



Anxiety in Mexican adults throughout the COVID-19 pandemic: A cross sectional study

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ABSTRACT

Introduction: Perceived fear during a pandemic along with measures used to contain it can develop or intensify anxiety symptoms. In Mexico, information on the psychological impact of the COVID-19 pandemic in the general population is scarce.

Objective: We examined the prevalence and factors associated with anxiety during the COVID-19 outbreak in a Mexican sample.

Method: We conducted a cross sectional study from June 15, 2020, to January 31, 2021, in a state in north-eastern Mexico, using an online survey. Beck Anxiety Inventory was used to determine the prevalence and severity of anxiety.

Results: The overall prevalence of anxiety was 43.5 %. Categories with the highest anxiety prevalence within their groups were women (46.2 %), age group of 18–30 years (47.3 %), higher level of education (43 %), students (48.8 %) and people who weren't currently with a couple (47.3 %). Additionally, we found that people who reported clinically significant anxiety were more likely to be women, ages 18–30 years, not currently partnered and currently living with a psychiatric disorder. Moreover, patients with clinically significant anxiety were more likely to be diagnosed with a mood, anxiety, trauma and stress, or an eating disorder. We also observed that being a woman and having at least one psychiatric disorder were independent factors related to a positive anxiety screening.

Discussion and conclusion: COVID-19 outbreak results in considerable increase in anxiety symptoms among the Mexican population. It is important to acknowledge the psychological impact of contingency situations to provide information that can allow establishing preventive and therapeutic strategies.

Introduction

Coronavirus disease 2019 (COVID-19) was detected for the first time in Wuhan, China, on December 31, 2019. Its rapid transmission capacity has alerted health authorities worldwide to take measures to mitigate the economic, social, and health consequences expected in the emergence of a pandemic (Shevlin et al., 2020).

In Mexico, the first case of coronavirus was detected on February 27,

2020, and despite preventive measures, cases increased exponentially (Suárez et al., 2020). As of April 7, 2021, a total of 2,261,879 cases and 205,598 deaths have been confirmed by COVID-19 (Secretaría de Salud, 2021).

The main transmission mechanism of COVID-19 is from person-to-person contact, through respiratory droplets or direct contact (Lai, Shih, et al., 2020); therefore, since March 2020, Mexico's government has implemented and enforced actions to ameliorate transmission of

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COVID-19. These strategies have been focused on social distancing, through confinement and self-isolation, including school closures and suspension of non-essential jobs and activities, all of which are effective means for reducing the exponential risk of infection, but are also threats to financial stability and employment, loss of social support networks and adaptation to daily routines, which are stressful changes that affect emotional regulation (Milman et al., 2020; Smith & Lim, 2020). As a matter of fact, it has been demonstrated in previous studies carried out during a pandemic that these measures can produce a psychological impact in the general population (Xiang et al., 2020; Zhu et al., 2020). In Mexico, it is estimated that up to 50.3 % of individuals may present psychological distress, while 15.7 % may have symptoms of depression and 22.6 % symptoms of anxiety due to the COVID-19 outbreak (Cortés-Álvarez et al., 2020). This is also true for specific population groups including teachers and students, as the COVID-19 pandemic has led to a significant disruption in the workload of educational institutions and has forced the reorganization of learning and teaching methods, leading this group to be more vulnerable to developing psychological distress symptoms (Chang et al., 2021; Ozamiz-Etxebarria et al., 2021; Zhao, 2020).

In addition, common psychological reactions related to a pandemic context include fear, along with community anxiety after the first death was reported, increased media coverage, and the growing number of new reported cases (Rubin & Wessely, 2020; Serafini et al., 2020).

In addition to the psychological impact of containment measures during COVID-19 pandemic, fear of being diagnosed or suspected with COVID-19 infection can cause intense emotional reactions, which can progressively evolve into an anxiety disorder (Maunder et al., 2003; Ornell et al., 2020; Shigemura et al., 2020; Xiang et al., 2020).

Several studies that have examined the psychological consequences during the COVID-19 pandemic have reported that the affected individuals show an increase of negative feelings such as fear, hopelessness, anger, confusion, frustration, desperation or loneliness, and symptoms of emotional distress such as depression, posttraumatic stress disorder (PTSD) and anxiety (Liu et al., 2020; Salari et al., 2020; Serafini et al., 2020). Moreover, susceptible groups such as healthcare professionals have faced specific stressors related to diagnosis, treatment, and care of patients with COVID-19, as well as increased workload, shortages in personal protective equipment and discrimination, which is why they are considered at greater risk of developing numerous psychiatric symptoms including anxiety, depression, acute and post-traumatic stress, and insomnia (Abeldaño Zuñiga et al., 2021; Lai, Ma, et al., 2020; Marvaldi et al., 2021; Pappa et al., 2020; Sahebi et al., 2021; Santabárbara, Bueno-Notivol, et al., 2021). Furthermore, according to previous studies performed in healthcare workers, it has been observed that nurses are particularly affected by emotional distress and exhibit higher rates of affective and anxiety symptoms compared to other medical professionals (Lai, Ma, et al., 2020; Pappa et al., 2020; Sahebi et al., 2021; Santabárbara, Bueno-Notivol, et al., 2021).

In our country, information on the psychological impact of the COVID-19 pandemic in the general population is scarce. The objective of this study was to report the prevalence and factors associated with anxiety during the COVID-19 pandemic in a sample of the Mexican residents through an online questionnaire.

Methods

Study design

A cross-sectional study was conducted from June 15, 2020 to January 31, 2021, through an online survey using the Google Forms software. This was the method of choice for recruiting subjects due to the preventive measures for the spread of the COVID-19 and for aiming for subjects out of our health care environment. We used a snowball sampling procedure through social networks (WhatsApp and Facebook were the main distribution platforms), encouraging participants to remit

the link of the form to as many people as possible. Ethical approval for the study was provided by the Ethics Committee of the Faculty of Medicine, Autonomous University of Nuevo Leon (PS20–0008).

Participants

We included subjects 18 years or older, of Mexican nationality, and who were residing in Mexico for at least a week prior to filling in the survey. Incomplete or incorrectly filled out questionnaires, and those that were sent in duplicate were eliminated from the study.

Procedures

All participants had to read and consent to a brief informed consent statement before filling out the survey, where information about the purpose of the study and the use of their information was provided. If they agreed to participate in the study, they selected the option that indicated their voluntary participation. We requested an email address at the beginning of the form to avoid duplication of questionnaires and removed it once recruitment was completed. All forms were filled out anonymously.

The questionnaire consisted of an 8-question form that solicited sociodemographic data (age, sex, country of origin, and state of residence, if they resided in Mexico for at least 7 days prior to filling in the questionnaire, marital status, schooling, and current occupation), 2 questions about past medical history (history of psychiatric illness or non-psychiatric disease) and the Beck Anxiety Inventory (BAI). At the end of the questionnaire, general recommendations and strategies to reduce levels of anxiety and stress related to the health contingency were offered. Participants could abandon the questionnaire at any time.

Measurements

The Beck Anxiety Inventory (BAI) (Beck et al., 1988) is one of the most frequently used tools for the evaluation of anxiety symptom, its application is simple and its interpretation is practical (Guillén et al., 2019). The BAI was validated for the Mexican population by (Robles et al., 2001); it is a self-reported instrument consisting of 21 items, which include four factors: subjective, neurophysiological, autonomic, and panic symptoms (Carlbring et al., 2007). To be considered, the symptoms must have been present in the period of the last week prior to filling the questionnaire. Participants were asked to rate how much each symptom bothered them during the last week, using a 4-point Likert scale depending on severity (0 = little or nothing, 1 = more or less, 2 = moderately, and 3 = severely). Although the BAI is a tool that aims to indicate the severity of symptoms, categorizing them into minimal anxiety (0 to 5 points), mild (6 to 15), moderate (16 to 30 points), and severe (31 to 63), previous studies take a score of 16 or higher as the cut-off point for reporting prevalence, which is also the score suggested by the authors of the scale that represents clinical significance (Carney et al., 2011; Guillén et al., 2019). The psychometric properties of the BAI for the Mexican population are characterized by high internal consistency (Cronbach alpha's of 0.84 and 0.83), with a high test-retest reliability coefficient ($r = 0.75$), convergent validity, and adequate factorial structure (Vázquez et al., 2015), and has an internal consistency that is not affected by its online application (Carlbring et al., 2007).

Statistical analysis

The description of the demographic characteristics of the sample was performed with frequencies and percentages for categorical variables, and with medians and interquartile range (IQR) for BAI scores. Normality was assessed by the Kolmogorov-Smirnov test. We compared the proportion each demographic characteristic and psychiatric comorbidities within subjects with and without clinically significant anxiety using the Pearson's χ^2 or Fisher's exact tests. We designed all

univariate and multivariate models by logistic regression analysis. The level of statistical significance was set at $P < 0.05$ and a 95 % confidence interval (95 % CI). Statistical analysis was performed on IBM SPSS version 25 software (IBM Corp., Armonk, NY).

Results

We received a total of 570 online forms, 12 were excluded because they were from individuals who were not residing in Mexico 7 days prior to filling in the survey, 4 reported another nationality and 50 were sent in duplicate.

The final sample that was analyzed consisted of 504 subjects, 132 men (26.2 %) and 372 women (73.8 %), with a median age of 27 (IQR, 22–31) years. Most subjects were single (70.8 %), with bachelor's degree (72.6 %) and employed (45.2 %) or currently studying (43.3 %) (Table 1).

The median BAI score of the total sample was 14 (IQR, 6–23). According to the cut-off levels proposed for the BAI, the severity of anxiety symptoms in 21.6 % of participants was minimal, mild in 34.9 %, moderate in 29.2 % and severe in 14.3 %. Clinically significant anxiety was found in 43.5 % of participants, considering a BAI score > 15 points, or the equivalent to moderate to severe anxiety (Table 2).

Subjects with the highest prevalence of anxiety within each demographic group were predominantly women (46.2 %), age group 18–30 years (47.3 %), higher level of education (43 %), students (48.8 %), people who aren't partnered (47.3 %) and people living with at least one psychiatric comorbidity (68 %).

Regarding the sociodemographic factors associated with anxiety, we found that people who reported clinically significant anxiety from those who didn't were more likely to be women (78.5 % vs. 70.2 %, $P = 0.034$), ages 18–30 years (79.5 % vs. 68.1 %, $P = 0.004$), people currently without a couple (79.5 % vs. 68.1 %, $P = 0.004$) and living with at least one diagnosed psychiatric comorbidity (39.3 % vs. 14 %, $P < 0.001$) (Table 3).

We also observed that patients with clinically significant anxiety were more likely to be diagnosed with a mood disorder (21.5 % vs. 7.7 %, $P < 0.001$), an anxiety disorder (28.3 % vs. 7 %, $P < 0.001$), a trauma and stress disorder (3.2 % vs. 0.4 %, $P = 0.014$) or an eating disorder (4.1 % vs. 0.4 %, $P = 0.003$) (Table 4).

We performed a multivariate analysis by logistic regression to identify independent factors associated with clinically significant anxiety by screening, considering only those demographic features that were statistically significant. After running the first model that did not discriminated within psychiatric comorbidities, we observed that being

Table 1
Demographic variables.

Age	27 (22–31)
Gender	
Men	132 (26.2 %)
Women	372 (73.8 %)
Level of education	
Secondary School	4 (0.8 %)
High School	29 (5.8 %)
Bachelor's Degree	366 (72.6 %)
Master's Degree	95 (18.8 %)
Doctor's degree	10 (2 %)
Occupation	
Unemployed	18 (3.6 %)
Employed	228 (45.2 %)
Student	218 (43.3 %)
Household	37 (7.3 %)
Retired/Pensioned	3 (0.6 %)
Marital status	
Single	357 (70.8 %)
Free union	27 (5.4 %)
Married	109 (21.6 %)
Other	11 (2.2 %)

Table 2
Anxiety level.

Minimal	109 (21.6 %)
Mild	176 (34.9 %)
Moderate	147 (29.2 %)
Severe	72 (14.3 %)

Table 3
Association of sociodemographic and psychiatric factors with anxiety.

Variables	Anxiety	Normal	P
Gender			0.034
Male	47 (21.5 %)	85 (29.8 %)	
Female	172 (78.5 %)	200 (70.2 %)	
Age group			0.004
18–30 years	174 (79.5 %)	194 (68.1 %)	
31–65 years	45 (20.5 %)	91 (31.9 %)	
Level of education			0.395
Higher education	207 (94.5 %)	264 (92.6 %)	
High school or below	12 (5.5 %)	21 (7.4 %)	
Occupation			0.099
Employed	89 (40.6 %)	140 (49.1 %)	
Student	106 (48.4 %)	111 (38.9 %)	
Unemployed	24 (11 %)	34 (11.9 %)	
Marital status			0.004
Having a couple	45 (20.5 %)	91 (31.9 %)	
Having no couple	174 (79.5 %)	194 (68.1 %)	
Living with medical comorbidity			0.85
Yes	56 (25.6 %)	75 (26.3 %)	
No	163 (74.4 %)	210 (73.7 %)	
Living with psychiatric comorbidity			<0.001
Yes	85 (39.3 %)	40 (14 %)	
No	133 (60.7 %)	245 (86 %)	

Table 4
Association of psychiatric disorders with anxiety.

Psychiatric disorder	Anxiety	Normal	P
Mood Disorders	47 (21.5 %)	22 (7.7 %)	<0.001
Anxiety Disorders	62 (28.3 %)	20 (7 %)	<0.001
Developmental Disorders	6 (2.7 %)	3 (1.1 %)	0.141
Trauma and Stress Disorders	7 (3.2 %)	1 (0.4 %)	0.014
Personality Disorders	2 (0.9 %)	1 (0.4 %)	0.402
Obsessive Compulsive Disorder	2 (0.9 %)	0 (0 %)	0.188
Eating Disorders	9 (4.1 %)	1 (0.4 %)	0.003
Substance Use Disorder	1 (0.5 %)	0 (0 %)	0.435

a woman (OR 1.55, IC 95 % 1.01–2.39; $P = 0.045$) and having at least one diagnosed psychiatric comorbidity (OR 3.77, IC 95 % 2.44–5.84; $P < 0.001$) were independent factors related to a positive anxiety screening result. After designing a second model that distinguished between anxiety, mood and other psychiatric disorders, we identified that being a woman (OR 1.63, IC 95 % 1.04–2.54; $P = 0.03$), having a previously diagnosed anxiety disorder (OR 4.19, IC 95 % 2.27–7.71; $P < 0.001$) and having any diagnosed psychiatric disorder other from mood disorders (OR 4.83, IC 95 % 1.83–12.73; $P = 0.001$) were independent factors related to finding a positive clinically significant anxiety result after BAI screening (Table 5).

Discussion and conclusion

The COVID-19 pandemic continues to represent a major challenge worldwide, and it remains causing an impact in numerous spheres of daily life and, although the extent of these concerns remain unknown (Gavin et al., 2020), evidence continues to emerge about the psychological and psychiatric consequences on individuals' well-being.

We investigated the prevalence and factors related to clinically significant anxiety in Mexican adults during the COVID-19 pandemic and found out that 43.5 % of people experience moderate to severe anxiety.

Table 5
Multivariate analysis by logistic regression.

Variable	Univariate		Multivariate	
	P	OR (95 % CI)	P	OR (95 % CI)
Model 1				
Women	0.035	1.55 (1.03–2.34)	0.045	1.55 (1.01–2.39)
Age 18–30 years	0.005	1.81 (1.20–2.73)	0.281	1.33 (0.79–2.23)
Having a couple	0.005	0.55 (0.36–0.83)	0.093	0.64 (0.38–1.07)
Having a psychiatric comorbidity	<0.001	3.96 (2.57–6.09)	<0.001	3.77 (2.44–5.84)
Model 2				
Women	0.035	1.55 (1.03–2.34)	0.03	1.63 (1.04–2.54)
Age 18–30 years	0.005	1.81 (1.20–2.73)	0.36	1.27 (0.75–2.16)
Having a couple	0.005	0.55 (0.36–0.83)	0.107	0.64 (0.38–1.09)
Anxiety disorder	<0.001	5.23 (3.04–8.99)	<0.001	4.19 (2.27–7.71)
Mood disorder	<0.001	3.26 (1.90–5.61)	0.36	1.35 (0.70–2.58)
Any other psychiatric disorder	<0.001	5.72 (2.29–14.26)	0.001	4.83 (1.83–12.73)

This is consistent with the results reported by (Priego-Parra et al., 2020)), who reported a prevalence of anxiety of 50 % in Mexican population during the initial phases of the current pandemic, as well as in a cross-sectional study carried out by (Galindo-Vázquez et al., 2020), who described a prevalence of 48.4 % of moderate-to-severe anxiety in our population.

We identified a higher prevalence than that reported in studies from China, where the general prevalence of anxiety reached 34 %, with a presence of moderate to severe anxiety in 28.8 % (Huang & Zhao, 2020; Wang et al., 2020). Our prevalence was notably higher than the 25 % reported in a meta-analysis carried out by (Santabárbara, Lasheras, et al., 2021), in which the prevalence of anxiety during the COVID-19 pandemic was assessed at a global scale, by searching for cross-sectional community-based studies.

At the time of our study, which began 3 months after Mexico's government implemented and enforced actions to ameliorate transmission of COVID-19, we observed higher presence of moderate-to-severe anxiety compared to a study that examined the psychological distress of COVID-19 in a sample of Mexican individuals one week after the national health emergency was declared in our country, where 22.6 % of respondents reported moderate to severe anxiety symptoms (Cortés-Álvarez et al., 2020). Similarly, another study conducted during the first two months of the pandemic in our country reported that 12 % of participants met criteria for moderate-to-severe anxiety (Toledo-Fernández et al., 2021). This difference could possibly be due to the moment in which anxiety symptoms have been assessed, hinting that anxiety symptoms may increase according to the growing number of new cases and deaths and increased media coverage (Rubin & Wessely, 2020; Serafini et al., 2020).

In the National Survey of Psychiatric Epidemiology in Mexico carried out in the early 2000s, the prevalence of anxiety was 14.3 % (Medina Mora et al., 2003; Medina-Mora et al., 2007); these estimates remained a current reference in official reports by the Mexican government prior to the pandemic (Senado de la República, 2017), indicating that in the context of the pandemic, general anxiety becomes almost three times more prevalent (Santabárbara, Lasheras, et al., 2021).

Coupled with this in our country, according to the National Institute of Statistics and Geography (INEGI), in a telephone survey on COVID-19 and the labor market (ECOVIM-ML) conducted in July 2020, 82.3 % of non-economically active individuals reported having had job absences, while family members from 28.4 % households reported having lost

their jobs due to the pandemic (Instituto Nacional de Estadística y Geografía, 2020), which lead to a decline in many family's socio-economic position and mental health (Pierre et al., 2021). Additionally, it is important to highlight the presumably lower prevalence of anxiety symptoms in the general population we found in our study, compared to that reported in a study conducted in our country that reported a higher frequency (74.7 %) in healthcare workers (Juárez-García et al., 2021), which can indirectly reflect the emotional demands of extreme work pressure, fear of infection, ethical conflicts, stigmatization, loss of social support and other negative psychosocial stressors many healthcare providers have been submitted to (Juárez-García et al., 2021; Lai, Ma, et al., 2020; Marvaldi et al., 2021; Pappa et al., 2020; Sahebi et al., 2021).

After addressing the prevalence of anxiety according to gender, we observed that anxiety was more frequent in women (46.2 % vs. 35.6 %) in our community, similar to other studies conducted in Iran and United Kingdom (Moghanibashi, 2020; Shevlin et al., 2020). These differences of anxiety symptoms according to gender, are not only limited to the frequency of clinically significant anxiety but also as an associated factor, as we found that people who reported clinically significant anxiety from those who didn't were more likely to be women (78.5 % vs. 70.2 %, $P = 0.034$). Women are more prone to suffer from higher levels of anxiety than men and there is clear evidence that indicates a higher prevalence of anxiety and trauma-stress-related disorders (Li & Graham, 2017), as well as increased severity of symptoms, comorbidity, and disease burden within women. This may possibly be related to genetic, neurodevelopmental, environmental, and neurobiological factors (Jalnapurkar, 2018), in addition to other factors linked to cultural gender roles, such as parental stress after school closures, especially seen in women, who traditionally take on the role of primary caregivers, as well as specific gender-related stressors concerning intimate partner violence and reproductive considerations, all of which represent risk factors for developing mental health problems during the pandemic (Almeida et al., 2020). Women are also more prone to suffer from anxiety and depression and more likely to develop and/or enhance them in the context of a pandemic. Additionally, being a woman has proven to be a significant predictor of anxiety (Kim et al., 2014; Özdin & Bayrak Özdin, 2020). In this regard, we allude to the results of the fourth quarter National Occupation and Employment Survey (ENOE) performed in 2021 which reported a total of 620,000 registered individuals dedicated to the provision of paid nursing services in Mexico, where women represented the majority of this group (79 %) (Instituto Nacional de Estadística y Geografía, 2022). Further, aside to the gender-related associations with psychosocial distress, a previous study of the psychological effects of the COVID-19 pandemic in Mexican nurses reported that 42.4 % evidenced high level of emotional exhaustion and 41.7 % showed moderate to severe psychological distress (Cortés-Álvarez & Vuelvas-Olmos, 2020). Coupled with this, in a systematic review and meta-analysis conducted by Pappa et al. (2020) it was communicated that nursing staff showed higher prevalence estimates of anxiety compared to physicians. Likewise, nurses show poor outcomes concerning mental health and anxiety disorders compared to other healthcare professionals (Sahebi et al., 2021). This could be related to longer work shift hours and direct exposure with COVID-19 patient care compared to other medical staff, as well as frequent staff shortages and lack of available protective equipment (al Maqbal et al., 2021; Simonetti et al., 2021).

Additionally, although previous studies have shown greater psychological distress during COVID-19 outbreak among older participants (Cortés-Álvarez et al., 2020), we observed that people who reported clinically significant anxiety from those who didn't were more likely to be young adults (18–30 years), agreeing with reports in other parts of the world who have indicated higher levels of anxiety in younger adults (Moghanibashi, 2020; Salari et al., 2020). Moreover, a previous study in our country showed that a younger age was an important factor associated to the development of anxiety and depression (Priego-Parra et al., 2020). The main reasons for this seem to be that different stages and

events in life may influence the exposure to school, work and health-related stressors. Furthermore, younger people could be more aware and concerned about the future, as they are an economically active group in society and therefore be mostly affected by the economic impact of the pandemic (Salari et al., 2020). However, a study conducted among university students in Mexico found out that this population suffered from high levels of anxiety, stress and depression (Dosil-Santamaria et al., 2022) and a recent study published in our first-year medical students from our university showed that burnout was present in 14.9 % (with men being more susceptible), and high emotional exhaustion in up to 53.9 % (Jezzini-Martinez et al., 2022). Likewise, a meta-analysis conducted by Chang et al. (2021), reported a pooled prevalence of anxiety symptoms of 31 % among college students. These statistics were related to the mitigation measures enforced to lower COVID-19 transmission during the pandemic, including closure of universities, restriction of social activities, uncertainty about the future and the need to switch to online learning methods (Chang et al., 2021; de la Cruz-de la Cruz, 2020; Dosil-Santamaria et al., 2022) Furthermore, these educational changes have not only affected students, but also teachers at different educational levels have experienced adverse psychological symptomatology during the COVID-19 pandemic, with an estimated overall prevalence of anxiety of 17 % (Ozamiz-Etxebarria et al., 2021).

In our study, we found a substantial association of clinically significant anxiety among people that indicated not being a couple compared to those who were partnered (79.5 % vs. 68.1 %). This is comparable to Nkire et al.'s (2021) findings, who observed that people who identified as single showed higher mean scores of anxiety symptoms compared to those who were married, cohabitating or partnered. Similarly, (Lei et al., 2020) found that people who were divorced or widowed had significantly more anxiety and depression than those with a different marital status. This could be explained because single individuals tend to recur to negative auto-focused coping (Varela et al., 2021), and are more propense to feel lonelier and more isolated, which is more prominent during the pandemic restrictions, suggesting that being in a relationship may provide a connection for socialization, mitigating the risk of developing anxiety symptoms (Nkire et al., 2021).

Another prominent finding was the association between clinically significant anxiety and living with at least one previously diagnosed psychiatric comorbidity. Also, patients with clinically significant anxiety were more likely to be previously diagnosed with a mood, anxiety, trauma and stress or eating disorder. People with psychiatric illnesses during the current COVID-19 pandemic are more prone to exhibit higher levels of PTSD, depression, anxiety, and stress (Hao et al., 2020). This may be because people with mental disorders are also more susceptible to stress, and more influenced by the emotional responses brought on by the COVID-19 epidemic, which can provoke relapses or worsening their condition (Alkhamees et al., 2020; Yao et al., 2020). Moreover, individuals with previous or current psychiatric illnesses have a greater sensitivity to and awareness of sensations in their own bodies, which can result in the misinterpretation of their own feelings, leading to negative affective states (Özđin & Bayrak Özđin, 2020). It is also expected that between one to two thirds of people who have had a previously anxiety disorder, will relapse (Oei & Boschen, 2009). Furthermore, when suffering from eating disorders, there is a tendency toward physical and emotional isolation, which can be exacerbated by the security and sanitation measures undertaken during the pandemic (Touyz et al., 2020).

It is important to acknowledge that this study comes with several limitations. As a consequence of the snowball sampling method used, there may be a selection bias that could interfere in the report of the actual picture in the general population. In addition, given the virtual nature of the survey, only those who had access to the internet and electronic media were able to participate and be included in the study, resulting in a minor coverage and misrepresentation of demographic sectors without access to digital tools, and lower socioeconomic status, and undermining their contribution to the general prevalence; this is

important to point out because a low socioeconomic status has been linked to increased odds of anxiety and depression (Pierre et al., 2021). Owing to these limitations, the results of this study should be approached with caution.

Anxiety is among the psychiatric illnesses with the greatest impact on mental health. The COVID-19 pandemic has shown that the emergence of a major eventuality, especially one that carries a direct risk to health, along with measures taken to limit transmission, can lead to negative coping mechanisms, that evolve toward dysfunctionality in daily life and exacerbation in anxiety levels. This encouraged us to find information to identify factors and susceptible individuals, which will allow for early identification, diagnosis, and treatment, as well as reinforce coping mechanisms and preventive measures in populations that are especially vulnerable. Additionally, as nurses represent a great component of the overall healthcare workforce, it is essential to improve supportive measures that allow them to strengthen their resilience and coping mechanisms, as well as to provide organisational support, adequate working conditions and access to early psychosocial interventions.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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