# Coping with covid-19 by physicians: An integrative review

Enfrentamento da covid-19 por médicos: Uma revisão integrativa Afrontamiento de la covid-19 por parte de los médicos: Una revisión integradora

#### **RESUMO**

Objetivo: buscar na literatura o que já foi publicado sobre o enfrentamento da COVID-19 por médicos. Método: trata-se de uma revisão integrativa da literatura, realizada na Biblioteca Virtual de Saúde, plataforma que possibilita busca simultânea nas principais bases de dados de literatura nacionais e internacionais. A pesquisa foi realizada em janeiro de 2022, a partir do cruzamento dos descritores "Médicos" and "Adaptação psicológica" and "COVID-19", sendo selecionados 12 artigos que atenderam aos critérios de inclusão. Resultados: todos os artigos eram da língua inglesa e indexados no Medline. Vários fatores negativos foram relatados e foram descritas estratégias que auxiliam no enfrentamento da pandemia por estes profissionais. Conclusões: as repercussões dos estressores (medo, preocupação, depressão, ansiedade e angústia) ocorreram nos âmbitos mental, físico, espiritual e social e para o enfrentamento da COVID-19 foram utilizadas estratégias como o uso das redes sociais para aliviar, recursos psicológicos, a busca de conhecimento sobre a doença, da fé, além do humor e da postura positiva diante dos acontecimentos.

DESCRITORES: Médicos; Adaptação Psicológica; COVID-19

#### **ABSTRACT**

Objective: to search the literature for what has already been published on the confrontation of COVID-19 by doctors. Method: this is an integrative literature review, carried out in the Virtual Health Library, a platform that allows simultaneous search in the main national and international literature databases. The research was carried out in January 2022, from the crossing of the descriptors "Doctors" and "Psychological adaptation" and "COVID-19", 12 articles were selected that met the inclusion criteria. Results: all articles were in English and indexed in Medline. Several negative factors were reported and strategies that helped these professionals face the pandemic were described. Conclusions: the repercussions of stressors (fear, worry, depression, anxiety and anguish) occurred in the mental, physical, spiritual and social spheres and to face COVID-19, strategies were used such as the use of social networks to relieve, psychological resources, the search for knowledge about the disease, faith, in addition to humor and a positive attitude towards events.

**DESCRIPTORS:** Physicians; Psychological Adaptation; COVID-19

#### RESUMEN

Objetivo: buscar en la literatura lo ya publicado sobre el enfrentamiento a la COVID-19 por parte de los médicos. Método: se trata de una revisión integrativa de la literatura, realizada en la Biblioteca Virtual en Salud, plataforma que permite la búsqueda simultánea en las principales bases de datos bibliográficas nacionales e internacionales. La investigación se realizó en enero de 2022, a partir del cruce de los descriptores "Médicos" y "Adaptación psicológica" y "COVID-19", se seleccionaron 12 artículos que cumplieron con los criterios de inclusión. Resultados: todos los artículos estaban en inglés e indexados en Medline. Se relataron varios factores negativos y se describieron estrategias que ayudaron a estos profesionales a enfrentar la pandemia. Conclusiones: las repercusiones de los estresores (miedo, preocupación, depresión, ansiedad y angustia) se dieron en los ámbitos mental, físico, espiritual y social y para enfrentar el COVID-19 se utilizaron estrategias como el uso de redes sociales para aliviar, recursos psicológicos , la búsqueda del conocimiento sobre la enfermedad, la fe, además del humor y una actitud positiva ante los acontecimientos.

**DESCRIPTORES:** Médicos; Adaptación Psicológica; COVID-19

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## INTRODUCTION

he number of people who experience mental health impacts after a major event is many times greater than the number of people who experience physical injuries, and the mental health effects can last longer. <sup>1</sup>

In Egypt, the prevalence of psychological distress among physicians during the current COVID-19 pandemic was high, with a high percentage of severe distress.<sup>2</sup> Negative effects on physicians' mental health have also been reported in the United States of America (USA) <sup>3,4,5</sup>, in China <sup>1,6,7,8</sup>, in Malaysia <sup>9</sup>, in Croatia <sup>10</sup>, na Turkey <sup>11</sup> and in Tunisia. <sup>12</sup>

In addition to being an overwhelming, highly contagious and rapidly progressing disease, frontline professionals become a high-risk group, which causes suffering due to the psychological stress generated. <sup>7</sup> In addition to these stressors, the level of risk of the disease for professionals was not well established, as well as its implications for their families and for the patients themselves. <sup>11</sup>

The COVID-19 pandemic created challenges for these professionals, who were already struggling with long working hours, a continuous increase in administrative responsibilities and with patients who needed care and demanded prolonged assistance. <sup>4</sup>

In this scenario, both frontline doctors and those under management suffered. Those on the front line were emotionally affected due to uncertainties regarding the diagnosis of COVID-19, due to the exhaustive workload with personal protective equipment, under heat and humid conditions, in addition to managing several urgent cases at the same time. Those in management dealt with limited resources, especially human resources. 9 In fact, the COVID-19 pandemic made the working conditions to which workers were exposed and which affected their mental health more evident. 13Given this context, these professionals sought strategies to better cope with this period. Some doctors reported relief in discussing stressors and their emotional repercussions, as if that moment of outburst was an intervention to relieve their tensions. 4

Thus, we know that doctors were one of the health professionals who suffered the most from the COVID-19 pandemic and that is why it is necessary to investigate how these professionals were affected and how they faced this period. In this sense, the present study aims to search the literature for what has already been published on the confrontation of COVID-19 by physicians. Based on this concern, added to the insufficiency of national studies that expose the topic during the pandemic, it is evident the need to delve into it in a systematic way.

## **METHODS**

This is an integrative literature review study on national and international scien-

tific production on the way doctors face COVID-19. This was guided by six steps: (1) choice of theme and research question; (2) establishment of criteria for inclusion, exclusion and search in databases; (3) definition of the information that will be extracted from the studies and categorization; (4) evaluation of studies included in the review; (5) interpretation of results and (6) synthesis/review. 14

The guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) were followed, marked by statements that attest that the systematic review with or without meta-analysis is formed from a clinical questioning, under a structured methodology and reproducible by pairs. <sup>15</sup>

In the first stage, the theme of coping with COVID-19 by doctors was chosen and, in this perspective, the following research question was defined: what has already been published about coping with COVID-19 by doctors, in the national and international literature?

In the second stage, the following inclusion criteria were established: publications in national and international journals; have a theme about the confrontation of CO-VID-19 by doctors; publications in Portuguese, English and Spanish and be complete and publicly available texts. Exclusion criteria were: articles repeated in more than one collection, which were considered only once, editorials, review articles, dissertations, theses and studies that, despite pre-

artigo

senting the selected terms, did not respond to the research question. No time frame has been established, as the pandemic began less than five years ago.

Data collection took place during the month of January 2022, at the Virtual Health Library (BVS), a platform that allows simultaneous search in the main national and international literature databases. The Health Sciences Descriptors (DeCS) were used in the search for articles: physicians; Psychological Adaptation; COVID-19. In the end, 12 articles were selected that met the inclusion criteria, as shown in Figure 1.

In the third stage, the information to be extracted from the selected studies was defined and categorized. In the fourth stage, the evaluation of the studies included in the review was aimed. In the fifth stage, the interpretation and discussion of the results was carried out and, finally, in the sixth stage, the review and synthesis of the knowledge produced about the confrontation of COVID-19 by doctors was carried out.

#### **RESULTS**

Information from publications included in the integrative review were categorized and summarized according to year of publication, authors, title, journal, sample and database, as can be seen in Table 1.

Among the 12 selected articles, all (100%) were originally written in English, no articles were found in Portuguese.

## **DISCUSSION**

Several negative factors have been reported in studies in relation to coping with the COVID-19 pandemic. In a study of 517 emergency physicians in the US, with the aim of evaluating the negative and positive results of COVID-19 on mental health, it was found that most respondents reported negative psychological effects. Doctors reported feeling more stressed (31%), more lonely (26%), more anxious (25%), more irritable (24%), and sadder (17.5%). The prevalence of mental health conditions was 17% for depression, 13% for anxiety, 7.5% for post-traumatic stress disorder (PTSD),



Fonte: Os autores (2022)

Quadro 1-Descrição dos artigos incluídos no estudo, oriundos da Biblioteca Virtual
de Saúde. Aracaju-SE, 2022.

YEAR	AUTHORS	TITLE	JOURNAL	SAMPLE	DATA- BASE
2021	Dehon et al., 2021	Sources of Distress and Coping Strategies Among Emergency Physicians During COVID-19	Western Journal of Emergency Medicine	517 emergency doctors	Medline
2021	Frierson; Lippmann, 2021	COVID-19-Related Stress on Physicians.	South Med J	12 physicians	Medline
2021	Zhang et al. 2021	Sleep disorders and related factors among frontline medical staff supporting Wuhan during the COVID-19 outbreak.	Bull Mennin- ger Clin	249 frontline healthcare professionals, 48 of which are physicians	Medline
2021	Xia et al. 2021	The self-psychological safety maintenance and its influencing factors of communi- ty frontline staff during COVID-19 pandemic	Medicine (Baltimore)	126 employees, 34 of whom are physicians	Medline
2021	Sehsah et al. 2021	Psychological distress among egyptian physicians during covid-19 pandemic	Int Arch Oc- cup Environ Health	714 physicians	Medline
2021	Dugani et al., 2021	Psychological wellness of inter- nal medicine hospitalists during the covid-19 pandemic	Hosp Pract (1995)	295 Internal Medicine hospitalists, 84 of whom are physicians	Medline
2020	Fauzi et al., 2020	Doctors' mental health in the midst of covid-19 pandemic: the roles of work demands and recovery experiences	Int. J. Environ. Res. Public Health	1050 physicians	Medline
2020	Salopek- -Žiha et al., 2020	Differences in distress and co- ping with the covid-19 stressor in nurses and physicians	Psychiatria Danubina	124 health professionals, of which 24 are physicians	Medline
2020	Bahat et al., 2020	Evaluating the effects of the covid-19 pandemic on the physical and mental well-being of obstetricians and gynecologists in turkey	Int J Gynaecol Obstet	253 obste- tricians and gynecologists	Medline



and 18% for insomnia. Regular exercise decreased from 69% to 56%, while daily alcohol use increased from 8% to 15%. <sup>3</sup>

In the same vein, a study that evaluated the presence of sleep disorders and related factors among 249 health professionals on the front line of COVID-19, 48 of whom were physicians, in Wuhan, China, highlighted a 50.6% prevalence of insomnia among physicians. In addition, potential risk factors such as depression, anxiety and fatigue symptoms were detected. 6

Another study carried out with 124 professionals from a general hospital in Croatia, of which 24 are doctors, with the objective of determining the degree of concern about COVID-19 and the degree of distress, anxiety and depression, found that 67% of medical staff were very concerned about the pandemic. <sup>10</sup>

Higher levels of acute fatigue and antagonistically normal levels of depression, anxiety and stress were found in a study of 1050 physicians working in health facilities in the state of Selangor, Malaysia. <sup>9</sup>

Regarding perceived stressors, a study carried out with 12 physicians in Louisville, USA, concluded that the most common stressors in all medical specialties were the fear of transmitting the infection to family members, and the consequences of restrictive family visitation policies. <sup>4</sup> In a study carried out with 191 physicians in Tunisia, with the aim of examining the impact of COVID-19 on stress, it was found that 92.14% of physicians reported a perception of moderate to severe stress. <sup>12</sup>

Worry and stress were also reported by 253 obstetricians and gynecologists who worked in hospitals for COVID-19 in Turkey, mainly regarding their own health and the health of their family members. <sup>11</sup> In Egypt, of 714 doctors, about 50% had severe psychological distress, and the most distressing concern was also fear regarding the health of families and personal safety. <sup>2</sup>

In line with the results of previous studies, 295 internal medicine hospitalists, of which 84 are physicians, in the US, also expressed concern about contracting CO-VID-19 infection at work, accompanied by a drop in the percentage of global well-

2020	Halayem et al., 2020	How tunisian physicians of public health hospitals deal with covid-19 pandemic: perceived stress and coping strategies	Psychiatry and Clinical Neuroscien- ces	191 physicians	Medline			
2020	Huang et al., 2020	Factors Associated with Resilience Among Medical Staff in Radiology Departments During The Outbreak of 2019 Novel Coronavirus Disease (COVID-19): A Cross-Sectional Study	Medical Science Monitor	583 health professionals, of which 223 are doctors	Medline			
2020	Kang et al., 2020	Impact on mental health and perceptions of psychological care among medical and nur- sing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study	Brain, Behavior, and Immunity	994 health professionals, of which 183 are doctors	Medline			
Source: Th	Source: The authors (2022).							

-being, an increase in anxiety and social isolation. 5

In addition to the impacts already described, some studies point to a significant difference between the sexes, in relation to the effects of the pandemic. A study carried out with 600 radiology medical staff members from 32 public hospitals in Sichuan, China, showed that the level of resilience of medical staff during COVID-19 was low, especially with regard to resistance, and the resilience of the female medical team was significantly lower than that of the male medical team. <sup>8</sup>

In order to corroborate the previous study, another study carried out with 994 health professionals, of which 183 were physicians, which aimed to assess the impact on mental health, indicated that a significant portion of these professionals were suffering from mental disorders, young women are the most affected. <sup>1</sup>

The highest stress scores were also found in female and young female doctors in Tunisia. Doctors who relied on the national police's management of the COVID-19 outbreak were significantly less stressed. <sup>12</sup> Negative feelings of anxiety and depression can affect the coping style of professionals. <sup>7</sup>

Some strategies have been reported to better cope with the COVID-19 pandemic period. In Egypt, reliance on faith through some religion was the most effective stra-

tegy. <sup>2</sup> In Croatia, although the impact of social media on population information during the COVID 19 pandemic was mostly negative, study data indicated that social media reduces depression, as they are the only reliable source of information for society during the quarantine period. <sup>10</sup>

For better coping, doctors in Wuhan, China chose to access psychological materials (such as books on mental health), psychological resources available in the media (such as online messages about mental health self-help methods), and participated in counseling or psychotherapy. <sup>1</sup>

Another factor that can be an ally, according to the international literature, is the search for knowledge about the disease, since a greater understanding of protective measures for COVID-19 is equivalent to better resilience and, consequently, better coping.<sup>8</sup>

In contrast, humor and positive reframing were effective coping strategies. Focusing on positive work-related experiences during the pandemic, limiting exposure to conflicting and distressing news, and using time off to focus on other activities alleviated stress. <sup>3</sup>

In a study carried out in Croatia, younger professionals wanted the pandemic to pass as quickly as possible and often fantasized that the pandemic had not even happened, in addition to hoping for a mira-

cle. Older professionals, on the other hand, were more likely to have conversations and dialogues about how they felt and about the special living conditions to which they were exposed. 10

In addition, in relation to the coping process, physicians are fundamentally oriented to analyze the disease and face it as an equation to be solved, unlike other professional classes that resort to positive reassessment. 10

## CONCLUSION

The studies discussed in this review made it possible to have an idea of the dimension of the problem and showed that the repercussions of stressors (fear, worry, depression, anxiety and anguish) occurred in the mental, physical, spiritual and social spheres. To face COVID-19, strategies such as the use of social networks, psychological resources, the search for knowledge about the disease, the search for faith, in addition to humor and a positive attitude towards events were used.

In view of the absence of studies in the Portuguese language, it is necessary to promote the theme so that studies of this nature are carried out and then we can draw an overview of coping with the disease in our country.

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