followed by memory loss (40.7%), attention deficit (37.0%), fatigue (34.2%), headache (29.6%), depression (25.0%), arthralgia (19.7%), vertigo (19.4%), cough (18.4%), and dyspnea (13.5%; Talhari et al., 2023).

Previous studies have demonstrated that COVID-19 may adversely affect memory and cognitive function, with these impairments being associated with sociodemographic characteristics, clinical features of the disease, and hospitalization-related factors (Ahmed et al., 2024; Hampshire et al., 2024; Merza et al., 2023; Mistry et al., 2021; Talhari et al., 2023). Therefore, this study aimed to determine the prevalence of self-reported memory loss among individuals with the post-COVID-19 condition and to identify the factors associated with this symptom. The Brazilian health system’s response to the post-COVID-19 condition has been described as episodic and reactive, reflecting an approach primarily designed for the management of acute illnesses (Cavalaro et al., 2025). Furthermore, the Brazilian Amazon is characterized by marked social inequalities and limited access to health services (Bousquat et al., 2019). During the COVID-19 pandemic, the region experienced a collapse of its health-care system, and the widespread use of medications lacking scientific evidence was reported (Ferrante et al., 2022). In addition, the use of homemade remedies is a common healthcare practice among the population of the Amazon region (Araújo et al., 2023).

Background

During the COVID-19 pandemic, nursing care primarily focused on individuals presenting with signs and symptoms of the acute phase of SARS-CoV-2 infection. As the post-COVID-19 condition became increasingly recognized among recovered individuals, persistent symp-

toms created new demands for nursing care, including rehabilitation, mental health support, and the management of chronic conditions (Robazzi et al., 2023). In this context, identifying the signs and symptoms associated with the post-COVID-19 condition is essential to ensure timely access to treatment for sequelae that adversely affect activities of daily living (Organização Pan-Americana da Saúde, & Ministério da Saúde, 2024). Previous studies have shown that the post-COVID-19 condition is associated with moderate self-care capacity and partial dependence in activities of daily living (Góis et al., 2024). In Brazil, the restrictive measures implemented during the pandemic, including mobility restrictions and social isolation, negatively affected the physical health, mental health, and socio-affective relationships of older adults, resulting in reduced self-care capacity (Muniz et al., 2022). This study was guided by Orem’s Self-Care Deficit Nursing Theory to contextualize the factors associated with self-reported memory loss during the post-acute phase of SARS-CoV-2 infection, characterized as the post-COVID-19 condition (Góis et al., 2024; Muniz et al., 2022). The Self-Care Deficit Nursing Theory comprises three interrelated theories: the Theory of Self-Care, the Theory of Self-Care Deficit, and the Theory of Nursing Systems. This theoretical framework emphasizes the importance of identifying internal and external factors that influence individuals’ self-care capacity and the implementation of nursing interventions or self-care strategies tailored to the health needs of affected populations (Hernández et al., 2017; Muniz et al., 2022).

Hypotheses

H1: Self-reported memory loss as a manifestation of the post-COVID-19 condition is a common symptom and is associated with sociodemographic, clinical, and treatment-related factors of COVID-19; H2: Self-reported memory loss as a manifestation of the post-COVID-19 condition is not a common symptom and is not associated with sociodemographic, clinical, or treatment-related factors of COVID-19.

Methodology

This quantitative, observational, cross-sectional study was conducted using an online questionnaire. Data were collected in the Northern Region of Brazil between April 2023 and February 2024.

The study included residents of the seven states in the Northern Region who were aged 18 years or older and reported a laboratory-confirmed diagnosis of SARS-CoV-2 infection. Participants were eligible if they reported persistent physical and/or mental health symptoms lasting at least four weeks after the acute phase of SARS-CoV-2 infection that could not be explained by an alternative diagnosis. Individuals without access to the internet or electronic devices required to complete the online questionnaire were excluded.

The sample size was calculated for Brazil as part of a multicenter project and subsequently stratified by geographic region and state. The calculation was based on the estimated prevalence of persistent COVID-19 symptoms. Based on the approximate number of COVID-19 cases (excluding children), it was assumed that 50.2% of individuals with COVID-19 experienced persistent symptoms, according to Miranda et al. (2022). Population estimates for 2021 by region and state were then used to estimate the proportion of post-COVID-19 condition cases in each region and state (Table 1). These estimates

were calculated by dividing the estimated number of persistent COVID-19 cases by the resident population and multiplying the result by 100.

Using these estimates, the required sample size was calculated for each Brazilian region. Assuming a 95% confidence level, a 1% margin of error, and an anticipated 20% loss rate, the estimated total sample size was 3,681 participants. For the Northern Region, the required sample size was 274 participants. Ultimately, 686 participants with a history of COVID-19 who met the criteria for the post-COVID-19 condition were included in the study (Table 1).

Table 1

Sample size

State	Approximate number of COVID-19 cases (except children)	Cases of persistence of COVID-19 symptoms	Resident population (2021)	Estimation of the percentage of post-COVID-19 condition	Sample size (20% extra)	Sample collected
NORTH	2.673.775	1.342.235	18.906.962	7,09%	274	686
Acre	148.905	74.750	906.876	8,24%	16	5
Amazonas	586.494	294.420	4.269.995	6,90%	56	77
Amapá	172.311	86.500	877.613	9,86%	19	20
Pará	809.308	406.273	8.777.124	4,63%	65	493
Rondônia	448.156	224.974	1.815.278	12,39%	56	76
Roraima	169.371	85.024	652.713	13,03%	22	5
Tocantins	339.231	170.294	1.607.363	10,59%	40	10

The WHO Global COVID-19 Clinical Platform Case Report Form (CRF) for Post COVID Condition (Post COVID-19 CRF; World Health Organization, 2021) was translated and culturally adapted by researchers from three federal universities located in different regions of Brazil. Data were extracted for participants who answered *yes* to the question: “In any of the episodes, did you experience any physical and/or mental health symptoms that persisted for four weeks or more after COVID-19?” Sociodemographic characteristics, clinical variables, treatment-related variables, and signs and symptoms associated with the post-COVID-19 condition were obtained from the questionnaire.

The questionnaire and the informed consent form were converted into digital format and hosted on the Research Electronic Data Capture (REDCap®) platform. Data were collected using an online adaptation of the Respondent-Driven Sampling (RDS) methodology. This adaptation consisted of administering the questionnaire digitally, without using recruitment coupons or providing financial incentives or other rewards to participants (Sosenko & Bramley, 2022).

The questionnaire link was initially distributed by 257 undergraduate students enrolled in health-related programs in the state of Pará through social media platforms and in community settings, including schools, universities, and public squares. Participants accessed the questionnaire

through a link received via the WhatsApp® messaging application and were encouraged to share the link with other individuals who met the eligibility criteria. The average completion time was approximately 15 minutes. Potential sources of bias included multiple submissions by the same participant, participation by individuals who did not meet the inclusion criteria, and low-quality responses (Sosenko & Bramley, 2022). The variable self-reported memory loss due to post-COVID-19 condition was associated with participants’ sociodemographic characteristics and clinical and treatment-related aspects of COVID-19 infection.

Data were extracted from REDCap® and exported to Microsoft Excel® for processing. Several limitations related to self-reported data were considered. The study design did not allow independent verification of participants’ responses regarding laboratory confirmation of COVID-19, vaccination status, chronic diseases, hospitalization, or the use of medications and other therapies.

Regarding memory loss specifically, no clinical assessment was performed. The questionnaire assessed memory loss solely through self-report, without the use of validated cognitive scales or objective neurological or laboratory testing. Consequently, the prevalence of memory loss may have been underestimated or overestimated, potentially affecting the reliability of the findings and limiting their generalizability. Nevertheless, the discovery of memory

loss and other symptoms in people recovered from COVID-19 was only possible through self-report (Rocha et al., 2024; Talhari et al., 2023). Other authors have assessed memory impairment using validated scales, including through online questionnaires (Hampshire et al., 2024; Merza et al., 2023).

The prevalence of memory loss was calculated by dividing the number of participants who self-reported memory loss by the total number of participants who reported at least one symptom consistent with the post-COVID-19 condition and multiplying the result by 100. Absolute and relative frequencies are presented in the tables, and age is reported as the mean in years.

Because the outcome variable was binary (*yes* or *no*), Pearson's chi-square test was used to assess associations between categorical variables, adopting a significance level of 5% ($p \leq 0.05$). The interpretation of the results also considered each cell's contribution to the chi-square statistic and the adjusted positive residuals (AR). Statistical analyses were performed using Minitab® Statistical Software.

The study was approved by the Research Ethics Committee of the Federal University of Paraíba (Protocol No. 5,826,893) because it constituted part of a multicenter project conducted across all regions of Brazil aimed at "identifying the persistence of symptoms in people with long COVID-19". After accessing the questionnaire link, participants were directed to the REDCap® platform, where they reviewed the informed consent form. Consent was considered to have been provided when participants selected the option, "I have read and

agree to participate in this research." Participants were also able to download a copy of the informed consent form. The multicenter project received funding through Emergency Call No. 12/2021, issued by the Brazilian Coordination for the Improvement of Higher Education Personnel (CAPES).

Results

The study included 686 participants who reported persistent physical and/or mental health symptoms lasting four weeks or longer after COVID-19. Of these, 5 participants were from Acre, 77 from Amazonas, 20 from Amapá, 493 from Pará, 76 from Rondônia, 5 from Roraima, and 10 from Tocantins.

The mean age of the participants was 32.5 years. Most participants were aged 18 to 32 years (58.5%; $n = 401$), female (67.2%; $n = 461$), 67.1% (460) had elementary/secondary education, reported an individual monthly income of up to one Brazilian minimum wage (58.2%; $n = 389$), self-identified as mixed race ("Brown") (55.8%; $n = 383$), and were single, separated, or widowed (67.2%; $n = 461$; Table 2).

The prevalence of self-reported memory loss as a post-COVID-19 condition was 53.3% (366/686). Table 2 presents the association between self-reported memory loss and participants' sociodemographic characteristics. Significant associations were observed for age ($p = 0.001$) and sex ($p < 0.0001$).

Table 2*Prevalence of memory loss and its association with sociodemographic characteristics*

Sociodemographic characteristics	Memory loss			Chi-Square	
	No n (%)	Yes n (%)	Total n (%)	p	χ^2
Age - Age range				.001	13.6
18-32	208 (51.9)	193 (48.1)	401 (58.5)		
33-47	82 (42.9)	109 (57.1)	191 (27.8)		
48-86	30 (31.9)	64 (68.1)	94 (13.7)		
Age (Mean)	30.5	34.2	32.5		
Sex				.0001	29.0
Female	182 (39.5)	279 (60.5)	461 (67.2)		
Male	138 (61.3)	87 (38.7)	225 (32.8)		
Education				.089	2.88
Elementary/Secondary	225 (48.9)	235 (51.1)	460 (67.1)		
Higher	95 (42%)	131 (58%)	226 (32.9)		
Individual income*				.106	4.47
Up to one minimum wage	193 (49.6)	196 (50.4)	389 (58.2)		
Two to three minimum wages	80 (40.6)	117 (59.4)	197 (29.5)		
More than three minimum wages	36 (43.9)	46 (56.1)	82 (12.3)		
No information	11	7	18		
Skin color				.072	5.26
White/Yellow	97 (46.0)	114 (54.0)	211 (30.8)		
Brown	170 (44.4)	213 (55.6)	383 (55.8)		
Black	53 (57.6)	39 (42.4)	92 (13.4)		
Marital status				.144	2.13
Married/ <i>de facto</i> union	96 (42.7)	129 (57.3)	225 (32.8)		
Single/separated/ Widower	224 (48.6)	237 (51.4)	461 (67.2)		

Note. n (%) = Absolute frequency (percentage); p = Significance level; χ^2 = Pearson's chi-square statistic. *Income categories are based on the Brazilian monthly minimum wage.

Table 3 presents the association between clinical characteristics related to COVID-19 and self-reported memory loss. Significant associations were found for the year of the first laboratory-confirmed SARS-CoV-2 infection

($p = 0.001$), a diagnosis of COVID-19 before receiving the first vaccine dose ($p = 0.010$), and the number of confirmed SARS-CoV-2 infections ($p = 0.001$).

Table 3*Prevalence of memory loss and its association with clinical characteristics related to COVID-19*

Clinical factors	Memory loss			Chi-square	
	No n (%)	Yes n (%)	Total n (%)	p	χ^2
Pre-existing chronic illness				0.834	0.04
No	251 (46.7)	287 (53.3)	538 (82.9)		
Yes	53 (47.7)	58 (52.3)	111 (17.1)		
No information	16	21	37		
Year of the first laboratory-confirmed SARS-CoV-2 infection				0.001	13.3
2020	113 (41.1)	162 (58.9)	275 (40.3)		
2021	119 (45.4)	143 (54.6)	262 (38.3)		
2022/2023	87 (59.6)	59 (40.4)	146 (21.4)		
No information	1	2	3		
Diagnosis of COVID-19 before receiving the first vaccine dose				0.010	6.65
No	110 (54.7)	91 (45.3)	201 (30.8)		
Yes	198 (43.8)	254 (56.2)	452 (69.2)		
No information	12	21	33		
Doses of the COVID-19 vaccine				.207	1.59
Up to 2	54(41.9)	75(58.1)	129(19.4)		
Three or more	257(48.0)	278(52.0)	535(80.6)		
No information	9	13	22		
Confirmed SARS-CoV-2 infections				0.001	10.64
One	223(51.4)	211(48.6)	434(63.3)		
Two or more	97(38.5)	155 (61.5)	252(36.7)		
Severity level of COVID-19 signs/symptoms				0.455	1.57
Mild	265 (47.6)	292 (52.4)	557 (81.3)		
Moderate	48 (41.7)	67 (58.3)	115 (16.8)		
Severe	7 (53.8)	6 (46.2)	13 (1.9)		
No information		1	1		

Note. n (%) = Absolute frequency (percentage); p = Significance level; χ^2 = Pearson's chi-square statistic.

Table 4 presents the association between treatment-related variables and self-reported memory loss. Significant associations were observed for antibiotic use ($p = .023$), antiviral use ($p < 0.0001$), ivermectin use ($p = 0.014$), and the use of herbal teas or homemade remedies ($p = 0.001$).

Table 4*Prevalence of post-COVID-19 memory loss and its association with COVID-19 treatment-related variables*

COVID-19 treatment	Memory loss			Chi-Square	
	No n (%)	Yes n (%)	Total n (%)	p	χ^2
Was hospitalized to treat COVID-19				0.536	0.38
No	294 (47.0)	332 (53.0)	626 (94.6)		
Yes	15 (41.7)	21 (58.3)	36 (5.4)		
No information	11	13	24		
Received oxygen to treat COVID-19 symptoms				0.768	0.08
No	287 (46.7)	328 (53.3)	615 (90.2)		
Yes	30 (44.8)	37 (55.2)	67 (9.8)		
No information	3	1	4		
Received antibiotic to treat COVID-19				0.023	5.19
No	117 (52.9)	104 (47.1)	221 (32.2)		
Yes	203 (43.7)	262 (56.3)	465 (67.8)		
Received antiviral to treat COVID-19				0.0001	17.7
No	192 (54.1)	163 (45.9)	355 (52.3)		
Yes	123 (38.0)	201 (62.0)	324 (47.7)		
No information	5	2	7		
Received ivermectin to treat COVID-19				0.014	6.02
No	186 (51.0)	179 (49.0)	365 (53.8)		
Yes	130 (41.5)	183 (58.5)	313 (46.2)		
No information	4	4	8		
Received chloroquine to treat COVID-19				0.948	0.004
No	265 (46.6)	304 (53.4)	569 (84.3)		
Yes	49 (46.2)	57 (53.8)	106 (15.7)		
No information	6	5	11		
Used homemade remedies to treat COVID-19				0.001	10.9
No	185 (52.9)	165 (47.1)	350 (51.2)		
Yes	134 (40.2)	199 (59.8)	333 (48.8)		
No information	1	2	3		

Note. n (%) = Absolute frequency (percentage); p = Significance level; χ^2 = Pearson's chi-square statistic.

Discussion

Among the 686 participants who reported signs and symptoms consistent with the post-COVID-19 condition, more than half reported experiencing memory loss. The prevalence of self-reported memory loss was higher than that reported in a Brazilian cohort study, which found prevalences of 36.8% at 6 months and 20.0% at 12 months after COVID-19 infection (Rocha et al., 2024). It was also substantially higher than the prevalence reported in a cross-sectional study conducted in India (19.2%) (Ahmed et al., 2024).

Regarding sociodemographic factors, older age and female sex were significantly associated with self-reported memory loss. Previous studies conducted in Brazil have

similarly reported an association between female sex and the post-COVID-19 condition (Rocha et al., 2024; Talhari et al., 2023). Among older adults, post-COVID-19 memory loss may mask underlying cognitive impairment (Rodrigues et al., 2024). Furthermore, in older adults with impaired self-care capacity, the post-COVID-19 condition has also been associated with reduced pulmonary function, generalized pain, and muscle weakness (Muniz et al., 2022). These findings support nurses' implementation of compensatory nursing systems, particularly for older adults (Santos et al., 2022).

The analysis of clinical characteristics and treatment-related factors demonstrated that self-reported memory loss was more frequent among participants whose first laboratory-confirmed SARS-CoV-2 infection occurred in 2020,

who were infected before receiving their first COVID-19 vaccine dose, and who experienced more than one confirmed SARS-CoV-2 infection. Similarly, another Brazilian study found that vaccination before hospitalization was not associated with post-COVID-19 condition at either 6 or 12 months of follow-up and that recurrent COVID-19 was associated with a greater number of persistent symptoms after six months (Rocha et al., 2024).

A study conducted in England identified persistent cognitive impairment among individuals infected during the first wave of the pandemic, when the original SARS-CoV-2 strain was circulating (Hampshire et al., 2024). Likewise, a retrospective cohort study conducted in Iraq reported that memory impairment was associated with older age, female sex, pre-existing diseases, repeated exposure to SARS-CoV-2, and infection with multiple viral variants (Merza et al., 2023).

The present study also associated self-reported memory loss with the use of antibiotics, antivirals, ivermectin, and herbal teas or homemade remedies during COVID-19 treatment. Previous studies conducted in Brazil have shown that limited access to healthcare services during the most critical phases of the pandemic contributed to the use of medications lacking scientific evidence (Ferrante et al., 2022; Soto et al., 2024). In the present study, the use of unproven therapies was common among participants with the post-COVID-19 condition, including those reporting memory loss. The use of medications without demonstrated efficacy has previously been documented in the Brazilian Amazon during the COVID-19 health crisis (Ferrante et al., 2022).

These findings highlight the importance of health education-based nursing interventions to promote self-care as part of an educational/support system (Muniz et al., 2022; Santos et al., 2022).

This study has several limitations. First, the analyses performed do not permit causal inference among the variables examined, although they are appropriate for the study's objective. Second, memory loss as a symptom of the post-COVID-19 condition was assessed exclusively through self-report using the WHO instrument, without confirmation through standardized cognitive assessment tools or clinical diagnosis. Likewise, previous SARS-CoV-2 infections were self-reported, and participants were not required to provide laboratory confirmation of their diagnosis. These factors may have introduced information bias and affected the validity of the collected data.

Furthermore, the absence of objective cognitive testing may have resulted in the overestimation of the prevalence of memory loss, thereby limiting the external validity of the findings. Nevertheless, the unique context of the Brazilian Amazon, including the challenges faced during the management of the COVID-19 pandemic, distinguishes this population from other settings. Consequently, the findings should be interpreted within this specific context and should not be generalized to other populations.

Despite these limitations, identifying factors associated with memory loss may support nurses working in community settings by facilitating screening and follow-up, promoting self-care, and identifying self-care deficits.

Conclusion

A high prevalence of self-reported memory loss associated with the post-COVID-19 condition was identified in this study. Older age and female sex were the sociodemographic factors associated with memory loss, whereas among the clinical characteristics, associations were observed with the year of the first SARS-CoV-2 infection and the number of confirmed infections. Treatment-related factors associated with memory loss included the use of antibiotics, antivirals, ivermectin, or homemade remedies.

Nurses can develop educational interventions addressing memory loss and its potential impact on daily functioning, as well as implement individualized care plans within primary healthcare, particularly for older adults, who are more vulnerable to changes in daily life. For populations in which self-medication and the use without guidance of herbal remedies are common, nurses should provide evidence-based education during individual and group consultations. Early identification of individuals in need of care may support the development of screening protocols and referral pathways to rehabilitation services and across different levels of the healthcare system.

Author contributions

Conceptualization: Pinheiro, L. C.; Silva, A. C.; Valois, R. C.; Reis, R. K.; Oliveira, M. F.; Ferreira, G. R.

Data curation: Pinheiro, L. C.; Oliveira, M. F.; Ferreira, G. R.

Formal analysis: Pinheiro, L. C.; Silva, A. C.; Valois, R. C.; Fernandes, D. S.; Reis, R. K.; Oliveira, M. F.; Ferreira, G. R.

Funding acquisition: Silva, A. C.; Reis, R. K.

Investigation: Fernandes, D. S.; Reis, R. K.; Oliveira, M. F.; Ferreira, G. R.

Methodology: Silva, A. C.; Oliveira, M. F.; Ferreira, G. R.

Project administration: Silva, A. C.; Reis, R. K.

Resources: Reis, R. K.

Supervision: Silva, A. C.; Reis, R. K.

Writing – original draft: Pinheiro, L. C.; Silva, A. C.; Valois, R. C.; Fernandes, D. S.; Reis, R. K.; Oliveira, M. F.; Ferreira, G. R.

Writing – review & editing: Pinheiro, L. C.; Silva, A. C.; Valois, R. C.; Fernandes, D. S.; Reis, R. K.; Oliveira, M. F.; Ferreira, G. R.

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