

Mental Health of Doctors Who Treat Patients with COVID-19 in Mexico City: An Anthropological Investigation

La salud mental de los médicos que atienden COVID-19 en la Ciudad de México: una investigación antropológica

A saúde mental dos médicos que tratam a COVID-19 na Cidade do México: uma investigação antropológica

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Abstract

Introduction: The objective of this article was to explore, from an anthropological perspective, the social representations that doctors who treat COVID-19 in specialized hospitals in Mexico City have, regarding the relationship between their professional performance and the deterioration of their mental health; as well as their social representations of the existing institutional resources to provide them mental health attention and their care-seeking and self-care strategies. **Materials and Methods:** For this, a qualitative investigation was carried out with semi-structured interviews with 35 doctors who treat COVID-19. **Results:** From the points of view of the doctors, various sociocultural and structural causes of mental illness related to their professional performance are documented and analyzed, as well as their representations about the inadequacy and/or ineffectiveness of the institution, group, or individual resources to provide them mental health attention; and some allopathic and non-biomedical forms of care-seeking and self-care. **Conclusions:** Recommendations are made to address the etiologies of the disease analyzed in a culturally and structurally appropriate way to the context of the pandemic.

Keywords: COVID-19; mental health; health care providers; hospitals; medical anthropology.

Resumen

Introducción: el objetivo de este artículo es explorar, desde una perspectiva antropológica, las representaciones sociales de los médicos que atienden COVID-19 en hospitales especializados de la Ciudad de México, respecto a la relación entre su desempeño profesional y el deterioro de su salud mental, así

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como de los recursos institucionales existentes para atenderla y sus estrategias de búsqueda de atención y de autoatención. *Materiales y métodos:* para ello, se realizó una investigación cualitativa con entrevistas semiestructuradas a 35 médicos que atienden COVID-19. *Resultados:* a partir de sus puntos de vista se documentan y analizan diversas causas socioculturales y estructurales del padecimiento mental relacionado con su desempeño profesional, así como sus representaciones sobre la inadecuación o ineficacia de los recursos institucionales, grupales o individuales, para atenderlo y algunas modalidades de búsqueda de atención y autoatención alopáticas y no biomédicas. *Conclusiones:* se realizan recomendaciones para abordar institucionalmente las etiologías del padecimiento reportadas por los entrevistados de una forma cultural y estructuralmente adecuada al contexto de la pandemia.

Palabras clave: COVID-19; salud mental; personal de salud; hospitales; antropología médica.

Resumo

Introdução: O objetivo deste artigo é explorar, a partir de uma perspectiva antropológica, as representações sociais que os médicos que tratam a COVID-19 em hospitais especializados na Cidade do México, têm sobre a relação entre seu desempenho profissional e a deterioração de sua saúde mental; bem como os recursos institucionais existentes para cuidar da saúde mental e as estratégias de busca de cuidado e autocuidado. *Materiais e métodos:* Para isso, foi realizada uma pesquisa qualitativa com entrevistas semiestructuradas com 35 médicos que tratam da COVID-19. *Resultados:* Do ponto de vista dos médicos, são documentadas e analisadas diversas causas socioculturais e estruturais do adoecimento mental relacionadas à sua atuação profissional, bem como suas representações sobre a inadequação e/ou ineficiência dos recursos institucionais, grupais ou individuais, disponíveis para atendê-los e algumas modalidades de busca de cuidado e autocuidado alopáticos e não biomédicos. *Conclusões:* São feitas recomendações para abordar institucionalmente as etiologias da doença relatadas pelos entrevistados de forma cultural e estruturalmente adequada no contexto da pandemia.

Palavras-chave: COVID-19; saúde mental; profissionais de saúde; hospitais; antropologia médica.

Introduction

On 31 December 2019, in the city of Wuhan, China, a new respiratory disease caused by a new virus, SARS-CoV-2, was discovered, and was subsequently called COVID-19. On 11 March 2020, the World Health Organization (WHO) officially declared a “pandemic” (1). The Americas are the region of the world with the most healthcare professionals infected with COVID-19 and Mexico is the country with the most number of deaths of healthcare professionals caused by COVID-19 (2).

Various research projects worldwide show that healthcare professionals experience higher levels of work-related stress than the general population, even under normal conditions (3,4). According to the research, doctors found it difficult to talk about their mental health issues with their colleagues or managers, or to seek professional care for them (5); this was attributable to them being potentially embarrassed by professional failure, worried about their ability to practice medicine, or about their licenses being restricted (6,7). Although they usually look to friends or family members for help when they realize that they are

experiencing mental health issues, evidence show that they find it difficult to disclose these issues to these persons (8).

During pandemics, doctors have considerably more work and experience higher levels of stress and other mental health issues, such as depression, anxiety, post-traumatic stress disorder (PTSD), or burnout syndrome (BS). Studies on the mental health of frontline healthcare professionals during pandemics show that their problems last far beyond the outbreak of the disease. According to a 2006 study, the staff of a hospital in Beijing, who worked during the outbreak of SARS in 2003 and underwent quarantine for the same, displayed symptoms of depression even 3 years after the pandemic ended (9). Similarly, several documented cases in which the COVID-19 pandemic has caused doctors to experience several mental health issues have been observed. Globally, the first reports came from China, and showed that a sixth of the healthcare professionals interviewed experienced psychological disorders, with the symptoms mainly comprising depression, which required assistance from psychologists or psychiatrists (10). Furthermore, for healthcare professionals, working in “COVID-19 affected areas” was evidently considered a challenge. This was because of the unprecedented circumstances, the doctors’ exhaustion after a workday, or doctors being prevented from eating or drinking due to the protective equipment that they had to wear. Moreover, they were afraid of becoming infected or infecting their family members and felt a sense of frustration as they were not able to do more for their patients. They also found that managing their social relationships was difficult under those circumstances. The mental health of healthcare professionals was also affected by the deaths of their patients, which caused them pain and emotional anxiety (11). In other parts of the world, such as Pakistan, and in the Latin American context, Colombia, Brazil (14), Ecuador, and Mexico (12-16) quantitative studies also highlighted issues such as PTSD, insomnia, and depression.

In Mexico, several studies have shown a high incidence of BS among healthcare professionals who performed their daily work in conditions unrelated to pandemics. Several factors that contributed to burnout were discovered, including employment seniority, having more than two jobs, the department of work, and the specific professional role (17). In the context of COVID-19, one quantitative study on the mental health of healthcare professionals and doctors has been published. Few qualitative studies related to this topic had been published in the country before the pandemic, and up till now, none have been published on the challenges of dealing with COVID-19 in the field.

Many studies have highlighted the importance of promoting strategies to prevent and detect mental health issues, and to help healthcare professionals seek professional psychological and psychiatric care (18,19). This involves creating a culture of open communication that reduces the stigma of psychological vulnerability (20). For example, in China, the strategies that healthcare professionals use to cope with the COVID-19 pandemic are starting to become a topic of research.

In Mexico, healthcare authorities announced that they would implement certain measures to prevent, detect, and treat mental health issues in health care professionals. On 15 May 2020, a document was published that recommended building accessible areas for resting, promoting shifts of less than 8 hours, as well as regular periods of rest and rotation of duties. In addition, it suggested that staff was specifically assigned to the duties of providing reports and delivering bad news to the families of the patients, and that mental health services were promoted (21). This document also recommended that institutions like hospitals, clinics and so forth, proactively look for members of staff who might be experiencing difficulties, through a program of accompaniment involving two people, i.e., a mental health monitor and an accompanying mental health specialist—a psychologist or psychiatrist, belonging to the institution or hired for this purpose. Priority health issues that should be detected early and require professional mental health intervention include vicarious trauma, compassion fatigue, and burnout.

Other measures implemented by healthcare authorities include a website dedicated to mental health, which provided the phone numbers of some private and public institutions that offer emotional support to healthcare professionals (press conference, Daily Coronavirus Report in Mexico, 9 May 2020) (22). Although there are several quantitative articles that have researched and analyzed similar strategies in various countries of the world, qualitative research on this topic is virtually non-existent (23).

Based on an anthropological perspective that accounts for the person's points of view, this article describes and analyzes some processes focused on the relationship between doctors' professional practice and the mental health deterioration they experienced while dealing with COVID-19 patients in public hospitals—referred to as “COVID and hybrid” hospitals—in Mexico City:²

- a. Social representations of the sociocultural and structural elements to which participants attribute their distress (24-26), specifically, sociocultural aspects, such as the perception of the risk of being infected and transmitting the disease, uncertainty as to how to properly cope with the pandemic and as to its duration, or conflicts with the families of patients; and structural aspects, such as workplace conditions. Some nosological categories used to name the distress, regardless of whether they originated from the biomedical field, were also considered.
- b. Social representations of the institutional resources available to deal with the distress.

2 A process that affects their mental health is the stigma and social discrimination they experience or generate in hospitals. I did not discuss this in this article, seeing as it was published in Rubén Muñoz. COVID-19 and social stigma in hospitals: a new epidemic of signification? *Med Anthropol.* 2021;40(7).

- c. Strategies for obtaining care (27) and self-care (28) to cope (29) with mental health deterioration.

For the purposes of this study, mental health is defined as mental suffering or illness and is understood as the subjective experience of a health state that has been affected by distress (25,26). It is known to affect the social, professional, and personal lives of doctors who treat COVID-19. In the present article, the category “stressor” is defined as stimuli, conditions or situations that generate stress and distress in the sense of a negative stressor that has repercussions on mental health. As for the strategies of seeking care and self-care, they are analyzed based on the category of “coping” (27,28). Social representations act as a system that interprets the reality that governs the relationship of individuals with their physical and social environments, helping them navigate their social practices and relationships (24). Care-seeking strategies refer to the actions that doctors take to treat mental health issues that have been identified on the basis of certain symptoms and changes in behavior that are linked to social roles and are related to the disease (27). As for self-care, it refers to the actions that doctors take to address their own health, without the intervention of mental-health professionals. Self-care involves both the person and their social reference groups, unlike self-management, which is a more individualistic concept.

Materials and Methods

This research is qualitative and based on grounded theory (30). Semi-structured telephone interviews were conducted with female and male doctors who worked in “COVID and Hybrid” hospitals in Mexico City³, either in the Health Department, in the Institute of Security and Social Services of State Workers or the Mexican Institute of Social Security.

The snowball technique was used to invite doctors to participate in this study, all of whom were previous contacts of the researcher. A total of 70 individuals were invited to participate in this study, of which 35 accepted and were interviewed (17 women and 18 men). Of those who did not accept or could not do the interview on the given day, some stated that they had “too much work” or that their workdays were very long, especially in the case of resident doctors. Others said that some of their family members were ill, had recently died, or had COVID-19. Interviews were conducted with the help of a research assistant and were stopped when data saturation was reached.

The 35 interviews involved 16 resident doctors working in Internal Medicine, Medical and Surgical Emergencies, Psychiatry, Pediatrics, Clinical Pathology, Oncological Surgery,

3 These are hospitals with level three and two healthcare, which have been reorganized to provide priority treatment for COVID-19. The former only treat COVID-19 patients, while the latter still provide mixed healthcare (for both COVID-19 and other diseases).

and Dermatology; as well as 16 doctors attached to Critical Medicine, Medical and Surgical Emergencies, Ophthalmology, Otolaryngology, Clinical Pathology, Cardiothoracic Surgery, Urology, Pediatrics, and Gynecology. Three doctors were general practitioners. The testimonies included in this article mention the areas of expertise so that doctors can be better identified while guaranteeing their anonymity. Owing to the increase in the number of COVID-19 cases in the country, and to the impossibility of dealing with the pandemic with only the help of professionals specializing in infectious/respiratory diseases, we invited professionals from all areas of medical expertise to participate in this study based on their work roles. Therefore, the sample was diversified to include the various areas of medical expertise that dealt with COVID-19.

The participant age was 26–55 years, with a median age of 33. This was attributable to the fact that, in all of the institutions, members of staff with risk factors for COVID-19 and/or aged >65 years were authorized to take a leave of absence. Nevertheless, 6 of the doctors (17%) had risk factors (hypertension and asthma, mainly), but had decided to continue working because they thought that staying at home would have been counterproductive for their mental health, irresponsible or, in the case of resident doctors, not possible. Seven the participants (20%) were diagnosed with COVID-19.

The work period in the field lasted from May until September, 2020. The interviews lasted between 1 and 2 hours. When completed, they were transcribed word-by-word and subsequently coded using Atlas.ti 8. To code and analyze the information obtained, previous, co-occurring, and emerging categories were considered. The material obtained was triangulated using the data received from the different participants, the recurring concepts from the selected analysis units and, when possible, other existing concepts in the scientific literature or other sources, such as official information.

Regarding the limitations, there were restrictions related to COVID-19, such as “remote fieldwork,” which precluded participant observation and the possibility of interviewing any healthcare patients.

Ethical considerations

All participants received information about our research, the confidentiality of the data, the right to withdraw from the study and the option to receive the results. This was sent as a WhatsApp message, before the oral interview were conducted.

For the fieldwork and subsequent use of the information obtained for research purposes, we followed the guidelines of the Declaration of Helsinki. We requested that participants provide their informed written consent to record the calls—in order to respect their privacy, no video calls were used. Participant anonymity was ensured by not recording their personal

data and topics that might be sensitive were avoided. Participants who were interested were informed about existing strategies of mental healthcare for medical professionals.

Results

Facing an unprecedented situation involving new protocols and the uncertainties related to the risk of contracting COVID-19 had a significant impact on the mental health of the doctors who were interviewed.

In the first section, the main causes of participant distress, from their own points of view, are addressed:

1. The perception of the risk of contracting COVID-19 or infecting family members.
2. Uncertainty as to how to properly cope with the pandemic and as to its duration, as well as with conflicts with the families of patients.
3. Workplace conditions, as related to their work status.

In the second section, the social representations of the institutional resources available for treating distress are described, along with the strategies used for seeking care and for self-care to cope with the deterioration of their mental health (27-29).

The perception of the risk of contracting COVID-19 or infecting family members

The perception of risk resulting from new challenges in the professional environment meant that the sense of certainty provided by the biomedical and epidemiological knowledge used to tackle known diseases was lost. The main representations mentioned by the interviewees in regard to this topic concerned their fear of contracting COVID-19 and potentially dying from it, despite the fact that most of them did not belong to a known risk group. This was the case for themselves and for other people whom they could potentially infect, particularly members of their family, depending on whether they lived with them or not. This resulted in many of them isolating themselves by leaving their homes or sending their children to live with other family members, despite the fact that children are not considered a vulnerable population in terms of COVID-19. This perception of risk was mediated by information received from various sources such as hospital training or online research, but also by what they themselves observed in the workplace. As time passed, fear and the perception of risk decreased, especially for those who had contracted the disease and regarded themselves as immune, and for those who had not contracted it, but trusted the methods they were using to prevent infection:

I have colleagues who work in COVID-19 units, who haven't seen their children or their families in 2 months, and I see how sad they are. It makes me so angry. [...] I left my son for 3 weeks and it was the ultimate test, leaving your whole life behind, because you're fully convinced that if you don't, you'll infect them. (Female gynecologist)

On a similar note, previous experience with infectious diseases or intensive care units (ICUS), being familiar with using personal protection equipment, and the area of medical expertise, were factors that affected their perception of risk, as well as the negative psychological impact that the stressors had on them:

Many people come and help us from other areas of the hospital, colleagues from areas that don't normally deal with critical patients; we've got dermatology, ophthalmology... And they're even scared to pick up files or say hello where we are, and we've got to reeducate them, so they know where they're safe. (Critical-medicine specialist)

Uncertainty regarding how to properly cope with the pandemic and to its duration, as well as conflicts with the families of patients

Another cause of mental distress that was mentioned was the large number of deaths, along with the deaths of colleagues or patients whose medical outcome they were unable to explain, for example, in the case of young people who did not have any risk factors. Moreover, there was also the uncertainty surrounding the duration of the pandemic:

We're exhausted, the mortality rate is very high, there are many complications and almost 40% of patients are dying. It's not up to us. We're used to other diseases, where the patients respond to the treatment and get better over time. It wears you out. (Internal-Medicine Resident)

The conflicts with the families of the patients are another source of stress reported by the interviewees. They referred to three processes:

1. The unpredictability of the disease, its high mortality rate and its impact on patients without risk factors.
2. The difficulties of being empathetic and adequately transmitting information over the phone, as well as protocols involving the isolation of patients, stopping them from being accompanied, and preventing the performance of funeral rites.
3. The limitations encountered when trying to ensure the rights of patients and families to confidentiality:

It's heartbreaking to have a 23-year-old boy die on you and have to give the news over the phone. When it happened, I thought, "What am I going to do? How am I going to tell them?" I cried in frustration. "How could he die on me so young?" Because you couldn't get him out of it. Or 40 or 50-year-old moms. They'd put you on loudspeaker, the family

would be waiting, and you started with a preamble to see if they could start to process the bad news: “Did they tell you it was serious? Well, the thing is that her heart...” But they never processed it, I’d be screamed at and insulted, I’d listen to people, children cry, it’s very frustrating. They couldn’t understand that their patient had been admitted and they didn’t say a proper goodbye and they would get a little box with ashes. Then they’d start using force, they’d get infected, they wanted to say goodbye. (Internal-medicine resident)

You don’t get that human contact over the phone, which is essential when treating and giving reports on people, and it’s more difficult to show empathy [...] Many times the patient is not properly identified and information about a different patient may be given to a family member... The doctor who provides the information isn’t the doctor who treats the patients. They have so much work in the ICU that one doctor is treating the patient, and another gets a list with the patient’s name and general situation, and it’s that doctor who reports on the patient. And sometimes that doctor has no idea how the patient’s doing. (Head of quality)

Workplace conditions, as related to their work status

Despite experiencing the aforementioned adverse situations, and in some cases having certain risk factors, some of the interviewees who were entitled to a leave of absence for medical reasons, for instance, associate doctors, did not take advantage of this because they felt a sense of responsibility in light of the pandemic. In some cases, the perception was that this sense of “responsibility” would have had a negative impact on their mental health if they had stopped working, and it was also associated with a normalization of burnout in their workplace. Nevertheless, the majority of specialists with risk factors did request a leave of absence, something that increased the pressure caused by COVID-19 for those who continued working:

My wife would say to me, “Why don’t you declare yourself unfit? You’re obese, you’ve got hypertension.” I felt a personal need to work during this pandemic, to live through it; it was a social and personal responsibility. These are the moments for which I was trained. (Emergency specialist)

Our colleagues from the ICU say, “What we need is people coming and giving us a hand with this huge workload.” (Pediatrician specializing in immunology)

According to the resident doctors, the aforementioned processes connected to COVID-19 were the main causes of their anxiety and frustration. Resident doctors were also obligated to work during the pandemic, given that they were denied the right to ask for a leave of absence. For those specializing in areas other than respiratory/infectious diseases, another cause of anxiety and frustration was the uncertainty created by the interruption of their training, as well as the lockdown and the changes connected to the loss of coping resources as a result of an interruption of their usual social activities:

In terms of my training, I was worrying because I knew we'd lose all this time. We'd miss classes, things that would help us when training to be specialists; that was also stressful. (Dermatology resident)

I feel bad because my performance as a person worsened. I no longer read what I have to read, I no longer practice what I have to practice. I love being a psychiatrist, and not seeing patients is something that makes me feel less useful. (Psychiatry resident)

We also documented a nosological, non-biomedical category connected to mental distress. Several of the participants claimed to frequently experience “psychological COVID,” a term they had coined themselves and which referred to the anxiety caused by believing they had become infected and were developing symptoms similar to those of COVID-19:

Many times, we'd joke and say, “I've got psychological COVID,” because sometimes you start getting symptoms and being anxious, and it almost becomes real. (Internal-medicine resident)

The participants associated the processes described with a deterioration of their mental health. More than 70% of them reported issues with the quality of their sleep, such as insomnia or feeling sleepier than usual. Almost half of the interviewees mentioned experiencing difficulties when trying to concentrate as well as changes in their appetite, such as losing it altogether or feeling the need to eat constantly. A third of them mentioned the need to carry out more activities than usual, something they connected to the biomedical category of anxiety. Gaining or losing weight was also common among some of the interviewees. They attributed these changes to the constant stress that they experienced and to the difficulties of using the personal protection equipment in the “COVID-19 affected areas.” As for morale, they reported frequent changes related to irritability, sadness, and emotional exhaustion. One of the nosological categories that they used the most was “being burned out,” referring to BS:

It's stressful because you don't know what will happen next [...] It's totally uncomfortable because we stand for 5 hours; you end up dehydrated and with a headache. I weigh myself going to work in the morning and coming back, and I'd drop one and a half kilos per workday. (Female family practitioner).

I was burned out, I felt terrible, sad, I got hit by the deaths of two important associate doctors, [...] but I didn't feel the need for these [mental health] services. Nevertheless, I'm not saying no to the possibility of needing them at a certain point. (Internal-medicine resident).

Social representations of the institutional resources available for mental healthcare

One significant finding is that more than half of the interviewees were not fully aware of the strategies implemented by institutions in the health sector to prevent and treat mental health issues affecting healthcare staff. Some participants mentioned having seen advertising on social media or on hospital posters or flyers. This changed over time and, after July/August 2020, many of the doctors started to recognize them better. Their representation also depended on the specific institution and on the promotion strategies used in each hospital. The majority of interviewees did not take a positive view of the existing individual-based strategies, such as the availability of support resources on the internet or in mental health clinics. Some of them argued that those strategies ought to be more proactive in their attempt to reach healthcare staff. When it came to telephone support, the doctors perceived it as distant and untrustworthy, claiming that it was impossible to build the necessary rapport. However, some of the interviewed doctors who rejected telephone support admitted that being able to talk about what they were going through during the interviews had helped them emotionally:

The strategy should involve someone monitoring how things are going and acting in case of a red alert. [...] They [mental health monitors] were never implemented, at least in my hospital; we've got a psychiatrist there and she never came to us, she does her best to hide in her practice and never comes around here. (Internist)

I spoke to the head of the ICU about the fact that several doctors, mostly residents, were already exhausted, physically and emotionally burned out, and that we needed help. He understood that, asked for help from the mental health staff, and the reaction of the doctors was, "I don't need that, what I need are hands to come here and get dirty and help. I don't need them to tell me, 'Everything's going to be all right.'" (Pediatrician)

Most of the interviewees had a negative representation of the proactive group strategies that were implemented in their hospitals. One such example was the contempt displayed by an associated doctor who managed several resident doctors, toward the psychology staff during a session on mental health struggles. This attitude, also adopted by other interviewees, underlines how important it is for interviewees to maintain an image of resilience and non-vulnerability, the difficulties in seeking psychological care, and, in some cases, the worries about remaining anonymous during potential individual consultations and group sessions.

The hospital sent a few people from psychology over to see if we had any sort of problem. It was terrible because with the little time we had, we had to listen to these kids ask us, 'Have you been feeling down?' I stopped and said, "I'm sorry, but what you're doing is stupid." They only came twice and, after that, we and the residents told the one in charge

that that was “nonsense.” The group of residents to which we belong is quite practical in this type of situation. (Cardiothoracic Surgeon)

[...] I didn't use the service; I don't know how organized it is. This mental health thing is complicated, and we're not so used to seeking it, it's a bit stigmatized [...]. (Otolaryngologist)

According to their own experience, six of the interviewees—residents under 40—had a positive representation of the actions carried out in their hospitals by the mental health teams, such as support groups or offers of individual support, be it face-to-face or virtual. All of the participants who worked at a hospital where a dog was used as a co-therapist, were in favor of this method:

The psychiatry unit at the hospital had the brilliant idea of bringing along a therapy dog. It went to several areas. It's wonderful, you bend down, say hello, pet it, it moves its tail, don't do that! It's so cool. You're stressed and it takes your mind off it. (Pediatrics Resident)

Strategies for seeking care and self-care to cope with a deterioration of mental health

Despite the fact that the interviewees did not typically seek mental healthcare, they did have their own resources to cope with stressful situations. Some of them already employed these self-care-related practices before the pandemic, and thus had to reorganize these habits—considered “a necessity”—in order to adjust them to new schedules or fresh ways of communicating, e.g., by videoconference. Others started using these strategies when they started to perceive the pandemic as a red flag for their mental health. These self-care strategies included sports, yoga, and, in seeking professional care, psychological/psychiatric care or coaching. None of the interviewees who had never received professional care before sought such care as a result of the COVID-19 pandemic. Those who had received professional care before either continued with it or restarted it if they had stopped. In some cases, homeopathic treatments to cope with anxiety were mentioned. The strategies of seeking professional care or self-care occurred mostly among doctors who were younger than 40:

I haven't stopped working out, online; I don't do every day, it's a bit difficult, but I try to do it. I joined a class on stress that's basically about breathing, I try to do yoga. That helped me a lot. (Female general practitioner)

When it comes to my mental health, I've been doing [coaching] for many years, maybe 5 or 6, so I wasn't hit so hard by the pandemic. (Male general practitioner)

For other interviewees, a meaningful resource was their religious faith, which was strengthened by the circumstances of the pandemic. Some distanced themselves from the

pandemic-related news that caused them anxiety and, in many cases, tried to keep in touch with their loved ones virtually:

At one point, I noticed I couldn't get to sleep. I started distancing myself from the news, the surveys, I no longer watch any COVID-related stuff, it was starting to make me very anxious and angry, and I kept thinking about it during the night. (Internist)

Several interviewees mentioned the regular consumption of alcohol or medication as a strategy for self-care. These medications included painkillers and anti-inflammatory pills meant to eliminate tension headaches or stress-related muscle contractions. It is important to note that some young doctors—younger than 30 years—mentioned taking benzodiazepines, either without a prescription or with a prescription from their psychiatrists or resident colleagues in their fourth year of studies. Others reported that they had seen other colleagues do this. Only one doctor reported consuming marijuana regularly, and that they had increased its consumption since the beginning of the pandemic:

Days of insomnia, of crying, of being nostalgic... I took some strong painkillers because I couldn't sleep, and I had big headaches. I really needed to sleep, and my mind was racing; being a doctor, most of us have a pharmacy at home. There's been an increase over the past month, once or twice a week. (Female general practitioner)

Some colleagues say, "I feel very stressed by this whole COVID situation, and I have to take Clonazepam the day before." (Internal-medicine resident)

Discussion

The arrival of COVID-19 in Mexico brought along various challenges for hospital healthcare and for the mental health of medical professionals (16). These challenges were connected to new and uncertain sociocultural and structural conditions that were linked to the preexisting ones. One of the factors that participants mentioned were key in the deterioration of their mental health was the fear of contracting COVID-19, as well as the unpredictable consequences that this might have had on their health or that of their family members, should they get infected with it as well. This was highlighted by several quantitative studies (31). It is also worth noting that Mexico has the highest mortality rate for healthcare staff in the world (2). The perception of risk and its connection to stressors that, according to the participants, negatively affected their mental health, varied depending on factors such as more or less experience with infectious/contagious diseases or how used they were to using personal protection equipment. These results coincide with those of other studies on PTSD related to medical care for SARS or COVID-19 (10,16,32-34). This is the first study in Mexico that underlines the importance of the area of medical expertise in the perception of risk,

which the interviewees perceived as a cause of mental distress, thereby supporting recent evidence (16) that links healthcare staff roles and mental distress.

Self-isolation derived from the real or imagined fear of infecting family members represented a stressor that, according to the interviewees, contributed to mental distress. This finding has been discussed in other research in Latin America using secondary sources, and, on other continents, using empirical data (35). A fear of infecting children has been mentioned in the literature, and it also appears in the testimonies from our study, despite the fact that it has now become apparent that children are not a vulnerable group (9,36). Fear and uncertainty operate independently of scientific evidence, not only in the general population but also among healthcare staff, something that was reflected in the refusal of healthcare workers to get vaccinated during the influenza epidemic that happened in Mexico in 2009 (37).

The absence of effective treatments, along with the uncertainty related to the duration of the pandemic, was the cause of many fears among the doctors that were interviewed, and this was mentioned as a cause of mental distress. This was in addition to the frustration that stemmed from the high mortality rate in infected patients and the unpredictability as to the course and outcome of the disease, as ascertained in other studies (11). One element that was specific to the pandemic in Mexico was that it affected certain groups, e.g., young people, in a different manner from that observed in other parts of the world, for example, in Europe (38,39).

Some studies mentioned conflicts between healthcare staff and the families of patients, which were brought about by the mandatory protocols for isolating the patients in the hospital (40). Telephone communication was not helpful when medical staff had to deliver the news about the death of a patient, owing to the limitations of the process when it comes to empathy between the doctor and the family, and to potential errors that might lead to breaches in doctor-patient confidentiality. According to the doctors, telephone communication worsened those conflicts, as well as the stress that the doctors experienced. These processes were disruptive in terms of the social and cultural importance of being physically accompanied in hospitals and having direct contact with medical staff in Mexico (41). The impact that those kinds of conflicts might have on the mental health of doctors dealing with COVID-19 is a new finding in the Latin American context. Since the beginning of the pandemic, funeral rites had not been allowed in Mexico, despite their high social and cultural importance (42). The social and community conflicts that can arise when funeral rites are not permitted during situations of international healthcare emergencies, as well as anthropological interventions designed to provide sociocultural adaptations, have been documented in several studies on Ebola and, in France, to COVID-19 (43,44).

During past epidemics, it has been found that doctors and nurses felt a strong professional obligation to keep working despite the dangers that this involved (45). The findings

of our study regarding the associate doctors who had risk factors but continued working, coincide with those findings, as well as those related to a “sense of duty” felt by nurses and doctors treating COVID-19 in China (9). There is a new finding related to the resident doctors’ representation of their mental health issues as stemming from the context of subordination in which they work and from being prevented from requesting a leave of absence, along with the potential professional disruption—in the sense of professionalization described by Freidson—that the pandemic might mean for their training (46). Resident doctors are a pillar of the Mexican hospital network, because of the lack of specialists hired to work in the public sector. A deterioration of resident doctors’ mental health, owing to their precarious work conditions, had been documented in several studies prior to the pandemic (47,48).

The nosological biomedical categories mentioned by the interviewees to refer to their mental distress coincide with quantitative findings in Mexico, i.e., a high incidence of insomnia, anxiety, or burnout (16). “Psychological COVID” is a part of a non-biomedical explanatory model that aims to name and depersonalize the fear of contracting the disease, using a humorous language (49).

The social representations of the strategies employed to attend to their mental health highlight the fact that the participants were either not aware of them or showed little interest in the topic. Several studies carried before and during the pandemic reveal the little interest that doctors have when it comes to attending to their own health, especially their mental health, by seeking help from colleagues (50). Some studies carried out in the hospital system in Mexico City prior to the pandemic highlighted an absence of strategies to tend to the mental health of both resident doctors in training and healthcare staff in general, and the little interest this population had in locating these strategies either in their own hospitals or externally (48). Findings such an ideal of resilience, a disregard for psychological/psychiatric care as subordinate disciplines in the health sciences, the normalization of burnout, social stigma internalized by doctors in regards to their own mental health, and the fear of breaches confidentiality in the workplace, as well as the potential repercussions of this, are themes that are in line with previous research on these issues (48,50-52). These representations, which are mirrored by a documented absence of care-seeking, are part of structural processes that treat mental health as secondary for the purposes public policy. Moreover, in Mexico, the approved budget for mental health between 2010 and 2015 was 2.2% of the total budget for healthcare, a number that was much lower than the one recommended by the WHO, and the budget of high-revenue countries (5.1% on average) (53). Between 2015 and 2021, this budget was even lower, and mainly directed toward psychiatric hospitals (54).

The strategies reported, such as eating well, engaging in relaxing activities such as yoga, avoiding COVID-19-related information, and resting when possible, were aligned with the ones documented in China (10). In the case of our study specifically, being younger than 40 was a variable that was correlated with more frequent use of these strategies, as well as with

a positive representation of the existing institutional resources. Another finding that was specific to the Mexican context and was also apparent in case of Iran, was the importance of religious faith to the doctors, as a way of seeking self-care (55). The connection between religious and scientific beliefs, and the various consequences of this connection on clinical practice, have been explored in other Latin American studies on infectious diseases (56).

The regular consumption of alcohol and other drugs, the practice of self-medication, self-prescription, or obtaining prescriptions from colleagues, was a topic tackled in several research studies, and represented the first level of care to which the doctors resorted—as described by Menéndez, for the self-care of non-healthcare professionals (48,50,57). These self-care strategies did not satisfy the mental health demands analyzed in this study, but allowed the doctors to maintain a certain functionality in the workplace, at least until a serious psychopathological presentation is triggered or intensified, preventing them from practicing medicine (48). In the current work conditions, detecting and preventing this remains a major challenge.

The results of this research study reveal how certain sociocultural and structural processes that are linked to the medical practice of doctors who treat COVID-19 are significant in the process of deterioration of their mental health. Sociocultural processes are related to the perception of risk of contracting and transmitting the disease, uncertainty about the duration and course of the pandemic, and the conflicts with the families of patients. Structural processes are related to the connection between workplace conditions and work status. Participant representations of the healthcare resources related to mental health at an institutional level, as well as the little use doctors make of these and the strategies of seeking self-care to cope with mental illness, have also been explored.

Based on our findings, we are providing some recommendations in terms of public healthcare policies, institutional protocols in hospitals, and the research context, which are meant to help understand and deal with the processes mentioned.

From a sociocultural point of view, we recommend tackling the documented causes of mental distress from various angles. Updated information regarding scientific evidence could alleviate some of the uncertainties related to the perception of risk, self-isolation, and the fear of infecting children. In the hospital context, some forms of social mediation, similar to intercultural mediation and related to the processes of communicating information and providing socio-culturally adequate funeral rites during COVID-19, have been successfully used to prevent and manage conflicts between the families of the patients and healthcare staff (58). Examples of this are the Funeral Rites Committees in France, which are comprised of multidisciplinary teams that collaborate with anthropologists (44). This could be a useful resource for the Mexican context, and would also improve the process of respecting patient confidentiality, considering their specific training and role.

From a structural point of view, it is crucial to invest more in medical specialists, as well as to provide better working conditions for resident doctors and increase the budget for mental health, including the prevention of mental disorders and mental healthcare for healthcare staff. Denormalizing the burnout experienced by doctors at work—as if it were an acceptable state of health—is an urgent matter, as is the rejection of mental healthcare. Taking into account doctors' points of view and habits at different times during the pandemic could inform potential adaptations to the strategies they currently tend to reject, as well as aid in the creation or recreation of successful ones. Examples of this are the promotion of virtual or remote means of participating in individual or group therapy, aided by therapists outside the hospital who would not compromise confidentiality. In addition, group sessions on how to cope with mental illness could also be promoted, as well as mental health monitors. “Indirect” strategies of promoting mental health and treating mental health issues that are not so closely linked to mental health and the stigma associated with it could also be useful. Three examples of this are mobile apps dedicated to mental health, online games used in other contexts, and therapy dogs (23). More anthropological research on this issue which takes into account the various stages of the pandemic is necessary in Mexico and Latin America.

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Author contribution

The author carried out the research, data analysis and writing of the article.

Conflicts of interest

None declared.

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