



COVID-19 Pandemic: A Consequential Global Hazard to Public Mental Health

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Background: The outbreak of COVID-19 infection in humans first reported in Wuhan (China) which has spread around the world and having a significant impact on global health and mental health. It has caused widespread psychosocial and behavioural changes as a result of mass hysteria, economic burden, and financial losses, in addition to its high infectivity and the increased mortality rates.

Method: Published articles regarding to mental health related to the COVID-19 outbreak and other previous global infections have been considered and reviewed.

Comments: The pervasive fear of COVID-19, named as "coronaphobia," has resulted with a slew of psychiatric manifestations in people from all walks of life. It has affected people from all the point of life, resulting in a variety of psychiatric issues such as anxiety, post-traumatic stress disorder (PTSD), fear and uncertainty, panic attacks, depression, obsessive compulsive disorder, xenophobia, and racism. Collective concerns have an impact on daily behaviours, the economy, prevention strategies, and decision-making by policymakers, health organisations, and medical centres, which can weaken COVID-19 control strategies and lead to increased morbidity and mental health needs on a global level.

Keywords: COVID-19; pandemic; anxiety; depression; mental health.

1. INTRODUCTION

The viral outbreak of the third severe acute respiratory syndrome coronavirus 2 (SARS-CoV2), also named as coronavirus disease 2019 (COVID-19), has spread faster than anyone could have predicted, based on the previous pandemic outbreaks. The entire world acted quickly and cooperatively to stop the virus from spreading, but the pandemic could not be halted since it has affected human lives globally. The COVID-19 outbreak has resulted in the death of nearly 4162304 people worldwide by the end of July 2021 [1].

Social bonds have been destroyed. Masks are becoming increasingly popular in nations where people are not used to them, and people can no longer see other's facial expressions [2]. Strong protection measures, such as personal protective equipment (PPE) and isolation, are needed due to the infectivity, outbreak, and uncertainty of infectious sickness [3]. While deferring major patient flows and speeding up hospital admissions, there is also a major task that is to protect the most vulnerable people from the infection, such as the elderly and patients with comorbidities. However, this approach has disrupted the psychosocial lives of the general population, causing an imminent sense of fear and anxiety, as well as other mental problems [4].

Even if the epidemic's effect on global mental health isn't tracked, past coronavirus infections could provide similar data. Mental health issues such as stress, anxiety, depressive symptoms, insomnia, denial, rage, and fear are being caused by the current situation [5]. Fear and anxiety are heightened by the virus's uncertain incubation period and the possibility of asymptomatic transmission, which, along with this large-scale quarantine, which is unparalleled, is likely to have negative psychosocial aftereffects [6]. A pandemic has the potential to damage not only people's physical health but also their psychological capital and resilience. After the outbreak, the pandemic's social and economic effects have become apparent increasingly in an integrated and globalised world [7]. Furthermore, because of the severity of the crisis and the background of social interaction transformations associated to the shutdown, as well as the digital revolution, this situation is unprecedented. However, the aim of this review

was to do a systematic analysis of the literature in order to gain a general understanding of how COVID-19 infection affects people's mental health.

2. METHODS

A literature review is done on PUBMED and Google scholar using the following keywords COVID-19, MENTAL HEALTH, ANXIETY, DEPRESSION, OBSESSIVE COMPULSIVE DISORDER, PANDEMIC. About 37 articles were included in the review. During the time this article is being published that is in September 2021, the COVID-19 epidemic and lockdown are still ongoing. We considered articles that provided detailed information on psychiatric illnesses during COVID-19 pandemics, epidemics, and natural disasters.

3. RESULTS

Individuals' health, safety, and well-being may be impacted by public health emergencies, which can result in various complications include Depression, Anxiety, Post Traumatic Stress Disorder, Social stigma and Xenophobia, Suicidality, Obsessive compulsive disorder and can also affect on the lives of psychiatric people.

4. DEPRESSION AND ANXIETY

Looking through the seriousness of the COVID-19 outbreak, it's not strange that a large percentage of individuals suffered from depression and anxiety [8]. A survey of 500 people was done in Hong Kong, with a response rate of 64%. Depression and anxiety were found to be prevalent in 19.8% and 14.0% of the population, respectively. The prevalence rate of study population having both depression and anxiety was 12.40%. Furthermore, 25.4% of respondents said their mental health had gotten worse since the COVID-19 outbreak started [9]. Distribution pattern of mental health of people in Hong Kong is depicted in Fig. 1.

According to previous studies, roughly two-thirds of recovered SARS patients experience at least mild or moderate psychological suffering in the short term after discharge, anxiety or depression symptoms are severe enough in 35% of recovered individuals to be classed as "moderate to severe" or "severe" [10].

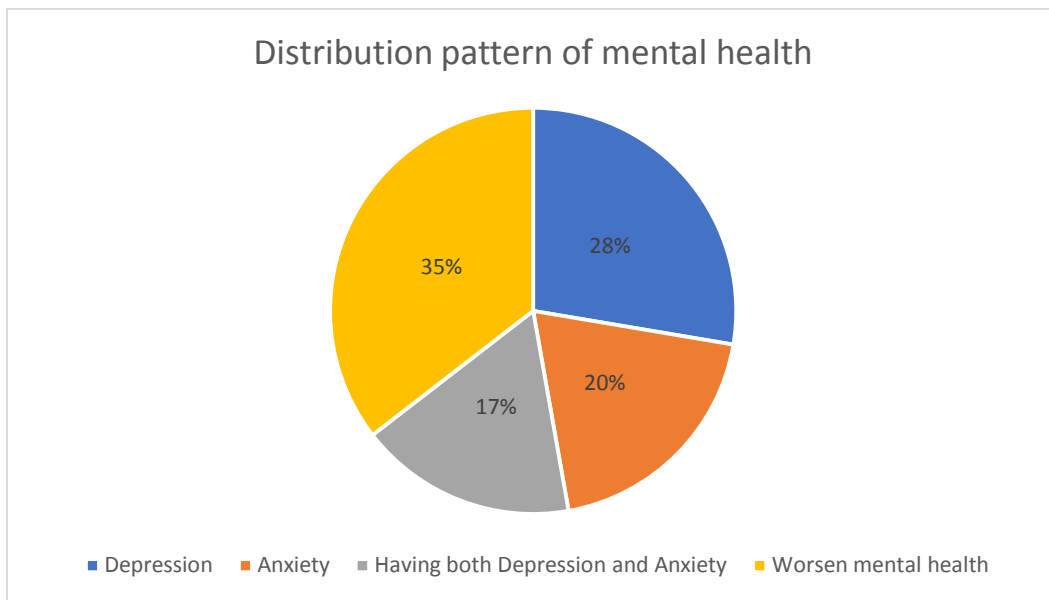


Fig. 1. Distribution pattern of mental health in people of Hong Kong

COVID-19 related public health issues are having a negative impact on the population’s mental health and increasing prevalence of psychological crises [11]. During the COVID-19 epidemic, an estimated prevalence of depression and anxiety is 26.9% and 21.8% according to a study conducted in China [12]. In a survey among 1821 participants aged 18 years or more shows that the prevalence rates of depression and anxiety across categories of severity. In total, 12.0%, 15.3%, 23.0%, and 30.7% of the participants satisfied the criteria for severe, moderately severe, moderate, and mild depressive symptoms, respectively. When it came to anxiousness, 20.6% of the participants had severe symptoms, 20.7% had moderate symptoms, and 32.1% had mild symptoms [13].

A cross sectional study conducted with 1115 respondents who were between 18 and 65 years of age and were citizens of Turkish Republic, Minimal-level depression symptoms were seen in 47% of the participants, mild-level depression symptoms in 25.7%, moderate-level depression symptoms in 22.3%, and severe-level depression symptoms in 5% [14].

An online study conducted among 1041 Irish population shows that generalized anxiety disorder and depression were common experiences in the population during the initial phase of the COVID-19 pandemic [15].

These studies on mental health during the COVID-19 outbreak support the hypothesis of a

risk of depressive and anxiety symptoms related to the pandemic.

5. SOCIAL STIGMA AND XENOPHOBIA

Stigma and xenophobia are the two major social and psychological features of the deleterious impact of pandemic infections. The links between epidemic risk, xenophobic behaviour and the global economy have been described many times throughout history, as well as today. Increased prejudice and xenophobia in the forms of fear, suspicion, and hostility towards people from China have been registered along with many other countries particularly in Europe, North America, and Asia-Pacific region [16].

According to the World Health Organization, social stigma refers to a negative link between a person or a group of people who share certain characteristics and a certain disease [17]. Studies shows that individuals who are close to persons who have the disease, such as caregivers, family members, members of the same community, or members of the same racial/ethnic group, may be affected by stigma. Such actions may hinder illness mitigation methods and lead to a lack of testing and healthy behaviours, such as wearing masks to avoid prejudice. Previous reports reveals that In Africa, during the Ebola pandemic, stigmatization in the form of discrimination, prejudice, and social isolation that arose during the outbreak continued among those who survived. Similarly, in COVID-19 cases in Africa, protective

measures, such as wearing a mask, being tested, or the belief of coming into contact with an infected person, have led to people being ostracized, harassed, and isolated from others [18]. Stigmatized groups and individuals are often subjected to rejection, social avoidance, criticism, isolation, physical abuse and even elimination and refusing of employment, housing, education and healthcare services [19]. As a consequence of this form of behaviour the risk of group transmission increases. According to certain reports coming from India, people have been committed health crimes out of fear of being corona positive [20].

6. SUICIDALITY

Suicide is likely to become a more pressing concern as the pandemic spreads and has long-term effects on the general population, the economy, and vulnerable groups [21]. A longitudinal study conducted among 4978 adolescents after Hurricane Andrew observed that the following factors which had an effect on post-hurricane suicidal ideation: being female, low socioeconomic status, pre and post-hurricane depression, high stress scores, low family support and pre-hurricane suicidal ideation [2]. Multiple cases of COVID-19 related suicides in the U.S., U.K., Italy, Germany, Bangladesh, India, and other countries have been reported in mass media and psychiatric literature [19]. These are extraordinary times. The pandemic will be distressing, and many individuals will be vulnerable to mental health issues and suicidal behaviour as a result of it [21].

7. POST-TRAUMATIC STRESS DISORDER

Post-traumatic stress disorder (PTSD) is another alarming condition that is likely to become more prevalent during the pandemic. PTSD is more likely to develop after prolonged social isolation, and it is associated with a 2–5 fold increase in the risk of suicide [22]. To demonstrate the ongoing impact of COVID-19 on mental health, a study involving 2091 citizens in China after one month of the outbreak illustrates that the prevalence of PTSD on the Chinese mainland was 4.6 percentage, while a high prevalence of PTSD(18.4%) was recorded among the high-risk public, such as those living in Chinese provinces with the highest COVID-19 prevalence [19].

Post-traumatic stress syndrome (PTSS) has been well-documented in ICU survivors. Invasive ventilation, particularly for longer periods of time, has been associated with an increased incidence of PTSS. The chances of developing PTSD appear to be influenced by a number of conditions, including the patient's personal qualities (e.g., age and pre-existing comorbidities), and clinical treatment variables (e.g., use of sedation, restraint, and antipsychotic medications) [23]. Majority of clinically stable COVID-19 patients suffered from significant posttraumatic stress symptoms prior to discharge [24].

As evidenced by previous study, PTSD is observed in epidemics or other medical emergencies in the months following the critical period. Furthermore, in the first studies of the COVID-19 emergency in China and Italy, PTSD symptoms were reported. A study on Italian population with 2286 participants evidenced a significant prevalence of Post traumatic stress disorder related to the COVID-19 emergency, with a high percentage of 29.5 was found in the Italian population [25].

A study conducted in Lebanon which was dominated by female with a percentage of 69.3, findings of this study revealed that a significant number of participants experienced PTSD symptoms while in quarantine, with the most common symptoms being "feeling distant or cut off from other people," "feeling very upset when something reminded you of a stressful experience from the past," and "repeated, disturbing memories, thoughts, or images of a stressful experience from the past" [26].

8. COVID-19 AND OBSESSIVE-COMPULSIVE DISORDER

Obsessive-compulsive disorder (OCD) is a severe anxiety condition characterised by uncomfortable obsessions and compulsions that are repeated [27]. In the beginning of epidemic, there was an increase in the severity of obsessions and compulsions. Contamination symptoms were linked to a higher rate of deterioration. The frequent devastating news on TV, Radio, and social media, mixed with hygienic suggestions, may have been a stressful setting for this sensitive population, especially for those who already had contamination symptoms [28].

Reports reveals there are 10 to 30 fold increase in the relative prevalence of OCD symptoms

during the pre -pandemic period in general population [29].

9. EFFECT OF COVID-19 PANDEMIC ON THE LIVES OF PEOPLE WITH MENTAL ILLNESS

SARS-CoV-2 infects a large number of patients with severe mental illness (SMI). In-patients who require long-term care may be concerned about the possibility of cluster infection while outpatients with SMI may experience mental relapse and uncontrollable behaviours such as agitation and self-harm as a result of traffic restrictions and isolation measures [30]. People with bipolar disorders are experiencing a severe and long-lasting impact from the COVID-19 pandemic. Obesity, diabetes mellitus, coronary heart disease, and obstructive lung disease, as well as smoking and drug addiction, are all common comorbidities of BD [31].

According to a study conducted among the psychiatric patients from the First People's Hospital of Chongqing Liang Jiang New Area, China , higher degrees of PTSD, depression, anxiety, stress, and sleeplessness were considerably more likely to be endorsed by them, along with this Psychiatric patients may see a decline in mental health services as a result of the COVID-19 outbreak [32].

People with severe psychiatric disorders may have difficulty in adopting "barrier measures" (behavioural measures to protect oneself and others from the virus) and following confinement instructions, according to clinical experience. Surprisingly, isolated cases of noncompliance with confinement measures have resulted in hospitalisation without consent among previously psychiatrically stabilised patients [33].

According to a poll of 2111 adolescents in the United Kingdom with a mental health history, 83% felt that the pandemic had worsened their mental health, and 26% claimed they were no longer able to receive mental health support [2]. These patients were forced to stay in locked wards in China, with no access to family or electronic equipment. These situations exacerbated their discomfort and mental symptomatology [22].

10. DISCUSSION

10.1 Vulnerability

Several groups are especially sensitive to the COVID-19 pandemic's emotional, behavioural, and psychological effects. This review will focus on the most frequently mentioned ones. Anxiety, depression, PTSD, suicidality, obsessive-compulsive behaviours, panic, and paranoia are just a few of the psychiatric problems that the COVID-19 pandemic may exacerbate or initiate [22].

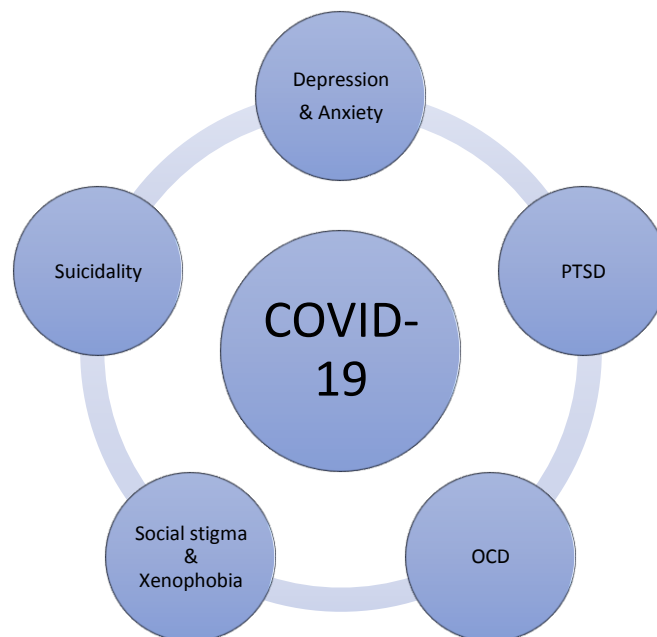


Fig. 2. COVID-19 effect on mental health

Lockdown and COVID-19-related concerns, as well as a rise in intrafamily violence linked to imprisonment, are all sources of stress [2]. When compared to before the outbreak, the general public's mental health is worsening [34]. It is clearly depicted in Fig. 2.

According to certain findings, confinement may exacerbate addiction-related behaviours, such as substance abuse. Second, contamination fear and obsessional symptoms, as well as the reappearance of obsessive-compulsive disorder (OCD) symptoms, may accompany contamination dread. Finally, some studies pointed to the COVID-19 pandemic's economic crisis as a potential source of vulnerability for psychiatric disorders [35].

Along with this our study found that people with psychiatric problems are particularly vulnerable, possibly as a result of disruptions in care, anxiety connected to COVID19, and difficulties coping with confinement. Furthermore, there are concerns about excessive internet, social media, and news access.

10.2 Interventions

Focus on the mental health of people under the age of 18 as well as middle-aged and older people (over 50 years old) and give targeted psychological intervention through numerous channels like television, the internet and telephone. Government education departments, schools, and teachers should help minors under the age of 18 understand the epidemic accurately. They should also try to alleviate worry and dread by adopting a positive and optimistic attitude. To promote good psychological health, the government should encourage children of middle-aged and older people over 50 years of age to explain the epidemic's popular science and to accompany them more frequently. Provide targeted psychological intervention and support to those who have been disproportionately affected by the epidemic [3].

A meta-analysis carried out found that cognitive-behavioral therapy, eye movement desensitisation and reprocessing (EMDR), narrative exposure treatment for children, and classroom-based interventions are all equally effective after manmade and natural disasters [36].

Safety and stabilisation should come first in any intervention. Professionals may be able to assist individuals in developing a survival strategy. This

strategy can help you find medical resources or safe places to avoid illness (e.g., park, home). Others may identify areas of refuge in civil conflict to decrease their exposure to violence. Second, given the persisting uncertainties, we urge psychoeducation and validation of heightened anxiety. We may acknowledge this demand for security in an ever-changing circumstance instead of characterising huge queues for facemasks and food as "frantic." Third, individuals might adopt emotion regulation skills such as breathing, muscular relaxation, grounding, or mindfulness to gain a sense of personal control [37].

The study have certain limitations review doesn't include many studies and it only focused on some mental health consequences.

11. CONCLUSION

The current focus on COVID-19 virus propagation around the world is likely to divert public attention away from the outbreak's psychosocial repercussions in both affected individuals and the general population while COVID-19 is causing severe psychosocial problems and has made mental health a secondary health concern all over the world. This review addresses the psychological stresses faced by people globally, particularly in relation to isolation/quarantine, fear, and vulnerability. It is critical for all psychiatrists and other mental health professionals to support their families and the general public in providing adequate care.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Lakhan R, Agrawal A, Sharma M. Prevalence of Depression , Anxiety , and Stress during COVID-19 Pandemic. 2020;1-7.
2. Benjamin S, Lachal J, Radjack R, Carretier E, Minassian S, Benoit L, et al. Adolescent

- psychiatric disorders during the COVID-19 pandemic and lockdown. *Psychiatry Res* [Internet]. 2020;291:113264. Available:<https://doi.org/10.1016/j.psychres.2020.113264>
3. Tian F, Li H, Tian S, Yang J, Shao J, Tian C. Psychological symptoms of ordinary Chinese citizens based on SCL-90 during the level I emergency response to COVID-19 Public Health Emergency of International Concern. *Psychiatry Res* [Internet]. 2020;288:112992. Available:<https://doi.org/10.1016/j.psychres.2020.112992>
 4. Shuja KH, Aqeel M, Jaffar A, Ahmed A. COVID-19 Pandemic and Impending Global Mental Health Implications. 2020;32(1):32–5.
 5. Torales J, Higgins MO, Castaldelli-maia JM, Ventriglio A. The outbreak of COVID-19 coronavirus and its impact on global mental health. 2020;3–6.
 6. Dong L, Bouey J. Public Mental Health Crisis during COVID-19 Pandemic, China. 2020;26(7):1616–8.
 7. Giorgi G, Lecca LI, Alessio F, Finstad GL, Bondanini G, Lulli LG, et al. COVID-19-Related Mental Health Effects in the Workplace: A Narrative Review. 2019;1–22.
 8. Chen X, Hu H, Tang Y, Yang S, Zhou H. Immediate psychological distress in quarantined patients with COVID-19 and its association with peripheral inflammation: A mixed-method study. *Brain Behav Immun* [Internet]; 2020. Available:<https://doi.org/10.1016/j.bbi.2020.05.038>
 9. Choi EPH, Hui BPH, Wan EYF. Depression and anxiety in Hong Kong during covid-19. *Int J Environ Res Public Health*. 2020;17(10).
 10. Cheng SKW, Wong CW, Tsang J, Wong KC. Psychological distress and negative appraisals in survivors of severe acute respiratory syndrome (SARS). *Psychol Med*. 2004;34(7):1187–95.
 11. Zhang J, Lu H, Zeng H, Zhang S, Du Q, Jiang T, et al. Brain , Behavior , and Immunity. *Brain Behav Immun* [Internet]. 2020;1–2. Available:<https://doi.org/10.1016/j.bbi.2020.04.031>
 12. Bareeqa SB, Samar SS, Yasin W, Zehra S, Monese GM, Gouthro RV. Prevalence of depression , anxiety and stress in china during COVID-19 pandemic : A systematic review with. 2020;22–3.
 13. Rudenstine S, Mcneal K, Schulder T, Ettman CK, Hernandez M, Gvozdieva K, et al. Depression and Anxiety During the COVID-19 Pandemic in an Urban , Low-Income Public University Sample. 2021;12–22.
 14. Ustun G. Determining depression and related factors in a society affected by COVID-19 pandemic; 2020.
 15. Hyland P, Shevlin M, McBride O, Murphy J, Karatzias T, Bentall RP, et al. Anxiety and depression in the Republic of Ireland during the COVID-19 pandemic. *Acta Psychiatr Scand*. 2020;142(3):249–56.
 16. Jakovljevic M, Bjedov S, Jaksic N, Jakovljevic I. COVID-19 Pandemia and Public and Global Mental Health from the Perspective of Global Health Security. 2020;32(1):6–14.
 17. Chopra KK, Arora VK. Covid-19 and social stigma: Role of scientific community. *Indian J Tuberc* [Internet]. 2020;67(3):284–5. Available:<https://doi.org/10.1016/j.ijtb.2020.07.012>
 18. Turner-Musa J, Ajayi O, Kemp L. Examining social determinants of health, stigma, and covid-19 disparities. *Healthc*. 2020;8(2):1–7.
 19. Anjum S, Ullah R, Rana MS, Khan HA, Memon FS, Ahmed Y, et al. COVID-19 PANDEMIC : A Serious Threat for Public Mental Health Globally. 2020;32(2):245–50.
 20. Dubey S, Biswas P, Ghosh R, Chatterjee S, Jana M, Chatterjee S, et al. Diabetes & Metabolic Syndrome : Clinical Research & Reviews Psychosocial impact of COVID-19. *Diabetes Metab Syndr Clin Res Rev* [Internet]. 2020;14(5):779–88. Available:<https://doi.org/10.1016/j.dsx.2020.05.035>
 21. Psychiatry L. Comment Suicide risk and prevention during the COVID-19 pandemic. 2020;2019(20):2019–21.
 22. Pedrosa AL, Bitencourt L, Cláudia A, Fróes F, Luíza M, Cazumbá B, et al. Emotional, Behavioral , and Psychological Impact of the COVID-19 Pandemic. 2020;11:1–18.
 23. Kaseda ET, Levine AJ. Post-traumatic stress disorder : A differential diagnostic consideration for COVID-19 survivors. *Clin Neuropsychol* [Internet]. 2020;0(0):1–17. Available:<https://doi.org/10.1080/13854046.2020.1811894>

24. Bo HX, Li W, Yang Y, Wang Y, Zhang Q, Cheung T, et al. Posttraumatic stress symptoms and attitude toward crisis mental health services among clinically stable patients with COVID-19 in China. *Psychol Med*; 2020.
25. Forte G, Favieri F, Tambelli R, Casagrande M. COVID-19 Pandemic in the Italian Population : Validation of a Post-Traumatic Stress Disorder Questionnaire and Prevalence of PTSD Symptomatology. 2020;1–14.
26. Fawaz M, Samaha A. COVID-19 quarantine : Post-traumatic stress symptomatology among Lebanese citizens;2020.
27. Williams MT, Franklin M. Symptom Dimensions in Obsessive-Compulsive Disorder : Phenomenology and Treatment Outcomes with Exposure and Ritual Prevention. 2013;40292:365–76.
28. Davide P, Andrea P, Martina O, Andrea E, Davide D, Mario A. The impact of the COVID-19 pandemic on patients with OCD: effects of contamination symptoms and remission state before the quarantine in a preliminary naturalistic study. *Psychiatry Res* [Internet]. 2020;113213. Available:https://doi.org/10.1016/j.psychres.2020.113213
29. Abba-aji A, Li D, Hrabok M, Shalaby R, Gusnowski A, Vuong W, et al. COVID-19 Pandemic and Mental Health : Prevalence and Correlates of New-Onset Obsessive-Compulsive Symptoms in a Canadian Province; 1–11.
30. Li W, Yang Y, Liu Z, Zhao Y, Zhang Q, Zhang L, et al. Progression of Mental Health Services during the COVID-19 Outbreak in China. 2020;16.
31. Stefana A, Youngstrom EA, Jun C, Hinshaw S, Maxwell V, Michalak E, et al. Short running title; 0–3.
32. Hao F, Tan W, Jiang L, Zhang L, Zhao X, Zou Y, et al. Brain , Behavior , and Immunity Do psychiatric patients experience more psychiatric symptoms during COVID-19 pandemic and lockdown? A case-control study with service and research implications for immunopsychiatry. *Brain Behav Immun* [Internet]. 2020;0–1. Available:https://doi.org/10.1016/j.bbi.2020.04.069
33. Chevance A, Gourion D, Hoertel N, Llorca P, Thomas P, Bocher R, et al. Ensuring mental health care during the SARS-CoV-2 epidemic in France : A narrative review. *Encephale* [Internet]. 2020;46(3):193–201. Available:https://doi.org/10.1016/j.encep.2020.04.005
34. Vindegaard N, Benros ME. Brain, Behavior, and Immunity COVID-19 pandemic and mental health consequences : Systematic review of the current evidence. *Brain Behav Immun* [Internet]. 2020; 1–12. Available:https://doi.org/10.1016/j.bbi.2020.05.048
35. Capuzzi E, Di C, Caldiroli A, Colmegna F, Nava R, Buoli M, et al. Psychiatric emergency care during Coronavirus 2019 (COVID 19) pandemic lockdown : results from a Department of Mental Health and Addiction of northern Italy. *Psychiatry Res* [Internet]. 2020;293:113463. Available:https://doi.org/10.1016/j.psychres.2020.113463
36. Brown RC, Witt A, Fegert JM, Keller F, Rassenhofer M, Plener PL. Psychosocial interventions for children and adolescents after man-made and natural disasters : a meta-analysis and systematic review; 2017.
37. Miu AS, Cheung CN, Tsang KKY, Chan BSB, Poon LT, Fung ICH. Broader trauma: Considerations for COVID-19 psychosocial interventions in Hong Kong Asian J Psychiatr [Internet]. 2020;53:102358. Available:https://doi.org/10.1016/j.ajp.2020.102358

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