



Are elderly people who have been infected with COVID-19 more afraid of falling?

Idosos que foram infectados por COVID-19 tem mais medo de cair?

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ABSTRACT

Falls in elder people during the COVID-19 pandemic constitutes an even more worrying public health problem. Therefore, the objective of this study was to verify whether older people who were infected by COVID-19 are more afraid of falling than those who were not infected. This is a cross-sectional study, carried out with older people living in a city in the interior of the state of Rio de Janeiro, Brazil. Data were collected by completing a digital questionnaire, containing questions about sociodemographic and health aspects and occurrences of falls, and the Activities-Specific Balance Confidence (ABC) scale. After collection, the data was analyzed using descriptive statistics. Of the 202 participants, 117 reported having suffered falls, of which only 25 (34.7%) had COVID-19. Although the risk of falls in the elderly is a worrying public health problem, which may worsen in the pandemic context, it was observed that the elderly participants in this study had the same fear of falling, regardless of whether they were infected with COVID-19 or not.

Keywords: Accidents due to falls. Aging. Covid-19.

RESUMO

A queda em idosos durante a pandemia de COVID-19 constitui-se um problema de saúde pública ainda mais preocupante. Assim, o objetivo desse estudo foi verificar se idosos que foram infectados por COVID-19 tem mais medo de cair do que os que não foram infectados. Trata-se de um estudo transversal, realizado com idosos residentes em município do interior do estado do Rio de Janeiro, Brasil. Os dados foram coletados a partir do preenchimento de um questionário digital, contendo questões sobre aspectos sociodemográficos, de saúde e ocorrências de quedas, e à Activities-Specific Balance Confidence (ABC) scale. Após a coleta, os dados foram analisados por meio de estatística descritiva. Dos 202 participantes, 117 referiram terem sofrido quedas, sendo que destes, apenas 25 (34,7%) tiveram COVID-19. Embora o risco de quedas em idosos seja um problema de saúde pública preocupante, que pode se agravar no contexto pandêmico, observou-se que os idosos participantes deste estudo tiveram o mesmo medo de cair, independente de terem sido infectados ou não por COVID-19.

Palavras-chave: Acidentes por quedas. Covid-19. Envelhecimento.

INTRODUCTION

COVID-19, illness caused by the new coronavirus (SARS-CoV-2), was initially identified in China, on December 2019, spreading through the world in the following years, becoming a global challenge without precedents, for both science and society^{1,2}.

It was soon identified that the newly found disease could cause from asymptomatic infection to severe conditions, which quickly and unexpectedly evolved into death in some cases³. Due to its high transmissibility rate and wide geographical distribution, this disease was characterized by the World Health Organization (WHO) as a pandemic in March 2020, with some risk factors for its aggravation being identified, which include advanced age, obesity, diabetes and hypertension, among others, even though the precise physio pathological mechanisms of the disease were still not known^{3,4}.

Common signs and symptoms of COVID-19 are mild, such as coughing, fever, nasal congestion and fatigue more present, but being able to evolve into dyspnea and Acute Respiratory Distress Syndrome (ARDS)⁵. It is also emphasized the register of other symptoms occurrence associated with the disease, including persistent ones such as prolonged coughing and dyspnea, overall weakness, among others. The uncertain prognosis would only reinforce the importance of the advance in search for accurate scientific evidence related to the disease, as well as effective prevention and treatment measures for it^{1,6,7}.

In this complex scenario, SARS-CoV-2 is becoming increasingly more worrying, bringing repercussion to several body systems, including the cardiovascular, the renal and even neurological one. Regarding these neurological symptoms of COVID-19, for example, the number of evidences signaling the occurrence of headache, dizziness, mental confusion, consciousness level alterations, disorientation, and even significative attention deficits, have been growing among the affected

by the disease. Especially in more serious cases and in the elderly^{8,4,9}.

Despite the restraint measures implemented, in different levels on each place^{10,11,12}, the pandemic advanced in a catastrophic way in Brazil¹³. According to data from April 2023, since the beginning of the pandemic, 37 million COVID-19 cases were confirmed in the country, with more than 700,000 deaths on national territory resulting from the disease¹³. Although most of these cases were mild and self-limited, the significant number of deaths in the elderly population stands out, in parallel with the significant number of people with persistent symptoms, even after the resolution of the acute illness⁷.

It is opportune to point out that, in a global crisis context such as the one established since March 2020, several already existing issues could still coexist and/or get worse in face of the adversities imposed¹⁴. In this perspective, the risk of falls in elderly people is one of these issues that need a keener and more shared look from the academic community, public management, healthcare professionals, family and society as a whole. Mainly due to the tendency of increase in the elderly population reached in the last decades, and the several biophysiological and psych sociocultural changes associated with the aging process, which make such individuals more vulnerable to falls, being able to even alter their environment perception ability^{15,16}.

It is necessary to consider that even before the pandemic, the elderly healthcare scenario was already worrying and neglected, permeated by lots of inequality regarding access conditions to health promoting preventive actions⁶. With the prolongation of the social distancing measures occurred by the pandemic prolonged course, it is estimated that the home restriction may have increased even more the incidence of falls among elder people¹⁷, or even increased their fear of falling, which was present way before the pandemic period¹⁸.

According to data from the WHO¹⁹, elderly people are at greater risk of death and/or serious injuries resulting from a fall, and this risk increases significantly with advancing age. This is due both to physical, sensory and cognitive changes, associated with the physiological process of aging, and to living in environments that are not adapted to their needs¹⁹. Furthermore, all of this becomes even more complex when associated with conditions of senility and possible underlying pathologies or even disabling conditions, such as muscle weakness, worsening of the physical conditioning and balance, sometimes accentuated due to SARS-CoV-2 infection, as well as the long period of physical inactivity experienced during the pandemic^{1,4,7,8,9}.

Characterized as one of the disabling events that most affects the elderly population, falls can lead to increased dependence and impaired quality of life, due to its possible consequences. In Brazil, approximately 30% of elderly people fall once a year and the risk of falling increases significantly with advancing age, reaching 50% in elderly people over 80 years old²⁰.

Therefore, considered as complex, multifactorial and recurring events, falls in the elderly population require a broader perspective for their prevention, and it is essential not to neglect the factors that can trigger them, such as fear of falls, for example. This fear has generated a loss of independence in up to 50.7% of these elderly people, making them anxious and depressed, with consequent changes in their daily habits¹⁸. This fear of falling in the elderly population constitutes a common and worrying public health problem, leading to loss of self-confidence, reduced physical and social activities, depression, loss of mobility, physical weakness, and even increased risk of falls, generating a negative impact on the quality of life of these individuals²¹.

It is estimated that around 684,000 deaths occur due to falls across the world, with 80% of these events occurring in low- and middle-

income countries. Of this total, people over 60 years of age are the most affected by fatal falls¹⁹. In the context of the COVID-19 pandemic, only one study, carried out in Vietnam, sought to investigate the relationship between the disease and the occurrence of falls in the elderly²². However, it is noteworthy that no studies that addressed the effect of SARS-CoV-2 infection on the fear of falling in elderly Brazilians were found. When researching the topic, we only identified a possible correlation between viral infection and neurological manifestations, where one of the symptoms was dizziness⁸, which constitutes a determining factor in imbalance, which can generate and/or accentuate insecurity in elderly person and, consequently, the fear of falling²¹.

Therefore, the objective of this study was to verify whether elderly people who were infected by COVID-19 are more afraid of falling than those who were not infected.

METHODOLOGY

This is a cross-sectional, descriptive and quantitative study, carried out with 202 elderly people, aged 60 years or over, living in the municipality of Barra Mansa, located in the Médio Paraíba region, in the interior of the state of Rio de Janeiro, Brazil. The sample calculation was carried out based on probabilistic sampling, of the simple random type²³, considering the elderly population according to data from the last census, established at 21,665 elderly people²⁴. Thus, considering the precepts recommended for a significant sample calculation²³, with a statistical power of 95%, a margin of error established at 5% and a possible sample loss of 15%, the participation of 244 elderly people would be necessary.

Included in the study are the elderly people present at the data collection sites, who lived in that municipality, and who agreed to participate in the study voluntarily and who had

adequate cognitive capacity, according to the Mini Mental State Examination (MMSE)^{25,26}. Those with previous neurological and/or vestibular diseases, elderly people who required any auxiliary device for walking and/or locomotion, those with amputation of any segment of the body, visual changes that could not be corrected with glasses or lenses (such as cataracts, diabetic retinopathy and glaucoma) and also those unable to communicate or walk alone, were excluded.

The research was carried out in person at two health units in the city, from June to October 2022. Due to the conditions imposed by the COVID-19 pandemic, all biosafety precautions were taken in accordance with the health standards in force at the time, such as wearing a mask, distancing at least 1 meter whenever possible, and prior and constant hand hygiene. After the invitation to participate in the research, the Free and Informed Consent Form (FICF) was presented to the elderly, which were signed by the participants prior to the start of data collection, informing them of the research objectives and forms of participation, also ensuring the clarification of possible remaining doubts. After accepting and signing the FICF, participants answered the questions contained in the questionnaires prepared on *Google Forms*, with digital completion carried out with the help of the researchers, using available electronic devices. This method, in addition to contributing to saving on paper usage, allowed the automatic saving of data.

To verify the cognitive capacity of the elderly, they were initially submitted to the MMSE²⁵, thus defining those who met the inclusion and exclusion criteria. For exclusion by the MMSE, the parameters obtained were considered to be at least 20 points for illiterate elderly people, 25 points for elderly people with education between 1 and 4 years, 26.5 for those with education between 5 and 8 years, 28 for those with education between 9 and 11 years old and, 29 for those who had more than 11 years of

schooling, according to the cutoff score proposed in previously carried out studies²⁶.

Those who were classified as suitable for research by the MMSE and met the other inclusion criteria described, answered the questions in the proposed questionnaire, assisted by the researchers, which contained sociodemographic and health questions, about the occurrence and locations of falls and possible injuries resulting from them and, referring to the ABC scale - *Activities-Specific Balance Confidence*. This tool is a questionnaire, consisting of 16 items, which was developed to numerically quantify the level of confidence in carrying out specific activities, without losing balance or becoming unstable²⁷. Thus, participants were asked to assign scores ranging from 0 (no confidence) to 100% (completely confident), with the scale score obtained from the sum of the assessments, which can vary from 0-1.600 and dividing this result by 16. Those defined in previously carried out studies were used as analysis parameters, considering that percentages above 80% indicate a high level of physical functioning; 50-80%, a moderate level of physical functioning; and percentages below 50%, a low level of physical functioning. It is noteworthy that values lower than 67% in the elderly are already predictive of future falls²⁷.

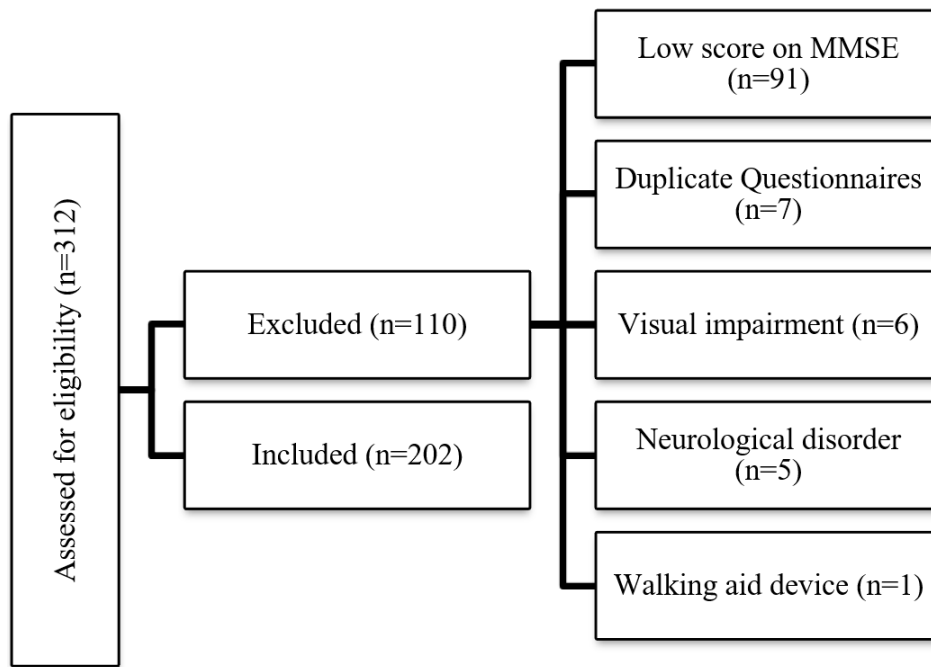
After collection, the data was organized using spreadsheets and graphs generated using the *Microsoft Office Excel*®, application, being analyzed after due treatment, using descriptive statistics, with the help of the *BioEstat 5.3* free software.

It is noteworthy that, in order to comply with the regulations established for research involving human beings^{28,29}, data collection only began after approval of the project by the Research Ethics Committee (REC) of the Centro Universitário de Barra Mansa (UBM), under protocol nº 5.166.618 (CAAE 53769621.4.0000.5236), with the signing of the

TCLE by the participant, a mandatory requirement prior to the beginning of the research procedures with them. In addition, recommendations regarding the security and storage of data from electronically generated questionnaires were also followed, in order to ensure the secrecy and confidentiality of research participants' information, as set out in the Circular Letter of the Conselho Nacional de Ética em Pesquisa (CONEP) nº 1/2021, with the collected data downloaded to a local electronic device after completion of data collection, erasing any and all records from any digital platform, shared environment or "cloud", as recommended³⁰.

RESULTS

Initially 312 elderly people were assessed for eligibility, however, 110 of those were excluded, based on the application of the inclusion and/or exclusion criteria established for the study, as described in Flowchart 1. The 202 participants included had a mean age of 68 ± 5,98 years, with their sociodemographic and health profile shown in Table 1, presented below. The results of the ABC scale regarding confidence in balance when carrying out specific activities, presence of falls and COVID-19 infection are shown in Table 2. In addition, data regarding the place where falls occurred, injury history and intervention(s) carried out, described by the participants who reported them, are shown in Table 3.



Flowchart 1: Participants involved in the research

Caption: n (Absolute frequency). MMSE (Mini Mental State Examination) Source: Research data.

Chart 1. Sociodemographic and health characteristics of the elderly participants in the research

(Continua)

Variables	n (%)*
Education	
Illiterate	6 (2,97%)
Literate	9 (4,45%)
Incomplete Elementary education	79 (39,10%)
Complete Elementary education	39 (19,30%)
Incomplete High school	14 (6,93%)
Complete High school	41 (20,29%)
Incomplete Higher education	6 (2,97%)
Complete Higher education	8 (3,96%)

(Conclusão)

Variables	n (%)*
Self-declared Race	
White	83 (41,08%)
Brown	69 (34,15%)
Black	44 (21,78%)
Yellow	5 (2,47%)
Indigenous	1 (0,49%)
Gender	
Female	144 (71,28%)
Male	58 (28,71%)
BMI**	
Underweight	4 (1,98%)
Normal	58 (28,71%)
Overweight	85 (42,07%)
Obesity	55 (27,22%)
Individual Monthly Income	
Class E (up to R\$ 1.576,00)	101 (50%)
Class D (up to R\$ 1.576,01 a 3.152,00)	59 (29,20%)
Class C (up to R\$ 3.152,01 a 7.880,00)	21 (10,39%)
Class B (up tp R\$ 7.880,01 a 15.760,00)	4 (1,98%)
Class A (up to R\$ 15.760,01)	2 (0,99%)
No Income	15 (7,42%)
Smokers	
Yes	15 (7,42%)
No	187 (92,57%)
Alcoholists	
Yes	45 (22,27%)
No	157 (77,72%)
Physical Activity	
Active practitioners of some activity	72 (35,64%)
Sedentary	130 (64,35%)

Caption: n (Absolute frequency), % (Relative Frequency, BMI (Body Mass Index). * Categorical variables were expressed as absolute and relative frequencies. ** The BMI data were calculated according to the weight and height reported by the participants, considering the normal values established by the World Health Organization (WHO) for BMI stratification. Source: Research Data.

Chart 2. Data on COVID-19 infection, reports of falls, age and confidence in balance to carry out specific activities, referring to elderly people participating in the research.

Variables	n (%) or average (SD)*
Been infected by COVID-19?	
Yes	72 (35,64%)
No	130 (64,35%)
Falls	
COVID-19 infected participants	25 (34,7%)
COVID-19 non-infected participants	92 (70,7%)
Age	
COVID-19 infected participants	66 ± 5,34
COVID-19 non-infected participants	69 ± 6,15
Confidence in balance to carry out specific activities	
COVID-19 infected participants	74 ± 22,09
COVID-19 non-infected participants	73 ± 24,08

Caption: n (Absolute frequency), % (Relative Frequency), SD (Standard Deviation) * Categorical variables were expressed as absolute and relative frequencies, and continuous variables as mean and standard deviation. Source: Research data.

Chart 3. Location of falls, injury history, and injury intervention for participants who reported falls

Variables	n*
Location of the fall (n=117)	N
On the Street	36
At Home	43
On the Street and At Home	38
Injuries due to the fall (n=117)	
Yes	70
No	47
Intervention** (n=117)	
None	51
Immobilization	47
Rest	19
Surgery	10
Physical Therapy	6
Stitches	1

Caption: n (Absolute Frequency). *The variables were expressed in absolute frequency. **Some participants reported needing more than one intervention. Source: Research data.

DISCUSSION

During data collection, especially when applying the MMSE, there were difficulties due to the use of a mask, especially in a noisy environment. This may have occurred due to peripheral hearing loss caused by aging, associated with a possible reduction in the efficiency of sound processing, or due to degeneration of the central auditory pathway. Although studies indicate that peripheral hearing loss also plays a key role in difficulties in understanding speech in noisy places³¹. However, it is noteworthy that data collection was not hampered due to these difficulties, which were overcome through effective communication and attentive and qualified listening, carried out by the researchers during the process.

The female gender was predominant among the participants in this research, as well as in other studies carried out with the elderly population^{16,17,21,32}. According to these authors, women tend to commit more intensely to healthy habits in order to have a longer life expectancy than men, although elderly women are more vulnerable to falls when compared to the elderly men.

Most participants in this research reported having incomplete primary education,

corroborating findings obtained in another study¹⁷, where 81% of participants had between 0 and 5 years of schooling. This finding is consistent with the Brazilian scenario, as found in a nationwide home-based study, where education of less than 8 years largely predominated, in more than 75% of participants¹⁶. Also noteworthy are the findings obtained in a study carried out in the same scenario as the current research, in which it was observed that 52% of elderly people had incomplete primary education¹⁸. This data can be justified by past national education policies, as well as a reflection of unequal access to education among different social groups³³.

According to a survey covering the entire national territory, elderly people in the southeast region have an average of 6 to 8 years of education. It should be noted that educational levels are an important indicator of socioeconomic status, and in this population, income comes mostly from retirement. This same research identified that 51.1% of elderly people have income from all sources below the total of a minimum wage³³, corroborating the results of the current research, where the majority of elderly people belong to Class E. However, no data were collected regarding if these elderly people remain in the

paid job market, which, in general, can occur either because they like their jobs or because they do not have the economic conditions to retire, with the participation of these elderly people in the job market being influenced by several possible factors, such as sex, age, education, family composition, income, health conditions, occupation characteristics and even race/color¹⁶. It is also worth highlighting that brown and black elderly people remain those who present the most inequities, in general, presenting a worse socioeconomic situation³⁴.

The presence of racial inequalities among the elderly suggests a complex interaction between color/race, with an unequal distribution of risk factors, such as health issues, that accumulate throughout life³⁴. However, it is noteworthy that, corroborating the findings of other studies^{17,35}, the majority of participants in this research declared themselves white. It should be noted that race categories are like a system of classification and lived experience and vary according to the national geographic region and over time. Furthermore, ethnic-racial inequalities in health have been highlighted and reveal that black, indigenous and mixed-race people are at a disadvantage in terms of health, due to specific political configurations and topics such as democratic participation, racial identities and migration³⁶. In the present study, stratification and correlation between race and income were not carried out, which makes the discussion of these variables difficult, and is also considered as another of its limitations.

It was also found that the majority were married, as was found in the findings obtained in other studies carried out in Campo Grande/MS³⁷ and Juiz de Fora/MG¹⁷, further contrasting with the findings obtained in a study carried out in Belo Horizonte/MG²⁰, in which single elderly people were present in greater numbers. It is noteworthy that marriage or partner support is a significant and independent predictor of survival, with a general reduction in the risk of mortality for married individuals³⁸.

It was also observed that the majority were not smokers, a habit that, when present, in addition to compromising not only life expectancy, can have a significant influence on the loss of quality of life of these individuals. As a result, non-smokers have a longer life expectancy than smokers, due to the biological damage induced by smoking³⁹. A minority of alcoholics was also observed among the study participants. Discussions about alcohol consumption generally refer to young people, due to the harm caused to this group, such as violent deaths and accidents; As for the elderly, biological and physiological changes related to aging affect the absorption, metabolism and elimination of alcohol, causing a decline in liver and kidney functions and even drug interactions, which can cause various health problems⁴⁰.

Regarding the consequences of falls, although the study did not track which type and segment was affected, it was found that the majority of participants reported having suffered injuries caused by them, with immobilization and rest being the most prevalent necessary interventions for treatment of these cases. It is noteworthy that the most frequent injuries resulting from falls reported in the literature are extremity fractures, mild traumatic brain injury and hip fractures. Although less than one in 10 falls results in a fracture in elderly people, the occurrence of this type of injury is quite worrying²⁰.

In relation to the fear of falling in the elderly population, the main variable of interest in this study, previous findings described in the literature³² are highlighted, which indicate that younger elderly people (between 60 and 69 years old) are less afraid of falling than the elderly aged 70 or over. In the current research, both age and confidence in balance to carry out specific activities were similar; however, it was observed that elderly people who were not infected by COVID-19 reported more falls when compared to those who were infected by the virus. Despite

this, it is noteworthy that some elderly people in this research reported not having undergone a test to confirm or rule out SARS-CoV-2 infection. In addition to the difficulties in accessing testing during the pandemic, it is also important to consider that the nucleic acid test for SARS-CoV-2 showed a high false-negative rate, making it difficult to effectively identify and isolate infected individuals to contain the infection, not being completely reliable for diagnosis⁴¹. In view of this, this is considered to be another possible limitation of this study, as well as the possible asymptomatic cases that may have occurred in this population, which in the absence of suspicion, did not even seek testing.

Based on the findings obtained in the present study, home was the main place where falls reported by participants occurred, and was mentioned by 69.2% of participants who reported the occurrence of these events. It is observed that home is an environment with a relevant impact on the life of elderly people, regardless of their level of limitations and capabilities. Thus, some stressors, such as the presence of carpets, absence of safety bars, inadequate lighting, slippery floors, presence of ledges and/or stairs, absence of handrails, and too many objects in the environment, tend to generate fear and vulnerability to falling, in this population¹⁷.

It is noteworthy that social isolation led to a decrease in habitual physical activity, which may explain the majority of participants in this research being sedentary (64.35%), and changes in eating habits, which may favor overweight and obesity¹¹. In the current study, most participants reported being overweight (42.07%) and/or obese (27.22%), making it possible that there is an association between increased BMI and falls, in agreement with the findings obtained in other studies¹⁸, which observed a greater risk of falls in obese elderly people, due to the reduced maintenance of postural balance and body stability. However, it must be considered that the weight and height of the participants were

not measured, and the information reported by the participant themselves was considered for calculating the BMI, which can be considered one of the limitations for these analyses.

Regarding the age of the participants, it was found that the average results obtained in the questionnaires between the groups were very close, as well as the groups reaching similar averages on the ABC scale. It is noteworthy that a score of 50 to 80% represents a moderate level of physical functioning, according to the ABC scale²⁷. In the findings obtained, both participants who were infected by COVID-19, and those who were not, fell within this moderate level of physical functioning, corroborating findings obtained in another study, that having also used the ABC Scale, verified a level moderate level of physical functioning in more than half of elderly people living in the community¹⁸.

The proximity of the ABC scale results may have occurred due to the difference in sample size, between participants who were or were not infected with COVID-19. However, this issue requires further studies with a greater number of participants, a similar number of participants in the groups, and also in different regions of the country, to determine whether the findings of this research reliably match the reality of Brazilian elderly people or not. As previously described, until the moment of analyzing the results obtained in this study, there was only one published research, which was developed in Vietnam and had the same character as the present study, associating post-COVID-19 falls with lower limb weakness²². Furthermore, one of the limitations found in this research is the lack of data on persistent symptoms and/or sequelae of COVID-19, already predicted in some studies.

In the present study, it was identified that elderly people who were not infected by the new coronavirus fell more than those who were infected. However, it is noteworthy that falls, together with the circumstances of confinement and the fear of contamination, can lead the

elderly to an increased fear of falling, especially at home¹⁷. In this sense, a study carried out with elderly people in the context of a pandemic identified that elderly people who had to stay at home for a long time during this period reported a high fear of movement, a high risk of falling and a low level of physical activity. Furthermore, it was observed that the fear of movement can explain 49.5% of the fear of falling, with this fear being a health problem equivalent to falling, making it important to assess both the risk and the fear of falling¹². Therefore, it should be noted that another possible limitation of the present research concerns the non-assessment of fear of movement.

Comparing the level of education observed, in relation to the risk of falls and/or the fear of falling, with findings highlighted in other studies²¹, it can be inferred that establishing coping strategies to minimize the fear of falling can be difficult, leading this population to become less active, causing a greater number of occurrences of physical instability and falls²¹. Furthermore, even elderly people considered “healthy” present motor instability when subjected to complex tasks, which require the association between cognitive and motor variables. In view of this, it is essential to establish an individualized and multidisciplinary therapeutic plan, in order to prepare elderly people to face daily challenges³⁷. Above all, in contexts even more adverse than those faced in the current pandemic.

Considering this entire pandemic context, which may even last for several years with recurring restrictions and social distancing needs, its potential risk of affecting the physical activity levels of this population is highlighted, consequently exposing them to greater risk of falls and incidence of disability in the elderly in the near future. From this perspective, it is even believed that this could lead to an increase in the number of falls in the elderly in the coming months and/or years, as a consequence of less physical activity during the pandemic period. Therefore,

the pressing risk of an increase in the number of deaths and disabilities in this population¹⁴, arising from this context, is highlighted, requiring urgency in the construction of effective public health policies for this population, especially with regard to this problem.

Considering the magnitude of the possible consequences of these events, both for the independence and functionality of these individuals, and for the health system of a country, it is extremely necessary to understand these phenomena in depth, the various factors involved, so that it is possible then, the planning and effective implementation of individual and/or collective measures to promote health and active aging¹⁶. These measures are essential for preventing these avoidable events and, consequently, for improving the quality of life of these elderly people, and reducing morbidity, mortality and health costs associated with these events^{14,15}.

CONCLUSION

In a context of global crisis, such as that resulting from the COVID-19 pandemic, several existing problems can get worse, given the adversities imposed. From this perspective, the risk of falls in the elderly is one of these conditions, considering the magnitude of its possible consequences. In the context analyzed, it was observed that the elderly participants in this study had the same fear of falling, regardless of whether they were infected with COVID-19 or not. However, these findings must be put into perspective, taking into account several aspects related to the underestimation of cases occurring in the Brazilian and global scenario, which, besides having difficulty in accessing testing for COVID-19 occurring in many locations, is experiencing a context of many uncertainties regarding a recently discovered disease, which sometimes proceeds asymptotically, compromising its diagnosis,

but with several possible late complications, still in the study phase.

This, although it is suggested that other studies are carried out with a larger sample and other variables to complement these findings, the relevance and contribution of the results presented here are highlighted, which point to the urgency of the commitment of public management, community academic and society as a whole, with the construction of effective measures to tackle such a complex and challenging public health problem. Above all, considering the importance of promoting active and healthy aging, in overcoming the impact that falls on the elderly can cause, both individually and in social and economic terms. Even more so, in a nation where social inequalities are disparate and significantly accentuated, due to the risk of greater vulnerability of these individuals in times of crisis.

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