

COVID-19 and the mental health of resident physicians in Primary Health Care: fear, anxiety and depression

COVID-19 e a saúde mental de médicos residentes na atenção primária: medo, ansiedade e depressão

COVID-19 y la salud mental de los médicos residentes de atención primaria: miedo, ansiedad y depresión

Bruno Limaverde Vilar Lobo¹ , Paulo César de Almeida² , Mariana Pompílio Gomes Cabral³ 

¹Instituto de Medicina Integral Professor Fernando Figueira – Recife (PE), Brazil.

²Universidade Estadual do Ceará – Fortaleza (CE), Brazil.

³Secretaria Municipal de Fortaleza – Fortaleza (CE), Brazil.

Abstract

Introduction: The COVID-19 pandemic has caused countless fatalities around the world. It not only threatens the individual's physical sphere, but it can also generate significant psychological illness in the population, mainly due to the fear of contracting the disease. **Objective:** To evaluate the correlation of fear of COVID-19 with the anxious and depressive symptoms of Family Medicine residents in the metropolitan region of Fortaleza, Brazil. **Methods:** An analytical, correlational, cross-sectional and quantitative study was carried out, in which the participants answered an electronic form containing a questionnaire developed by the authors and the instruments Hospital Anxiety and Depression Scale (HADS) and the Brazilian version of the Fear of COVID-19 Scale (EMC-19). **Results:** The research had 50 participants. We verified that 52% of residents had anxiety symptoms, 36% had depressive symptoms; and 22% were moderately to very afraid of the disease. The highest fear averages were for residents who were already treating psychological disorders and for residents who started treatment during the pandemic. **Conclusions:** The study showed a relevant percentage of anxiety and depression symptoms, in addition to showing a direct association between these symptoms and fear of COVID-19. In conclusion, we emphasize that the pandemic context requires greater attention to the circumstances of the mental health of Family Medicine residents, seeking to propose coping measures that are more resolute to the problem.

Keywords: COVID-19; Mental health; Medical residency; Family practice.

Corresponding author:

Bruno Limaverde Vilar Lobo

E-mail: blvlobo@gmail.com

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Resumo

Introdução: A pandemia da COVID-19 tem feito inúmeras vítimas fatais em todo o mundo. Ela não apenas ameaça a esfera física do indivíduo, como também pode gerar importante adoecimento psicológico na população, principalmente por conta do medo de contrair a doença. **Objetivo:** Avaliar a relação do medo da COVID-19 com sintomas ansiosos e depressivos dos residentes de Medicina de Família e Comunidade da região metropolitana de Fortaleza. **Métodos:** Realizou-se um estudo quantitativo analítico, correlacional e transversal, no qual os participantes responderam a um formulário eletrônico que continha um questionário elaborado pelos autores e os instrumentos Escala Hospitalar de Ansiedade e Depressão (HADS) e Escala de Medo do COVID-19 (EMC-19). **Resultados:** A pesquisa contou com 50 participantes. Verificou-se que 52% dos residentes apresentavam sintomas de ansiedade, 36% sintomas depressivos e 22% possuíam medo da doença de moderado a intenso. As maiores médias de medo foram dos residentes que já tratavam ansiedade ou depressão e dos residentes que iniciaram tratamento durante a pandemia. **Conclusões:** O estudo demonstrou que uma porcentagem relevante dos pesquisados apresentou sintomas de ansiedade e depressão, além de mostrar associação direta entre esses sintomas e o medo da COVID-19. Conclui-se enfatizando que o contexto pandêmico exige maior atenção às circunstâncias da saúde mental dos residentes de Medicina de Família para propor medidas de enfrentamento mais resolutivas à problemática.

Palavras-chave: COVID-19; Saúde mental; Residência médica; Medicina de família e comunidade

Resumen

Introducción: La pandemia de COVID-19 ha cobrado innumerables muertes en todo el mundo. No solo amenaza la esfera física del individuo, sino que también puede generar importantes enfermedades psicológicas en la población, principalmente por el miedo a contraer la enfermedad. **Objetivo:** Evaluar la relación entre el miedo al COVID-19 y la ansiedad y los síntomas depresivos entre los residentes de Medicina Familiar y Comunitaria de la región metropolitana de Fortaleza. **Métodos:** Se realizó un estudio cuantitativo analítico, correlacional y transversal, en el cual los participantes respondieron un formulario electrónico que contenía un cuestionario desarrollado por los autores y los instrumentos: Escala Hospitalaria de Ansiedad y Depresión (HADS) y Escala de Miedo COVID-19 (EMC-19). **Resultados:** Al final, la encuesta contó con 50 participantes. Se encontró que el 52% de los residentes presentaban síntomas de ansiedad, el 36% síntomas depresivos; y el 22% tenía miedo de moderado a severo a la enfermedad. Los promedios más altos de miedo fueron para los residentes que ya estaban tratando la ansiedad o la depresión y para los residentes que comenzaron el tratamiento durante la pandemia. **Conclusiones:** El estudio mostró que un porcentaje relevante de encuestados tenía síntomas de ansiedad y depresión, además de mostrar una asociación directa entre estos síntomas y el miedo al COVID-19. Concluye enfatizando que el contexto pandémico requiere una mayor atención a las circunstancias de salud mental de los residentes de medicina familiar para proponer más medidas resolutivas para abordar el problema.

Palabras clave: COVID-19; Salud mental; Residencia médica; Medicina familiar y comunitaria.

INTRODUCTION

The present article was written based on the urgency in problematizing and broadly understanding the new coronavirus (COVID-19) pandemic phenomenon. The emergence, contagion, and morbidity and mortality of COVID-19 began at the end of 2019, in the city of Wuhan, located in China. The disease caused by the new coronavirus quickly spread worldwide, and was declared, by the World Health Organization (WHO), a public health emergency of international interest on January 30, 2020.¹

COVID-19, which may have fever, cough, sore throat, runny nose, and dyspnea as symptoms, reached, in July 2021, the mark of more than 190 million infected people worldwide, with more than four million deaths recorded.² In Brazil, the first confirmed case of the disease occurred in February 2020, and by mid-July 2021 there were more than 19 million people infected, with more than 542 thousand deaths. In the state of Ceará, up to that same period, around 909 thousand confirmed cases and 23 thousand deaths were reported. It was the eighth Brazilian state with the highest number of confirmed cases and the seventh with the highest number of fatalities up to date.³ These data demonstrate high transmission rates of the virus, short incubation period, and large population reach. With the rapid increase in the

number of infected people and high mortality rates, health services became overcrowded and saturated; and professionals working on the frontline began to experience an intense fight against the disease and its repercussions.

In order to reduce the impacts inherent in this pandemic, the governments of several countries have adopted restrictive measures such as quarantine for all citizens, isolation of suspected cases, and social distancing of people at higher risk from COVID-19.⁴ Another important measure was the mandatory closure of non-essential services, modifying the work routine of billions of people and generating large-scale economic losses.⁵

With the course of the pandemic, it has been observed that COVID-19 has not only affected the physical health of the population. In addition to the physical and socioeconomic losses, high levels of anxiety, stress, and depression are being diagnosed in the general population.⁶ The main stressors that generate these symptoms are the fear of contracting the disease and transmitting it; the fear of dying and losing close people; the triggering of grief, loss, and separation processes; in addition to the need to adapt to the new lifestyle in the face of social distancing. It is also verified that this unstable scenario can aggravate pre-existing psychiatric disorders.^{7,8}

In the meantime, one of the main risk groups for psychiatric disorders triggered by COVID-19 are health professionals, who, in the context of the pandemic, experience various physical and emotional stresses. This is because they are subjected to a higher workload, using personal protective equipment (PPE) that causes physical and respiratory discomfort, in addition to hindering communication and the operationalization of procedures. They often have to work in environments with poor structure to receive patients with the disease, which instils fear of contagion between themselves and their family members. Another issue of great impact is the social pressure to take responsibility for the lives and health of patients, aggravated by the constant monitoring of fatalities and deaths⁹.

Resident physicians are included in the risk group of health professionals. These professionals are linked to specialization programs in several areas of medicine, and may work in primary, secondary, or tertiary health care.¹⁰ With the outbreak of the pandemic, residents have experienced major changes in their daily healthcare routine.

Despite the changes in residents' activities, the Brazilian Ministry of Education launched an Official Circular on March 19, 2020 recommending the maintenance of practical activities with a workload of 60 hours per week. The institution also highlighted the possibility of relocating resident physicians if their source services did not offer minimum safety requirements against COVID-19.¹¹

In the case, specifically, of the Family and Community Medicine Residency Program (FCM) of the state of Ceará, the professionals have worked on the frontline against COVID-19, as Primary Health Centers (*Unidades Básicas de Saúde* – UBS) provided the first care for patients suspected of having the disease.

Although the COVID-19 pandemic mostly gathers efforts to investigate the pathophysiology of the disease, this study intends to highlight the importance of analyzing the psychological and psychiatric implications correlated to the phenomenon. Therefore, the premise of this study is that it is relevant to make visible the importance of the care of health professionals, as their well-being is often underestimated and neglected, generating gaps in strategies to protect their lives and health.

Hence, our objective is to evaluate the relationship between fear of COVID-19 and anxious and depressive symptoms in residents of FCM in the metropolitan region of Fortaleza, so that future research can plan prevention and care measures regarding the psychological illness of this group.

METHODS

Study type, location, and period

This is a quantitative, analytical, correlational, and cross-sectional study conducted in December 2020, during the pandemic of the new coronavirus, in the metropolitan region of Fortaleza, state of Ceará, Brazil, with resident physicians of the Integrated Residency Program in Family and Community Medicine. The program is linked to the School of Public Health of Ceará, the Municipal Department of Health of Fortaleza, and Universidade Federal do Ceará.

Participants

In 2020, the program had 52 residents, 29 in the first year and 23 in the second year of residency. All residents who were working in their health facilities during the pandemic were invited to participate in the survey.

Data source and variables

The Google Forms[®] electronic form was adopted for data collection purposes, and an invitation was made to participate in the survey through the social media WhatsApp[®]. The form was composed of four parts:

- a) Informed Consent Form;
- b) Questionnaire prepared by the researchers, with demographic data (sex, age group, period of residency, workplaces, and working conditions) and questions related to the professional's mental health, which addressed the history of treatments undergone for mental disorders and impacts of the pandemic on their mental health;
- c) The Hospital Anxiety and Depression Scale (HADS), an instrument composed of 14 items divided into two subscales: HADS-Anxiety (HADS-A), with seven questions for the diagnosis of mild anxiety (odd items) and HADS-Depression (HADS-D), with another seven for mild depressive disorder (MDD) (even items). Answers can vary between 0 and 3 points (from absent to very frequent), with a maximum score of 21 points per subscale. The HADS scale was translated and validated for the general Brazilian population by Faro,¹² who obtained cutoff points of ≥ 7 for HADS-A and ≥ 6 for HADS-D;
- d) Brazilian version of the Fear of COVID-19 Scale (EMC-19). Developed by Ahorsu et al.¹³ as the Fear of COVID-19 Scale (FCV-19S) and with a Cronbach's alpha coefficient of 0.82, the questionnaire was translated into Brazilian Portuguese and validated for the general Brazilian population by Andrade et al.¹⁴ and Faro et al.¹⁵. The Brazilian version (called *Escala de Medo da COVID-19* – EMC-19) consists of a one-dimensional measure, with seven items answered on a Likert-type scale, with responses ranging from 1 (strongly disagree) to 5 (strongly agree). The total score is obtained from the sum of the items, ranging from 7 to 35 points; the higher the score, the greater the feeling of fear in the face of the disease. The scores were stratified into three categories: from 7 to 19 points, it was classified as "a little afraid"; from 20 to 26, as "moderately afraid"; and from 27 points or higher, as "very afraid".¹⁵

Statistical analysis

Data were tabulated in a spreadsheet using Microsoft Excel® version 2011 and exported to the Statistical Package for the Social Sciences® (SPSS) software, version 25. In the data analysis, the absolute and relative frequencies of the groups of categorical independent variables were initially described. Then, the Shapiro-Wilk normality test was applied to sum the scores of the HADS-A, HADS-D, and EMC-19 scales. Subsequently, measures of central tendency (mean and median) and dispersion (standard deviation [SD] and interquartile ranges [IQR]) appropriate for each scale were calculated. For the EMC-19, the scores were compared, per variable, using the 95% confidence interval (CI) for the difference between the means obtained per group.

Finally, the correlations between the EMC-19, HADS-A, and HADS-D scales were analyzed, two by two, using the Spearman's coefficient.

Ethical aspects

The research was developed respecting all the ethical principles contained in Resolution No. 466, of December 12, 2012, on research involving human beings. The form answered by the participants was filled out anonymously, and measures were used to guarantee anonymity such as the use of age groups instead of numerical values for age. The created database will not be shared in a data repository. The research project was approved by the Research Ethics Committee of Escola de Saúde Pública do Ceará, with Certificate of Presentation for Ethical Consideration (CAAE) No. 38806820.5.0000.5037.

RESULTS

Of the 52 FCM residents enrolled in the program in 2020, only two did not participate in the research because they were not eligible: one for being part of the research team and the other for belonging to the COVID-19 risk group, being absent from in-person activities. Thus, there were 50 participants in total. The characteristics of the participants are presented in absolute and relative frequencies in Table 1. Most residents (98%) reported having had contact with patients suspected of COVID-19 in their work units, and 40% reported having always used appropriate PPE.

Among the surveyed physicians, 38% answered that the pandemic has been greatly affecting their mental health, and only 12% said there was no psychological impact whatsoever. We verified that 12% of them started psychotherapy and 16% had to undergo drug treatment for anxiety and/or depression during the pandemic. In addition, 24% were already undergoing treatment for anxiety or depression before the pandemic.

The HADS-A and HADS-D scales presented nonparametric distributions and their medians and interquartile ranges are described in Table 2. According to the study by Faro,¹² who suggested the cutoff points ≥ 7 for HADS-A and ≥ 6 for HADS-D, it was found that 52% of the residents had symptoms of mild anxiety and 36% had symptoms of MDD. Regarding the HADS-A subscale, the highest medians of scores were obtained by the groups composed of: women, people aged 32 to 44 years, residents who were already undergoing drug treatment before the pandemic, and residents who started drug treatment for anxiety or depression during the pandemic. In the HADS-D subscale, the group of residents who

Table 1. Characteristics of research participants distributed in absolute and relative frequencies.

Variables	Frequency	
	n	%
Sex		
Women	27	54
Men	23	46
Age group		
24–27	18	36
28–31	21	42
32–44	11	22
Work location		
Fortaleza	39	78
Caucaia	11	22
Residency year		
First (R1)	27	54
Second (R2)	12	46
Works in emergency		
Yes	17	34
No	33	66

R1: first-year residents; R2: second-year residents.

Table 2. Median, 1st and 3rd quartiles, and interquartile range of scores obtained on the HADS-A and HADS-D scales

Variable	1 st quartile	Median	3 rd quartile	IQR
HADS-A	4,0	7,0	10,0	6,0
HADS-D	2,0	4,0	7,0	5,0

IQR: interquartile range; HADS-A: Hospital Anxiety and Depression Scale-Anxiety; HADS-D: Hospital Anxiety and Depression Scale-Depression.

started drug treatment for anxiety or depression during the pandemic reached the highest verified median. Descriptions of the obtained medians, per groups, in the HADS-A and HADS-D instruments are detailed in Tables 3 and 4, respectively.

The distribution of EMC-19 was normal, and the obtained mean was 16 (SD=4.6). After stratifying the results obtained from this scale, based on the study by Faro et al.,¹⁵ we found that 78% of residents were a little afraid of COVID-19; 18% were moderately afraid; and 4% were very afraid of the disease. The Cronbach's alpha coefficient was 0.80 (confidence interval — 95%CI 0.71–0.88).

As shown in Table 5, in the EMC-19 questionnaire, the highest means found, with 95%CI, were those of the groups composed of: women, people in the older age group, group that started drug treatment during the pandemic, and group that was already undergoing treatment before the pandemic. The correlations found between the EMC-19 and HADS-A scores ($r=0.478$; 95%CI 0.22–0.68) and between the EMC-19 and HADS-D scores ($r=0.544$; 95%CI 0.29–0.72) were significant and positive, with moderate strength, showing a direct association between anxiety and depression symptoms and fear of COVID-19. There was also a strong collinearity between the HADS-A and HADS-D scales ($r=0.84$; 95%CI 0.71–0.91), and it was not possible to create an efficient linear regression model between the three scales.

Table 3. Medians and interquartile ranges of Hospital Anxiety and Depression Scale-Anxiety scores, by categories.

Variables	Median	IQR
Sex		
Men	5,0	5,0
Women	8,0	8,0
Age group (years)		
24–27	4,0	6,25
28–31	7,0	7,0
32–44	8,0	7,0
Residency year		
First (R1)	7,0	7,0
Second (R2)	6,0	6,0
Work location		
Fortaleza	7,0	6,0
Caucaia	6,0	7,0
Started psychotherapy during the pandemic		
Yes	10,5	4,5
No	6,0	6,5
Started using antidepressants during the pandemic		
Yes	10,5	8,0
No	6,0	5,5
Was undergoing treatment for anxiety or depression before the pandemic		
Yes	10,0	8,75
No	6,0	6,0
Works in emergency		
Yes	5,0	6,5
No	7,0	7,5

IQR: interquartile range; R1: first-year residents; R2: second-year residents.

Table 4. Medians and interquartile ranges of Hospital Anxiety and Depression Scale-Depression scores, by categories.

Variables	Median	IQR
Sex		
Men	3,0	6,0
Women	4,0	5,0
Age group (years)		
24–27	2,0	7,0
28–31	4,0	5,0
32–44	6,0	6,0
Residency year		
First (R1)	4,0	5,0
Second (R2)	3,0	4,0
Work location		
Fortaleza	5,0	5,0
Caucaia	3,0	1,0

Continue...

Tabela 4. Continuation.

Variables	Median	IQR
Started psychotherapy during the pandemic		
Yes	6,0	4,75
No	3,0	5,0
Started using antidepressants during the pandemic		
Yes	6,5	9,5
No	3,0	5,0
Was undergoing treatment for anxiety or depression before the pandemic		
Yes	5,5	4,5
No	3,0	5,0
Works in emergency		
Yes	3,0	4,0
No	4,0	5,5

IQR: interquartile range; R1: first-year residents; R2: second-year residents.

Table 5. Means, standard deviation, and confidence interval of the difference between the means obtained from the Brazilian version of the Fear of COVID-19 Scale.

Variables	Mean±SD	95%CI of the difference between means
Sex		
Men	14,6±3,7	(0,06–5,22)
Women	17,3±5,1	
Age group (years)		
24–27	13,8±4,3	(0,58–8,73)*
28–31	16,6±3,9	
32–44	18,5±5,3	
Residency year		
First (R1)	16,1±4,6	(-2,62–2,76)
Second (R2)	16,0±4,7	
Work location		
Fortaleza	16,8±4,8	(0,40–6,56)
Caucaia	13,3±2,9	
Started psychotherapy during the pandemic		
Yes	17,0±3,6	(-3,07–5,16)
No	15,9±4,8	
Started using antidepressants during the pandemic		
Yes	19,1±6,4	(0,11–7,13)
No	15,5±4,1	
Was undergoing treatment for anxiety or depression before the pandemic		
Yes	19,1±5,7	(1,14–6,97)
No	15,1±3,8	
Works in emergency		
Yes	14,3±3,7	(-5,34–0,16)
No	16,9±4,9	

SD: standard deviation; CI: confidence interval; *CI of the difference between means of the 32–44 (highest mean) and 24–27 (lowest mean) age groups.

DISCUSSION

The study showed that FCM residents directly acted in tackling the new coronavirus pandemic in their health units. It also evidenced a study carried out in New York city, on 2,306 residents in 24 medical specialties, including the FCM, in which these professionals were on the frontline of COVID-19 and were exposed to all the physical and psychological harms that the pandemic could cause.¹⁰

As reported by Rossi et al.,¹⁶ health professionals directly involved with the pandemic presented with various symptoms of work-related mental disorders. The psychological consequences of this exposure could be noticed in the present study, when it was found that 88% of residents answered that the pandemic somewhat impacted their mental health.

In the application of the HADS scale, it was possible to have a more objective analysis of the psychological symptoms of residents during the pandemic. We observed that 52% of the professionals presented symptoms of anxiety and 36%, of depression. These numbers were higher than those found for the general population in a systematic review that analyzed 62 studies conducted in 17 countries, verifying that 32% of the population had anxiety during the pandemic and 27%, depression.¹⁷

Compared with the health professionals themselves, the numbers are also close to those found in a cross-sectional study on 994 doctors and nurses from the Wuhan emergencies, which showed an index of 50.4% of depressive symptoms and 44.6% of anxiety symptoms.¹⁸ Another multicenter study in Guangzhou, China, found rates of 50.7% for anxiety and 44.7% for depression among 1,563 physicians.¹⁹

Comparative studies with the SARS pandemic in 2003 also found that 18 to 57% of health professionals involved in coping with the disease suffered from psychiatric symptoms during and after the event.²⁰ This is because, while the general population has their working hours reduced and is forced to isolate themselves to reduce the chance of infectious contagion, health workers did the opposite. They are in a situation in which they have to increase their workload due to the increase in demand, expose themselves to patients with the virus, and must still wear very uncomfortable PPE for a long time.⁶

As it is also a new disease, these professionals have to deal with constant protocol changes, feelings of helplessness in the face of some fatal situations, lack of structure in some environments, in addition to being afraid to be infected with the disease, take it home and contaminate their loved ones. As the situation worsens, they suffer stigmatization of the population and may feel afraid.⁷

The fear caused by these factors could be quantified by the application of the EMC-19. In contrast to the study by Faro et al.,¹⁵ who observed that 31.8% of the general population were a little afraid; 38.8%, moderately afraid; and 29.4%, very afraid of COVID-19, the present study found that most of the surveyed residents (78%) were a little afraid, 18% were moderately afraid, and only 4% were very afraid of the disease.

Conversely, the averages obtained in EMC-19 by residents of the older age group (32 to 44 years), those who were already undergoing treatment for anxiety or depression before the pandemic, and those who started using antidepressants during the pandemic were 18.5, 19.1, and 19.1, respectively — close to the averages of 22 and 21.9 obtained in the studies conducted by Faro et al.¹⁵ and Andrade et al.,¹⁴ respectively. This detail may demonstrate that the fear of COVID-19 is greater in people who have developed or already had a psychological disorder^{8,21,22} and in the age group of parents with a constituted family. This was shown by a cross-sectional study conducted in Hunan, a Chinese province, in which doctors aged between 31 and 40 years were the ones who were most afraid of contaminating their relatives with the virus.²³

Regarding the influence of sex on the level of fear of COVID-19, female residents obtained a higher mean score than that of men, similar to that found in the Brazilian population¹⁴ and in the population of Cuba, in cross-sectional studies that used the same questionnaire.²⁴

There was no significant difference between the fear scores of residents who were attending the first year compared with those who were in the second year. Conversely, residents who worked in the city of Fortaleza presented a slightly higher fear score than those who worked in Caucaia, a city with a population seven times lower than the capital and with lower incidence of the disease.²⁵

Although most residents were a little afraid of COVID-19, this study found a direct correlation between fear of the pandemic and the presence of anxious and depressive symptoms, which was similar to the results presented by the Iranian study that created the Fear of COVID-19 Scale and correlated it with the HADS instrument.¹³

Although there is a strong influence of other stressors related to the pandemic, such as social distancing and work-related stress,^{8,21} in addition to personal issues, we cannot disregard the contribution of fear of COVID-19 to the psychological illness of the surveyed physicians, of which 12% required psychotherapy and 16% started using antidepressants during the pandemic period. This is a significant number if the 24% of professionals who were already undergoing treatment before the pandemic and who had their symptoms exacerbated are still considered, as shown by the results of the applied scales.

In any case, all of these professionals would benefit from the support of a psychological intervention team, such as the one that worked at the Wuhan University Hospital, where psychologists and psychiatrists provided the necessary support to the doctors and nurses on the hospital's frontline.²⁶ Even residents who have not started clinical treatment for mental disorders should be followed up by trained professionals, as a way of preventing psychological disorders generated by the stress of the pandemic.²⁷ Such a strategy can be facilitated, considering the publication of Resolution No. 4/2020 of the Brazilian Federal Council of Psychology, of March 26, 2020,²⁸ with remote psychological care.

Other ways to alleviate the mental symptoms triggered by the pandemic have been suggested by some authors such as maintaining regular contact with family members through digital platforms and, in these meetings, try not to talk about work.⁹ Alikhani et al.,²⁹ based on the COVID-19 experience in Iran, recommend getting enough sleep, eating well at least three times a day, keeping in touch with friends, sharing conduct decisions with colleagues, constantly updating on new protocols, and sharing their emotions.

The limitation of the present study is the fact that, to date, there is no screening instrument for mental disorders related to COVID-19 specific to health professionals. Thus, FCM residents completed questionnaires validated for the general population. Furthermore, the study was conducted only from a cross-sectional perspective, in December 2020, when the peak of cases of the pandemic in Ceará and Brazil had already passed. It is possible that, if the same scales had been applied in the months with the highest number of cases of the disease, the results would have shown higher levels of fear, anxiety, and depression.

CONCLUSION

A considerable percentage of FCM residents in Ceará presented symptoms of anxiety and depression, and there was a direct association between these symptoms and fear of COVID-19. Some professionals even needed to initiate psychotherapy and drug treatment, which highlights the need to correlate

pathophysiological studies of the new coronavirus with the psychosocial repercussions associated with the established context.

All in all, this article emphasizes the awareness of not being possible to know the totality of the investigated matter, considering that it is a pandemic with psycho-political, social, and economic repercussions that are still unfinished, but which already leaves marks on the history of society, public health, and medical practices.

In order to contribute to the continuity of scientific production in this area, the authors deem efficient to conclude this article with a question that can be a trigger and mediator device for future research: is there a fear/stress pandemic concomitant with that of COVID-19? How to investigate this issue?

This research insists on reinforcing the commitment to care for all health professionals who strive to perform their work with excellence with the population, despite so many adversities. In this context, the need to develop strengthened psychological support networks for these professionals during the confrontation of emergency situations with magnitudes similar to those experienced in the years 2020 and 2021 becomes evident.

CONFLICT OF INTERESTS

Nothing to declare.

AUTHORS' CONTRIBUTIONS

BLVL: Project administration, Formal analysis, Conceptualization, Data curation, Writing – original draft, Writing – review & editing, Investigation, Methodology, Validation. PCA: Formal analysis, Data curation, Methodology, Writing – review & editing, Software, Validation. MPGC: Formal analysis, Conceptualization, Writing – review & editing, Supervision, Validation.

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