



Anxiety in the pandemic: a study about the impacts on mental health during the COVID-19 contagion in Brazil

Ansiedade na pandemia: um estudo sobre os impactos na saúde mental durante o contágio de Covid-19 no Brasil

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Abstract: The aim of this study was to investigate the symptoms of anxiety resulting from social distancing and its impacts on the Brazilian population during the COVID-19 pandemic. The study consisted of a cross-sectional survey, with data constructed through an online questionnaire that included sociodemographic information and information about anxiety symptoms. The questions were constructed considering the concept of “mental health waves”, as being the mental health demands presented at the respective moment of the pandemic. The sample consisted of 632 participants, and the prevalence of anxiety identified was 81%, with no statistically significant differences between genders. The main factors related to anxiety were loneliness (OR=2.18, 95% CI=1.16-4.09), sleeping difficulties (OR=2.59, 95% CI=1.57-4.28), irritability (OR= 1.85, 95% CI=1.11-3.09), financial difficulties (OR=1.85, 95% CI=1.01-3.40), and problems related to emotional isolation (OR=2.43, 95% CI=1.47-4.01). In the context of the challenges for mental health, the results obtained contribute to deeper understanding of the changes related to anxiety that emerged with the advent of social distancing policies and the context of the pandemic.

Keywords: Covid-19; Anxiety; Mental Health.

Resumo: O objetivo deste estudo foi investigar os sintomas de ansiedade decorrentes do distanciamento social e seus impactos sobre a população brasileira durante a pandemia COVID-19. O estudo consistiu em uma pesquisa transversal, com dados construídos por meio de questionário online que incluía informações sociodemográficas e informações sobre sintomas de ansiedade. As questões foram construídas considerando o conceito de "ondas de saúde mental", como sendo as demandas de saúde mental apresentadas no respectivo momento da pandemia. A amostra foi composta por 632 participantes, e a prevalência de ansiedade identificada foi de 81%, sem diferenças estatisticamente significativas entre os sexos. Os principais fatores relacionados à ansiedade foram solidão (OR=2,18, 95% IC =1,16-4,09), dificuldades para dormir (OR=2,59, 95% IC =1,57-4,28), irritabilidade (OR= 1,85, 95% IC =1,11%-3,09), dificuldades financeiras (OR=1,85, 95% IC =1,01-3,40) e problemas relacionados ao isolamento emocional (OR=2,43, 95% IC =1,47-4,01). No contexto dos desafios para a saúde mental, os resultados obtidos contribuem para uma compreensão mais profunda das mudanças relacionadas à ansiedade que surgiram com o advento das políticas de distanciamento social e o contexto da pandemia.

Palavras-chave: Covid-19; Ansiedade; Saúde Mental.

Introduction

The COVID-19 pandemic has brought cross-sectoral, interprofessional, and multidimensional challenges. When declaring the pandemic on March 11, the World Health Organization (WHO) communicated to all countries in the world that infection by the new coronavirus would affect everyone. The WHO called on governments and their health management departments to face one of the greatest challenges of the century. As the pandemic progressed from China to Europe and later to other countries in Oceania and the Americas, the impacts became evident, as, in addition to the health emergency, the pandemic has also had social, political, and economic impacts.¹

The organization of health systems was put to the test in all countries. Considering mental health, waves of demands began to be identified, emerging from the situations imposed to control the spread of the new coronavirus (SARS-CoV-2). The social distancing used as a premise and fundamental strategy to contain the spread of the virus put projects, dreams, activities, and social and family gatherings on hold. The lack of knowledge and trust in the actions of the institutions responsible for confronting the pandemic, combined with false information disseminated many times by the federal government itself can also be considered triggers of fears and anxieties. This was observed during the advance in the pandemic in Brazil.

We adopted for this study the concept of "Mental Health Demand Waves", defined as mental health care needs according to the situation in which each country finds itself, with the understanding that psychological aspects are directly linked to public health decisions.^{2,3,4} Anxiety can be characterized as a complex set of emotions that has fear as a crucial and dominant component, which is related to other emotions, such as guilt, grief, shame, etc. It involves the anticipation of a fear that announces that something bad could happen (usually exposing a catastrophic view of events, arising

from distorted interpretations of reality).^{5,6} The first studies that linked anxiety to the COVID-19 pandemic described increased levels of anxiety, along with indicators of increased consumption of alcohol and other drugs, sleep disorders, mood disorders, fears, and loneliness, in addition to social and environmental risks and its consequences.⁷ Studies also signal excessive concern about the absence or excess of information and resources during the pandemic. In addition, increased levels of anxieties and fears are described in children, with significant alterations in mood and behavior. These frameworks have repercussions during and after the pandemic, requiring attention, knowledge production, and the development of strategies by health services in order to provide the necessary care to alleviate them.⁸

At the end of May 2020, the UN published a note in which it points out the impacts of the pandemic on mental health, warning of an unprecedented crisis in this area, where, as people around the world are surrounded by the health crisis that causes a new disease, without specific treatment, in addition to several deaths, these same people, when forced to isolate themselves, still have to deal with the socio-financial crisis (which resulted in poverty and poor living conditions) arising from the pandemic.⁹ In this way, it is evident that identifying anxiety symptoms in subjects who participated in a national survey can provide the necessary indications for the development of strategies in the health system. Understanding the situations, the feelings and emotions caused by social distancing enables the development of procedures aimed at specific interventions, as well as the production of knowledge about the impacts of the pandemic on mental health. That said, the purpose of the current study was to investigate anxiety symptoms arising from social distancing and to analyze the impacts of social distancing on the frequency of these symptoms during the COVID-19 pandemic.

Methodology

The study consisted of a cross-sectional survey to investigate the impact of the COVID-19 pandemic on the mental health of the Brazilian population, using an online questionnaire to score the main symptoms and changes experienced by respondents during the period of social distancing measures. It consisted of a part of the larger research "Psychological Symptoms During the Covid-19 Pandemic" approved by the CEP-UEA under opinion no. 4,098,461 (CAAE nº 33103420.3.0000.5016).

No identification of respondents was required, and participation was voluntary. The instrument contains questions regarding the variables of gender, age, region, city, state of residence, and education, and was structured according to the waves of mental health demands. As the pandemic progressed in waves globally from a geographic perspective, its progress was checked based on

reported emotional impacts.³ The Instrument contained questions regarding the symptoms arising from the first and second wave described by researchers in the literature during the COVID-19 pandemic, data were collected in a single period. Thus, the first wave represents the initial moment of the pandemic, when the arrival of the virus in the localities was reported and the initial symptoms described by the researchers in the literature were: depression, fear of contamination, fear of losing one's job, fear of dying, loneliness, increased consumption of alcohol and other drugs, sleeping difficulties, irritation, fear of returning to work, infodemic, and fear of shortages. The second wave was responsible for the mental health demands that emerged during the pandemic, the moment when the number of deaths grows, and the symptoms of the first wave are more prominent, with the emergence of signs of emotional fatigue, due to the prolonged period of social isolation. In addition to psychological symptoms, we also collected the following variables that refer to isolation and the impact on people's lives: financial difficulties, domestic violence, marital problems, problems related to emotional isolation, boredom, problems related to prejudice, and problems with homeschooling at a distance.

The collection instrument was built on the Google[®] forms platform and disseminated on the internet, through social networks, especially a Facebook page, and remained available between June 20th and July 4th, 2020. In all, 632 responses were obtained from all regions of the country, with different proportions in the number of respondents. All participants were of legal age and met all the inclusion and exclusion criteria of the approved project.

Data were tabulated in an Excel spreadsheet and analyzed using STATA[®] 13 software (Stata Corporation, College Station, TX, USA). Logistic regression was used to estimate the odds ratios and respective confidence intervals to identify the relationship between the other variables collected with anxiety. Subsequently multivariate analysis was used, with a p-value criterion less than 0.02 adopted for the variable to participate in the multivariate regression.

Results

Of the total of 632 responses forming the sample, 80.4% were female and 18.7% male (Table 1). Regarding education, 20.4% of respondents have completed higher education, 20.4% incomplete higher education or in progress, 17.9% complete high school, 13.1% postgraduate school, 7.3% incomplete elementary school, 6.6% master's degree, 6.5% incomplete high school, 5.2% complete elementary school, 1.4% doctorate, 0.5% post-doctorate, and 0.6% other (Table 2). Regarding age, 16.9% of respondents were between 18 and 24 years old, 17.7% between 25 and 29 years old, 10.6% between 30 and 34 years old, 15.3% between 35 and 39 years old, 12.8% between 40 and 44 years old,

9.7% between 45 and 49 years, 6.8% between 50 and 54 years, 5.2% between 55 and 59 years, 3.8% between 60 and 64 years, 0.8% between 65 and 69 years, and 0.3% between 70 and 74 years (Table 3). Regarding the region of residence, there was a predominance of responses from the northern region of the country, representing 32.3% of the sample, followed by the southeast region with 30.2%, the northeast region represented by 12.2% of the sample, the southern region represented by 12%, the Midwest region represented by 8.9 %, and 4.4% of respondents were outside the country.

Table 1. Relation between Gender and anxiety symptoms in the period of June and July of 2020, Brazil.

Variable	Anxiety						
	No (%)	Yes (%)	Total (%)	Univariate OR (95%CI)	P	Multivariate OR (95%CI)	P
Male	20.8	18.2	18.7	.	.	.	.
Female	77.5	81.1	80.4	1.2 (0.73-1.97)	0.47	.	.
Prefer not to say	1.7	0.8	0.9	0.54 (0.09-3.11)	0.49	.	.

Source: Elaborated by the authors.

Table 2. Relation between Schooling and anxiety symptoms in the period of June and July of 2020, Brazil.

Variable	Anxiety						
	No (%)	Yes (%)	Total (%)	Univariate OR (95%CI)	P	Multivariate OR (95%CI)	P
Incomplete elementary	12.5	6.1	7.3	.	.	.	.
Complete elementary	7.5	4.7	5.2	1.29 (0.48-3.45)	0.61	1.63 (0.47-5.7)	0.44
Incomplete high school	8.3	6.1	6.5	1.5 (0.59-3.85)	0.4	2.07 (0.64-6.67)	0.22
Complete high school	18.3	17.8	17.9	2.0 (0.92-4.33)	0.08	1.99 (0.75-5.23)	0.17
Incomplete higher education (or currently studying)	17.5	21.1	20.4	2.49 (1.15-5.39)	0.02	2.3 (0.81-6.5)	0.11
Complete higher education	15.8	21.5	20.4	2.8 (1.28-6.15)	0.01	2.22 (0.83-5.97)	0.11
Post-graduate (lato sensu specialization)	13.3	13.1	13.1	2.03 (0.89-4.62)	0.09	2.09 (0.72-6.11)	0.18
Master's degree	5.8	6.8	6.6	2.42 (0.87-6.7)	0.09	3.19 (0.9-11.13)	0.07
Doctorate degree	0.8	1.6	1.4	3.87 (0.44-33.85)	0.22	4.52 (0.44-46.52)	0.21
Post-doctorate	0.0	0.6	0.5	.	.	.	.
Other	0.0	0.8	0.6	.	.	.	.

Source: Elaborated by the authors.

Table 3. Relation between Age group and the presence of anxiety symptoms in the period of June and July of 2020, Brazil.

Variable (years)	Anxiety						
	No (%)	Yes (%)	Total (%)	Univariate OR (95%CI)	P	Multivariate OR (95%CI)	P
18 - 24	20.8	16.0	16.9	.	.		
25 - 29	15.0	18.4	17.7	1.59 (0.81-3.13)	0.18	1.39 (0.59-3.28)	0.45
30 - 34	5.8	11.7	10.6	2.61 (1.06-6.44)	0.04	3.1 (1.05-9.17)	0.04
35 - 39	13.3	15.8	15.3	1.54 (0.77-3.1)	0.22	2.68 (1.11-6.46)	0.03
40 - 44	14.2	12.5	12.8	1.15 (0.57-2.3)	0.7	1.6 (0.65-3.97)	0.3
45 - 49	15.8	8.2	9.7	0.67 (0.33-1.36)	0.27	1.0 (0.39-2.56)	0.99
50 - 54	1.7	8.0	6.8	6.25 (1.41-27.68)	0.02	10.06 (2.01-50.36)	0
55 - 59	9.2	4.3	5.2	0.61 (0.26-1.43)	0.26	0.85 (0.29-2.52)	0.77
60 - 64	4.2	3.7	3.8	1.16 (0.39-3.42)	0.8	1.08 (0.31-3.75)	0.91
65 - 69	0.0	1.0	0.8	.	.	.	.
70 - 74	0.0	0.4	0.3	.	.	.	.

Source: Elaborated by the authors.

The prevalence of anxiety in the present study sample was 81%, with no statistically significant differences between genders. Regarding age, three groups showed a significantly increased risk of developing anxiety symptoms by multivariate regression; between 30 and 34 years (OR=3.09, 95% CI=1.04-9.16), followed by the group between 35 and 39 (OR=2.67, 95% CI=1.11-6.45), and finally the group between 50 and 54 years old (OR=3.09, 95% CI=2.00-50.3). The results of the univariate and multivariate regression analyses related to anxiety symptoms reported are presented in Table 4. Factors significantly associated with anxiety by multivariate regression were: loneliness (OR=2.18, 95% CI=1.16-4.09), sleeping difficulties (OR=2.59, 95% CI=1.57-4.28), irritability (OR=1.85, 95% CI=1.11-3.09), financial difficulties (OR=1.85, 95% CI=1.01-3.40), and problems related to emotional isolation (OR=2.43, 95% CI=1.47-4.01).

Table 4. Relation between Symptoms described during the pandemic and anxiety in the period of June and July of 2020, Brazil.

Variables	Anxiety						
	No (%)	Yes (%)	Total (%)	Univariate OR (95%CI)	P	Multivariate OR (95%CI)	P
Fear of contamination	63.3	81.8	78.3	2.61 (1.69-4.03)	0	1.32 (0.75-2.32)	0.34
Fear of losing job	10.8	16.4	15.3	1.62 (0.87-3)	0.13	0.89 (0.42-1.9)	0.77
Fear of dying	29.2	50.6	46.5	2.49 (1.61-3.82)	0	1.5 (0.88-2.58)	0.14
Loneliness	15.0	43.0	37.7	4.27 (2.51-7.26)	0	2.18 (1.16-4.1)	0.02
Increased consumption of alcohol and other drugs	12.5	15.0	14.6	1.24 (0.69-2.24)	0.48	0.8 (0.39-1.63)	0.53
Sleeping Difficulty	36.7	70.1	63.8	4.05 (2.67-6.15)	0	2.6 (1.57-4.29)	0
Irritation	33.3	59.8	54.7	2.97 (1.96-4.52)	0	1.86 (1.11-3.1)	0.02
Fear of going back to work	16.7	35.0	31.5	2.69 (1.61-4.49)	0	1.59 (0.85-2.98)	0.15
An infodemic	34.2	60.7	55.7	2.98 (1.97-4.52)	0	1.56 (0.92-2.62)	0.1
Fear of shortage	35.0	50.8	47.8	1.92 (1.27-2.9)	0	1,0 (0.6-1.68)	0.97
Financial difficulties	15.8	29.5	26.9	2.25 (1.33-3.8)	0	1.87 (1.02-4.4)	0.05
Domestic violence	1.7	2.7	2.5	1.67 (0.37-7.44)	0.5	.	.
Marital problems	6.7	14.5	13.0	2.38 (1.12-5.09)	0.03	1.45 (0.62-3.41)	0.4
Problems related to emotional isolation	32.5	60.0	54.7	3.16 (2.07-4.81)	0	2.44 (1.48-4.02)	0
Boredom	66.7	72.9	71.7	1.34 (0.87-2.06)	0.19	1.17 (0.69-2.01)	0.56
Problems related to prejudice	7.5	7.8	7.8	1.05 (0.5-2.23)	0.9	.	.
Problems with home/distance education	25.0	36.7	34.5	1.76 (1.12-2.77)	0.01	1.2 (0.68-2.11)	0.53

Source: Elaborated by the authors.

Discussion

The anxiety rate was considered high, with 81% of the sample describing anxiety. Compared to a recent Brazilian study that evaluated psychiatric symptoms in the general population during the COVID-19 pandemic, the data obtained are in accordance with the 81.9% reported in the study, and much higher than those obtained in other countries mentioned in a systematic review of the literature, with values

for the prevalence of anxiety of 29% in China, 18.7% in Italy, 50.9% in Iran, and 21.6% in Spain. Considering the fact that Brazil has the second highest number of deaths caused by the COVID-19 pandemic and considering the high prevalence of anxiety symptoms, there is an indication of a very significant impact on mental health; this magnitude should be interpreted as a public health crisis.¹⁰

There was no relationship with gender in the distribution of symptoms, unlike what was observed in the majority of studies that show women reporting significantly higher levels of anxiety than men.^{11,12} Studies also point out that women are at a greater risk of developing symptoms of anxiety disorder, and complementary elements are pointed out to explain this difference in distribution, among them are genetic factors, hormonal influences, and vulnerability to social stressors, such as gender inequalities that cut across all areas of women's lives. In addition, when we make associations with ethnicity and social class, we can better understand that black women from lower classes can present significantly higher anxiety symptoms than the population average due to the confluence between gender discrimination, racism, and poverty.^{13,14} Gender patterns were not maintained in the distribution of anxiety symptoms during the pandemic according to the present study sample. A June 2020 Italian study conducted with young college students in the isolation period also did not identify a statistically significant difference between genders on the anxiety self-rating scale. A similar result was also obtained by a Chinese cross-sectional survey carried out during the COVID-19 pandemic, which reported no statistically significant differences in the prevalence of anxiety, depressive symptoms, and sleep quality by gender.^{15,16}

Age, understood as the time of life elapsed between birth and a certain cut-off taken as a reference, was an important sociodemographic variable. The age group between 30 and 39 years showed a significantly increased risk of developing anxiety symptoms, followed by the group between 50 and 54 years. Several studies have found a correlation between worsening mental health and younger groups, especially in the age group between 18 and 24 years, to the detriment of more advanced ages.^{17,18,19} Others explain this fact by stating that older people can develop a greater ability to regulate their reactions to problems than younger people and can use these adaptive mechanisms to preserve well-being during the COVID-19 pandemic. Another point identified would be that age offers opportunities for building resilience, since over time people are exposed to multiple stressors, which aids in the process of emotional management and, thus, results in lower levels of anxiety.²⁰ This was not the case in the present study, where it was not possible to establish this same pattern of age-related involvement. However, the results are in agreement with the U-shaped relationship between age and mental well-being, where, characteristically, younger and older people report higher levels of mental well-being, a different finding from that obtained in a British study, conducted in 2020 that

sought to correlate symptoms of anxiety and depression during the COVID-19 pandemic and identified suggestions that the pandemic could be disproportionately affecting younger people.^{21,22} If we think about the Brazilian context, people of both age groups can be considered as fully productive from the point of view of work and with a very active social life, in addition to having different responsibilities towards the home in the care of children or even of old people. In view of this, the necessity to abruptly stop these activities, whether due to unemployment arising from the economic crisis or social isolation, can give us clues about the development of anxious symptoms in this population. At this point, it is also necessary to emphasize the psychosocial aspects involved in a pandemic. When comparing data from different countries, we need to keep in mind that social impacts are directly related to the social decisions and policies implemented in each country. Thus, Brazil had a peculiar scenario, becoming the epicenter of the disease at certain times and with public neglect in the face of the pandemic. This is an important variable to be analyzed in this context.

Feelings of loneliness were reported in 37.7% of the sample and identified as a statistically significant risk factor (OR=2.18, 95% CI=1.16-4.09) for the occurrence of anxiety symptoms by multivariate regression ($p=0.015$). Loneliness was also found to be significant in an American study that examined associations between guidelines to stay at home and the perceived impact of COVID-19 on daily life for relevant psychological outcomes. In the present study, loneliness was associated with anxious feelings in 43% of cases. A study carried out in the UK found an association of 42%, with loneliness being the strongest of all indicators.^{23,24} The social distancing imposed during the COVID-19 pandemic has increased the rates of feelings of loneliness and this fact is important because this unplanned and prolonged separation from human relationships can contribute to mental health problems. Studies suggest that loneliness is the main risk factor for depression, anxiety, and their comorbidity and it is further inferred that loneliness can explain a significant portion of the psychiatric symptoms observed in individuals during the COVID-19 crisis.²⁵

Financial difficulty, defined as a situation in which the financial flow may not be sufficient to deal with the needs, is another variable in the questionnaire and mentioned by 26.9% of the sample, being identified as a statistically significant risk factor (OR=1.85, 95% CI=1.01-3.40) for the occurrence of anxiety symptoms by multivariate regression ($p=0.046$). An American study that investigated the perceived impact on daily life during the COVID-19 pandemic for relevant psychological outcomes also found financial worry as a factor related to anxiety, as social distancing imposes changes in habits and customs of daily life due to the pandemic, which can increase the perception of risks of harm to physical, as well as social and financial health, leading to increased anxiety about health and financial concerns.²³

One point that directly impacts financial difficulties is unemployment. A Brazilian study that deals with the health crisis in Brazil highlights that the COVID-19 pandemic has increased the situation of extreme vulnerability of the Brazilian population, resulting in high unemployment rates and reduced income.²⁶ Another study, also Brazilian, which observed the factors associated with the behavior of the population during social isolation in the pandemic, identified that a greater percentage of people who claim to have stopped making money in the context of the pandemic are in the lower income brackets; 35%, 34.8%, and 24.76% among those who declare they have no income, earn 1 minimum wage, and earn 1 to 2 minimum wages, respectively.²⁷ The health crisis caused by the COVID-19 pandemic culminated in a reduction in the consumption of goods and services and is related to a reduction in wages and staff numbers, and increased bankruptcy, leading to a persistent increase in unemployment by definitively reducing jobs and increasing unemployment, which, in turn, is identified as a trigger of anxiety symptoms because it generates economic insecurity.^{28,29} This context of reduced or lost income, unemployment, fears arising from an economic crisis, and recession is associated with negative effects on mental health, especially in individuals who already have lower incomes.³⁰

It was possible to identify that 54.7% of the sample describes symptoms of irritability, being a significant predictor (OR=1.85, 95% CI=1.11-3.09) for the occurrence of anxiety symptoms by multivariate regression ($p=0.018$). This irritability may be associated with high levels of stress. A Colombian study sought to assess the level of perceived stress associated with the pandemic through an online survey, where 15% of participants scored high levels of stress associated with COVID-19.³¹ A sample from northern Spain showed higher mean levels of stress and anxiety in the age group between 18 and 25 years, followed by the age group between 26 and 60 years.³² In China, a study identified the immediate psychological responses and associated factors during the early stage of the COVID-19 pandemic in February 2020 among the general population. The results showed that 24.1%, 5.5%, and 2.6% of the sample were suffering from mild, moderate, and severe stress, respectively.³³ A Brazilian study observed the behavior of the population during social distancing, where 56% of the sample reported being a little stressed and 17% reported a lot of stress in the home environment.²⁷ A systematic review carried out to observe the psychological burden of quarantine in children and adolescents also identified the manifestation of symptoms such as irritability, along with difficulty concentrating, boredom, restlessness, nervousness, and worry.³⁴ A Chinese study that researched the different psychological impacts of populations affected by the pandemic in the period from February 15 to February 29, 2020, with a sample of 205 participants, identified that anxiety-like behaviors, including being easily irritated, manifested primarily in the general public and patients who have experienced COVID-19 infection.³⁵

Problems related to emotional isolation were reported in 54.7% of the sample and identified as a statistically significant risk factor (OR=2.43, 95% CI=1.47-4.01) for the occurrence of anxiety symptoms by multivariate regression ($p=0$). An August 2020 study predicted a series of emotional outcomes as part of the pandemic response, as the imposition of public health measures that in a way violate personal freedoms, such as social isolation, and consequent feelings of insecurity, confusion, emotional isolation, stigma, among other stressors, contribute to emotional distress and increased risk of psychiatric disorders related to COVID-19.³⁶ In this context, social support is widely identified as a protective factor in relation to mental health. Social relationships and social support from support networks are very important during the process of coping with stressful events such as the period of social distancing, which represents a paradigm shift by imposing limitations on physical interactions with family and friends.^{29,37,38} Emotional distress is described in populations that are dealing with the social and emotional isolation imposed by the Covid-19 pandemic and is pointed out as related to alarming implications for individual and collective health, as well as emotional and social functioning.³⁶

Insomnia, understood as difficulty sleeping, was reported by 63.8% of the sample and identified as a significant risk factor (OR=2.59, 95% CI=1.57-4.28) for the occurrence of anxiety symptoms ($p=0$). A Chinese study that investigated social capital and sleep quality in self-isolated individuals identified that anxiety was associated with stress and reduced sleep quality. It was inferred that the anxiety and stress levels of isolated individuals were elevated while sleep quality was low, and that poor sleep quality could increase anxiety.^{39,40} The existence of this alteration is not surprising given the emotional and psychological distress during a pandemic, changes in routine, concerns about employment, and relationships, and changing exercise patterns.

The present study has certain limitations. As it is a cross-sectional study, it is not possible to state the extent to which the psychological symptoms identified in the sample existed before the COVID-19 pandemic and the implementation of social distancing. In the same way, the questionnaire that consisted of the self-declaration of signs and symptoms should also be taken into account as it may be influenced by difficulties in remembering certain facts or even a certain propensity to give answers considered to be more socially acceptable, which in any case have the capacity to affect the legitimacy of the data presented. Another possible limitation would be that those who were suffering from mental health problems were more implied to answering the questionnaire. Future studies would benefit from a prospective methodology over a longer period to assess whether the impact of observed relationships attenuates or intensifies as the pandemic continues.

Conclusion

The impacts of the COVID-19 pandemic on the mental health of populations and the effects related to the need for social distancing in an attempt to reduce coronavirus infection require further investigations that focus on strategies to mitigate the shock to the social, psychological, and emotional well-being of people, being a challenge to be faced going forward.

Despite the limitations, the results of this study highlight the main associations between anxiety and the symptoms presented in the subjects who participated in a national survey, establishing the changes perceived in the lives of individuals, and identifying them as significant risk factors for the occurrence of anxiety symptoms and negative psychological outcomes. Among the factors significantly associated with anxiety were loneliness, sleeping difficulties, irritability, financial difficulties, and problems related to emotional isolation.

The results of the current study highlight the need for public health interventions aimed at mitigating the negative psychological consequences of COVID-19 and related to social distancing, including those aimed at increasing social support and strengthening social connections. In the context of the challenges for mental health, the results obtained contribute to deeper understanding of the alterations related to anxiety that emerged with the advent of social distancing policies and the context of a pandemic. Understanding the situations, feelings, and emotions experienced enables the development of procedures aimed at more assertive and specific interventions, in order to meet the identified demands.

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