

Neuropsychiatric manifestations in patients with long COVID in Mexico

Dear Editor,

Long COVID is a chronic entity of COVID-19 whose definition mentions the persistence of symptoms of the entity for more than 12 weeks after the acute picture and in its etiopathogenesis; various theories are mentioned, such as viral persistence, immunothrombosis that leads to the formation of amyloid microthrombi, immune dysregulation, and dysbiosis, among others.^[1,2]

Currently, more than 200 symptoms that make up the syndrome are recognized, so we decided to carry out an online survey (https://docs.google.com/forms/d/1_ZvFXgNH5rvTgm_Dha2ktm16lp3nM5ADgflx_Q7i4zI/prefill) to find out which were the predominant symptoms in the population affected by long COVID in February 2023. The survey was applied online to a group of patients with long COVID in Mexico grouped on Facebook, meaning 10% of the patients who decided to participate (convenience sampling).^[3]

We obtained 345 responses that show the average age of those affected was 43 years (16–79 years); the most affected gender was female with 68%; the main reported comorbidities were obesity/overweight (45%), hypertension (19%), and diabetes (17%); and it also highlighted that 43% report having been healthy before the COVID-19 picture. Respondents report that they have suffered from COVID-19 on one occasion (37.8%), on two occasions (35.2%), and on three or more occasions (27%), of which 73% report having presented mild symptoms, while 15% of severe cases of COVID-19 and 12% both mild and severe cases. Regarding their anti-COVID vaccination status, 52.8% reported having three or more vaccines, 30.5% two vaccines, 6.4% one vaccine, and 10.3% reported not being vaccinated.

The neuropsychiatric manifestations were the most prevalent, with 96.6% of those affected presenting this type of symptoms; the most frequent were fatigue or weakness (80%), memory disorder (77%), anxiety (67%), lack of concentration (57%), and headache (56%). Other relevant data were the tendency to frequent infections (23%), development of autoimmunity (10%), the persistence of positive COVID tests (6%), and thrombotic events (5%), of which 0.4% corresponded to stroke [Table 1].

Table 1: Neuropsychiatric manifestations reported in the Mexican population with long COVID (n=345)

Symptoms	Percentage (%)
Fatigue or weakness	80
Memory disorder	77
Anxiety	67
Lack of concentration	57
Headache	56
Depression	55
Vertigo	41
Paresthesia	38
Chronic anosmia	22
Chronic dysgeusia	11
Delirium	5
Seizures	3
Paresis	2
Hearing loss	0.4
Stroke	0.4

In Mexico, other observational studies on long COVID have been published, in northern, central, and southern states of the country, highlighting that the most affected gender is 60% female, with an average age of 47 years. In practically all the studies, the risk factors are obesity, diabetes, and hypertension, and the main symptoms reported are neuropsychiatric, and of these, the most prevalent are fatigue, headache, memory disturbances, anxiety, and depression. We believe that our study similarly reports the same characteristics of this population.^[4–8]

Therefore, it is urgent that the country recognizes the disease and begins to generate clinical practice guidelines for a better opportunity in the diagnosis and treatment of these patients; as a study group, we have launched a proposal for an approach that we hope will be taken into account, and we are asking the government to meet this health demand through the change.org platform (<https://www.change.org/p/ssalud-mx-hlgatell-reconocimiento-del-covid-persistente-en-m%C3%A9xico>).^[9]

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Conflicts of interest

There are no conflicts of interest.

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