



## Is COVID-19 the Trigger of Obsessive-Compulsive Disorder?

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### Dear editor,

The novel coronavirus 2019, known as covid-19, was first officially identified in Wuhan (China) and soon spread to other countries. In response, countries closed their borders and imposed severe public health restrictions, including national lockdowns. Hence, in addition to forcing billions of people to stay at home, this novel virus imposed severe economic loss. As health agencies struggle to find global containment solutions, social distancing, frequent hand washing, and respiratory hygiene are still the major recommended strategies by World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) (1).

Coronaviruses are a large family of viruses that have caused two main outbreaks, apart from the recent pandemic, including severe acute respiratory syndrome (SARS) in 2002 and Middle East respiratory syndrome (MERS) in 2012. However, If SARS-CoV-2 infection follows a similar prognosis similar to SARS-CoV or MERS-CoV, most patients should recover without experiencing mental illness (2).

Preventive measures, including not sharing utensils, hand hygiene, and wearing face masks, are associated with lower levels of psychological consequences such as depression, anxiety, and stress. However, strict adherence to public health strategies may cause negative mental health consequences, particularly frequent hand washing. People with obsessive-compulsive disorder (OCD) experience persistent or recurring thoughts that are disturbing and cause anxiety. This would be more difficult when they cannot decide which behavior is "reasonable" or irrational. Those who suffer from OCD experience lower levels of quality of life, inability to perform daily activities, sleep and sex-

ual disorders, and even, suicide (3, 4). They are also at increased risk of divorce. WHO has prioritized OCD as the top 10 disabling disorders, which is associated with dysfunction, income loss, and decreased quality of life (5).

OCD patients already have doubts about their hygiene and feel a compulsive need to remain clean. Even before the covid-19 outbreak, the burden of OCD was worrying, so that its lifetime prevalence was 2 - 3% (1). Fineberg et al. (2020) indicated that among mental illness patients, people living with OCD are the most directly affected by covid-19 (6). Those who suffer from OCD often find their symptoms worsen under stressful situations. Hence, promoting compulsions will make their symptoms worse and more difficult to overcome (7). Therefore, paying more attention to mental health conditions, which may be triggered or exacerbated by the covid-19 pandemic, is of crucial importance.

A systematic review and meta-analysis on psychiatric and neuropsychiatric presentations attributed to coronavirus infections has investigated 65 peer-reviewed and seven pre-printed studies, with a total of 3559 covid-19 patients. They reported that the prevalence of post-traumatic stress disorder (PTSD) was 32.2% in the post-illness stage (2).

Also, evidence from a literature review indicated a high prevalence (30 - 82%) of OCD in people with a traumatic history compared to the general population (1.1 - 1.8%). Findings show that OCD caused by trauma as well as PTSD are resistant to treatment. (8). For instance, if covid-19 infection or its imagination be considered as a catastrophic trauma leading to PTSD, the stress of getting infected by or dying from covid-19 will trigger obsessive thoughts, which in turn compel the individuals to observe hygiene protocols excessively and repeatedly to relieve their anxiety.

Therefore, due to the significant coincide between coronavirus disease, PTSD, and OCD, it is important to determine the history of PTSD when either diagnosing or treating the OCD. Additionally, OCD should be considered in subjects affected by PTSD induced by the coronavirus.

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