

## Short Communication



# Illness anxiety: The missing point of the COVID-19 pandemic

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### Abstract

**Introduction:** The coronavirus disease 2019 (COVID-19) epidemic was confirmed as global pandemic by the World Health Organization (WHO) by 11 March 2020.

**Materials and Methods:** Data was collected from all the emergency medicine staff working in two referral main centers for COVID-19 affiliated to Tabriz University of Medical Sciences, Iran. The participants were enrolled in the study six months after the first COVID-19 hospitalization and the COVID-19 Anxiety Scale (CDAS) was used.

**Results:** According to our results, while 46 (20.7%) participants had a moderate anxiety score, 26 (11.7%) had a severe anxiety score.

**Conclusion:** The results of this study showed that emergency department staff are at risk of developing an Illness Anxiety Disorder (IAD). During the COVID-19 pandemic, more research should be done on these groups.

### Introduction

Following the incidence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in Wuhan, China and its spread to other parts of the world, the World Health Organization (WHO) confirmed the novel coronavirus disease 2019 (COVID-19) a public health emergency of international concern and by 11 March 2020, the COVID-19 prevalence was confirmed a worldwide pandemic.<sup>1</sup> The COVID-19 revolutionized our whole perspective of healthcare and since then much effort has been dedicated to help the affected individuals.<sup>2</sup> However, regarding to prior research on SARS or Ebola epidemics, the sudden onset of a life-threatening illness imposes severe pressure on health care workers (HCWs).<sup>3</sup> COVID-19 pandemic affects almost every aspect of human life.<sup>4</sup> During the COVID-19 pandemic people are exposed to a variety of mental health problems, including anxiety about the illness. Compared to other professions, treatment teams are at a greater risk both physically and psychologically due to their close contact with patients with COVID-19. The shock from this pandemic, people rush to hospitals and medical centers, confusion about how to manage and treat the disease, and contradictory and confusing information about the ways the virus is transmitted can lead to more severe anxiety about the disease in medical staff. Nonetheless, despite their relatively similar conditions, not all medical staff are equally affected, and they experience varying degrees of emotional distress.<sup>5-9</sup>

Health-related anxiety is a normal and usual response

to a global pandemic like COVID-19. While anxiety is proportionate for most people to their perceived threat, but it is an existing overthinking with physical symptoms and illness in some cases that makes matters worse. In the upper end of the continuum, people experience an obsessive fear of illness that may fall within the realm of health anxiety.<sup>10</sup> Illness anxiety disorder (IAD) is a recent term for what used to be diagnosed as hypochondriasis or hypochondria. Patients with IAD, despite having no symptoms or even mild symptoms, believe that they have a critical or life-threatening illness. Meanwhile, IAD patients' fears seems so actual for themselves.<sup>11</sup>

### Materials and Methods

We evaluated the staff working in the emergency departments of Imam Reza and Sina hospitals in Tabriz, Iran from October 2020 to June 2021. This descriptive-correlational study was reviewed and approved by the Tabriz University of Medical Sciences, Northwestern Iran. Ethical code and written consent were obtained before distributing the pencil-paper questionnaires.

### COVID-19 Anxiety Scale (CDAS)

This scale has been developed and validated to measure anxiety caused by the COVID-19 pandemic in Iran. In the study conducted to build and validate this scale, a total of 318 individuals (aged 18-60 years old) completed the CDAS and the General Health Questionnaire (GHQ) online. The final version of this scale possesses 18 items and two constituents (factors). The maximum and minimum

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scores in the aforementioned questionnaire were 54 and 0, respectively. High scores in the scale show a developed level of anxiety in the subjects. The reliability of this tool was confirmed with a Cronbach's alpha of  $\alpha=0.879$  for the first factor,  $\alpha=0.861$  for the second factor, and  $\alpha=0.919$  for the entire questionnaire. Also, the amount  $\lambda$ -2 Guttman was 0.822 for the first factor, 0.864 for the second factor, and 0.922 for the whole questionnaire. The questionnaire used in this study was the valid Persian version of English CDAS.<sup>12</sup>

## Results

Based on the psychological symptoms of anxiety, two years after the prevalence of COVID-19 in Tabriz, 47 (21.2%) participants had a mild anxiety score, 142 (64.0%) had a moderate anxiety score, and 24 (10.8%) had a severe anxiety score. On the physical symptom subscale, 113 (50.9%) participants had a mild anxiety score, 68 (30.6%) had a moderate anxiety score, and 38 (17.1%) had a severe anxiety score. Finally, regarding the total score of the COVID-19 anxiety scale, 138 (62.2%) participants had a mild anxiety score, 46 (20.7%) had a moderate anxiety score, and 26 (11.7%) had a severe anxiety score. It was also observed in this study that there is a significant relationship between the age of the participants and their overall anxiety score. As observed, if other variables remain constant, increasing age by one year increased the overall score of anxiety of COVID-19 by 0.761 units.

## Discussion

The COVID-19 pandemic has caused a set of psychological reactions and severe impact on mental health.<sup>13</sup> The results from one study demonstrated that corona-phobia and hypochondriasis were fear factors that predicted pandemic-related psychopathology.<sup>14</sup> Given the transition of more than two years since the onset of the COVID-19 pandemic and the psychological pressure it imposes on HCWs, especially emergency department staff as a front line in the fight against disease, more investigation must be performed on COVID-19-related psychological distress. This study can be practically included in clinical practice and offer useful data for designing intervention protocols. Furthermore, operational healthcare management can manage frontline healthcare workers' COVID-19-related anxiety by reducing the sources of such anxiety, as well as including visions from employees' strategic coping acts into organizational stress management programs.<sup>15</sup>

## Conclusion

The current study presented that emergency department staff are at risk of developing an IAD. During the COVID-19 pandemic, more research should be done on these groups. As mentioned this study can be applied practically in clinical practice and offer useful data for designing intervention protocols.

## Study Highlights

### What is current knowledge?

- The COVID-19 pandemic has caused a set of psychological reactions and severe impact on mental health.
- Health Care Workers are more at risk for psychological disorders due to direct exposure to the COVID-19.
- One of the most important psychological problems associated with COVID-19 is illness anxiety in emergency workers, which is less addressed than other problems and groups.

### What is new here?

- Emergency department staff are at risk of developing COVID-19 anxiety.
- Age is associated with illness anxiety.
- Demographic factors such as gender and education are not associated with illness anxiety.

## Limitations

The main limitation of the current research is that we limited the HCWs merely to emergency staff. So, generalization of the results should be done cautiously.

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## Authors' Contribution

**Conceptualization:** Zahra Mousavi, Kavous Shahsavarinia, Hassan Soleimanour.

**Data curation:** Kavous Shahsavarinia, Parastoo Amiri, Hassan Soleimanour.

**Formal analysis:** Kavous Shahsavarinia.

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**Writing—original draft:** Parastoo Amiri.

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## Competing Interests

The authors declare no conflict of interest.

## Consent For Publication

Not applicable.

## Data Availability Statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

## Ethical Approval

This manuscript was approved by the Research Ethics Committee of Tabriz University of Medical Sciences (IR.TBZMED.REC.1399.732).

The authors confirm that all methods were performed in accordance with the relevant guidelines and World Medical Association Declaration of Helsinki. Also, we declare that written informed consent was obtained from all participants.

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