



# Post-traumatic stress: psychological consequences of an ongoing pandemic

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**The pandemic caused by the spread of the SARS-CoV-2 virus is a traumatic event of great proportions that has caused severe effects on people's mental health.[1]**

According to the World Health Organization (WHO), before the pandemic, depression levels reached more than 300 million people worldwide, which is equivalent to 4.4% of the world's population.

From a scientific point of view, the **researchers agree that it is still too early to know what the real impact of the pandemic was on the cognitive structures of people globally and in the long term** because the stressor is still ongoing after more than a year of exposure. Despite this, the **latest studies carried out warn about a significant increase in levels of depression and anxiety** in general, highlighting **acute stress** and **post-traumatic stress** as the mental disorders most frequently experienced by both health workers and citizens in general during this pandemic.

After more than a year of being exposed to the virus, can we qualify the COVID-19 pandemic as a traumatic event? What does the data say about it?

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) prepared by the American Psychiatric Association (APA), **post-traumatic stress is diagnosed if the person has been directly exposed to a traumatic event or if you are aware of a close third party who has experienced it.** What are the symptoms of PTSD? How does it manifest in the body and in the mind?

**Post-traumatic stress symptoms include: distressing memories, involuntary, and intrusive memories of the traumatic event; recurrent disturbing dreams, intense and prolonged psychological and / or physiological discomfort when exposed to internal or external factors that symbolize or resemble one aspect of the traumatic event, among others.**

It is important to note that **PTSD differs from acute stress by the duration of its symptoms.** While acute stress refers to the initial symptoms that a patient presents after having suffered a traumatic event for up to a month, post-traumatic stress refers to the symptoms that persist in the patient that has passed a period of time greater than one month, as indicated by the DSM-5.

After more than a year of exposure to the virus, post-traumatic stress is one of the most alarming and common clinical pictures in the world population today. The objective of this article is to describe the symptoms of post-traumatic stress in relation to the current pandemic and to offer a conclusion in this regard.



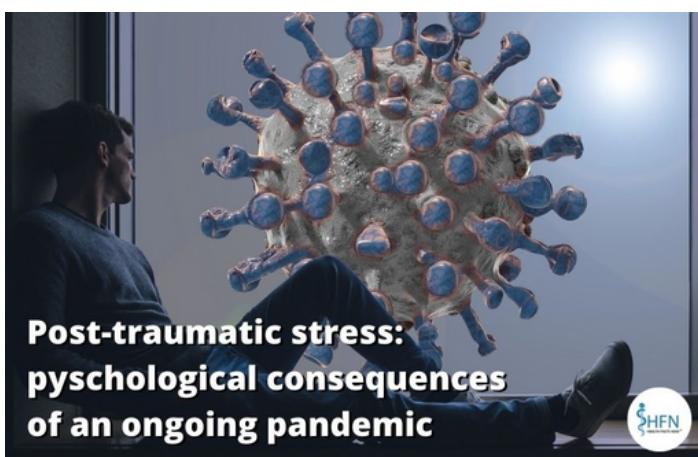
<sup>1</sup> According to a study by the Department of Psychology of the La Sapienza University of Rome, the pandemic constitutes a traumatic event to the extent that health workers and other population groups have presented symptoms of acute stress and post-traumatic stress. (<https://www.mdpi.com/1660-4601/17/11/4151>).



The team of psychology professionals at the University of Ottawa in Canada conducted a meta-analysis of 55 international studies. From this study it was concluded that **post-traumatic stress, after the COVID-19 outbreak, reached 22%, being five times more frequent compared to what the World Health Organization (WHO) usually reports.** The results of this study also show that insomnia was more prevalent in health workers than in other citizens.

So far, there are **three types of stressors linked to the pandemic.** First, there is the stressor related to the direct impact that the person experiences when they are diagnosed positive for COVID-19. Then there is the stressor to which health workers are exposed, particularly those who experience the direct impact suffered by patients from day to day.

Finally, there is the stressor linked to the socioeconomic consequences of the pandemic, such as the loss of employment, the lack of face-to-face classes in schools and universities, and the closure of numerous businesses, among others.



**A study published in the Italian Journal of Psychiatry revealed that the most frequent psychological reactions during the COVID-19 pandemic were: maladaptive behavior [2], emotional distress, defensive responses, anxiety, fear, frustration, loneliness, anger, boredom, depression, stress and avoidance behaviors.**

**In this sense, health workers are especially susceptible to developing post-traumatic stress symptoms due to the stressors to which they are exposed. This, as a consequence of the fact that day by day they live the direct impact suffered by patients when facing the disease.**

To illustrate the above, we can bring up the testimony of a nurse dedicated to the care of COVID-19 patients in a public hospital. "It was difficult for me to assimilate so much pain and suffering, I was filled with fears and fears and I went into an emotional crisis," she confesses.

Unfortunately, the psychological effects of the pandemic do not end there. For example, other studies on the psychological effects of the COVID-19 pandemic on mental health emphasize the negative impact of sanitary restriction measures, such as quarantines, lockdowns and social distancing, due to the absence of natural protective mechanisms associated with lack of social support, affected by other mental and somatic disorders, as well as re-exposure to previous traumatic experiences.

2 It refers to the behavior that generates restlessness and disharmony. It occurs when the person does not adapt to the environment.

While it is true that the measures have been necessary to reduce the spread of the virus, they have had a significant impact on the mental health of the population. For example, if the SARS-CoV epidemics of 2002 in the Asian region and Ebola in the African region are taken as a reference, the presence of post-traumatic stress symptoms is significantly high in both health workers and citizens in general. For example, a study conducted in China, three years after the SARS-CoV outbreak in 2002, revealed that health care workers who had been in quarantine even developed symptoms of alcoholism.[3]

To diagnose post-traumatic stress, the scientific community uses a questionnaire of 22 questions called IES-R (Impact of Event Scale-Revised) or Revised Scale of Impact of the Event, in which the patient responds according to a scale of values from 0 to 4. This method aims to quantitatively measure the impact of a traumatic event in the adult population taking as a reference the PTSD criteria present in the DSM-5. **The three factors that the IES-R analyzes are: 1) intrusive thoughts, 2) cancellation and 3) hyperactivity, regarding the traumatic event experienced.**

Next, is a comparative table that summarizes three quantitative studies carried out in Italy[4], China[5], and Mexico[6] that show the prevalence of post-traumatic stress symptoms in a number of cases determined during the COVID-19 pandemic.

	N° of cases	Period of time covered by the study	Symptomatology and predictors of PTSD	Prevalence
Italy	2286	March 18, 2020 - March 31, 2020.	Mood alterations, intrusions, dysphoria, anxiety associated with memories of the COVID-19 outbreak or its restrictive measures.	29,5%
China	2091	January 30, 2020 - February 3, 2020.	Poor sleep conditions prior to the COVID-19 outbreak.	4,6%
Mexico	3932	March 24, 2020.	Intrusive thoughts, hyperactivity, and avoidance of the traumatic event.	27,7%

## Conclusion

After more than a year of exposure to the SARS-CoV-2 virus, the psychological consequences in the world are still unknown. In addition, from the studies reviewed, it is estimated that post-traumatic stress will be recorded in a greater number of people over time. As noted above, **post-traumatic stress has the characteristic of being a chronic disorder that can lead to depressive states, maladaptive behaviors, anger, frustration and anxiety in people who suffer from it.** After having experienced an unprecedented event in recent history such as the COVID-19 pandemic, investigating the prevalence of post-traumatic stress symptoms in the world population is essential.

3 28. Wu P, Liu X, Fang Y, et al. Alcohol abuse/dependence symptoms among hospital employees exposed to a SARS outbreak. Alcohol Alcohol 2008; 43: 706-12.

4 <https://www.mdpi.com/1660-4601/17/11/4151/htm>

5 <https://www.medrxiv.org/content/10.1101/2020.03.06.20032425v1>

6 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7398879/>



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