



## Editorial article

Mental health in times of COVID: Thoughts after the state of alarm<sup>☆</sup>

## Salud mental en tiempos de la COVID: reflexiones tras el estado de alarma

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Coronavirus disease type 2 of the severe acute respiratory syndrome (SARS-CoV-2), also known as COVID-19, was first described in Wuhan, China in December 2019 and has spread rapidly around the world.<sup>1</sup> As of 1 July 2020, more than 10 million people in the world have been infected by the virus.<sup>1</sup> Although some aspects of transmission, infection and treatment are still unknown, the mortality associated with the COVID-19 disease is mainly related to the presence of previous pathologies and expansion in vulnerable populations with chronic lung diseases, immunosuppression, etc.<sup>2,3</sup> Other factors related to mortality from the COVID-19 disease are age, sex, the appearance of an extreme systemic immune response, bleeding disorders (an increase in D-dimer levels would be associated with an increased risk of mortality) and difficulties in accessing the health system.<sup>2</sup> In view of this, and given the rapid spread of the virus, on 11 March 2020 the World Health Organization (WHO) decreed a pandemic due to COVID-19. In Spain, one of the countries most affected by the virus, the rapid spread led the government to decree a state of alarm by means of a decree of urgent extraordinary health, economic and social measures (Royal Decree-Law 8/2020, of 17 March).<sup>4</sup> The measures taken included isolation, quarantine, social distancing, and confinement.<sup>5</sup> All these measures have proven to be effective in reducing transmission and have been adopted by most countries.<sup>5</sup>

We herein reflect on aspects related to mental health during the three months of the state of alarm. First, we will discuss the specific side effects, the adaptation of isolation and the drug treatment in patients with COVID-19 disease. Second, we will mention the recommendations or psychological support strategies that are offered to relatives of patients with COVID-19, and the preventive and psychological support measures for the professionals who care for these patients. Lastly, we will address aspects related to the impact on mental health of a stressful situation such as the pan-

dem itself or the imposed public health measures, both in patients with previous mental illness and in the general population.

In the hospital setting, patients with COVID-19 disease have required isolation and restrictions on transfer and mobility with respect to other patients and professionals. On many occasions it has been necessary to restrict visits from family and friends, thus reducing psychosocial support. In addition to the stress component associated with the isolation or the fear of having a serious infectious disease, the psychopharmacological management of the COVID patient with psychopathological symptoms has been a challenge for interconsultation psychiatrists. They have had to care for patients who were being administered medicinal products for the infectious disease that carry the risk of inducing neuropsychiatric symptoms, such as azithromycin, hydroxychloroquine or glucocorticoids, which have been positively linked with psychotic symptoms and mood disorders (depression/mania).<sup>6</sup> The safety of psychopharmacological treatment has been an important aspect to monitor, given the potential interactions that exist between drugs metabolised by CYP3A4 (e.g. hydroxychloroquine), i.e. the risk of QT prolongation when co-administering drugs used for COVID-19 (e.g. azithromycin, hydroxychloroquine) with psychotropic drugs that can lengthen the QT (e.g. antipsychotics or antidepressants).<sup>6</sup> Adapting hospitals to the care of COVID-19 patients has had consequences on the mental health of patients. Rates of anxiety have increased with restrictions on family visits and uncertainty about the prognosis of the disease. In addition, affective and psychotic symptoms related to the pharmacological treatments of the infection<sup>6</sup> have appeared in some patients which has made the management of these patients more complex.

The COVID-19 disease has also been a source of stress for family members, due to the pandemic itself and because some have had to experience bearing the death of a family member. During the state of alarm there have been many cases reported when the family members could not say goodbye to their loved one or carry out the grieving process under normal conditions, with the risk this carries of presenting emotional symptoms that can become chronic in the context of unresolved grief. During these months of health crisis and lockdown, specific care programmes have been put into place for family members whose relatives have suffered

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the disease or have died.<sup>7</sup> Some general recommendations include the cognitive-behavioral therapy model and strategies to promote interaction with family members.<sup>7</sup> For example, COVID-19 patients admitted to the ICU ask about their relatives and seek interaction through conversations and photos. In some cases, audio recordings are recommended, and if end of life is foreseen, a restricted farewell can be organised.

Another fundamental aspect to take into account in this health crisis is the acute stress generated by situations of high emotional burden and post-traumatic and chronic stress that some groups of professionals who have worked on the front line can develop. In many hospitals, psychological support strategies have been implemented for professionals. In addition, WHO makes some recommendations for the reduction of stress and psychological anxiety in health professionals, which include the normalisation of emotions, fulfillment of basic needs, social support and a distribution of tasks with flexible working hours.<sup>8</sup> However, individual and group psychological support for these professionals can be helpful in reducing the emotional anxiety and stress they suffer. In a recent study conducted in China that included 202 nurses exposed to COVID-19, the incidence of post-traumatic stress disorder was 16.8%.<sup>9</sup> Post-traumatic stress symptoms were associated with female gender, lower job satisfaction and stress coping strategies (positive relationship with negative coping strategies, inverse relationship with positive coping strategies). As yet, we still do not know the effectiveness of the psychological support measures for professionals in reducing the risk of mental pathology and post-traumatic stress disorder in health professionals.

If we focus on the impact of the pandemic and lockdown on the mental health of patients with psychiatric disorders, there are several points to consider. First, the risk and fear of becoming infected by SARS-CoV-2 are potentially stressful conditions that modulate the psychopathological characteristics of different psychiatric disorders. Given the risk of contagion, the difficulties in controlling the pandemic and the recommendations for hand washing and avoiding physical contact, patients with obsessive-compulsive disorder (OCD) may present a worsening of symptoms, particularly in obsessive ideas of contamination. Recent studies suggest a worsening of obsessive-compulsive symptoms in patients with OCD during confinement.<sup>10</sup> Other disorders that may have seen an increase in prevalence are substance use disorders, specifically opioid use disorder.<sup>11</sup> During this period, telemedicine visits have also increased in specific addiction units with the aim of reducing the displacement of patients to the outpatient and/or hospital health centers. The COVID-19 crisis may increase the consumption of substances in individual consumption patterns and at home. That is why recommendations have been made to intensify prevention and treatment strategies.<sup>12</sup> Also, an escalation in the appearance or exacerbation of behavioral addictions may occur, particularly due to the increase in the use of audiovisual media, such as the so-called «binge-watching».<sup>13</sup> The safety and clinical stability of patients with affective disorders and schizophrenia can also be altered by the pandemic, the state of alarm and the lockdown situation. Patients with psychotic disorders may present an increased risk of relapses and hospitalisations, especially those with little awareness of the disease and the need for treatment. Recent studies also suggest the existence of brief reactive psychoses triggered by the COVID-19 pandemic.<sup>14</sup> During the COVID-19 pandemic, the use and prescription of long-acting injectable antipsychotics has been one of the great challenges.<sup>15</sup> The restrictions due to the pandemic have made it necessary to modify clinical practice and establish new action protocols. Some patients have refused to go to hospitals or mental health outpatient centres for the administration of

injectable treatment. In many cases it has been necessary for nursing professionals to visit private homes to administer injectable medication. Specific mental health home care programmes have been furthered, which have been considered of special relevance during the current epidemiological crisis.<sup>16</sup>

During these three months of state of alarm, outpatient mental health care has had to adapt. Face-to-face visits have been reduced and telemedicine strategies have been strengthened, conducting telephone interviews and via videoconference. On certain occasions the face-to-face visits have been maintained, especially in some specific outpatient programmes (administration of injectables, methadone maintenance programme, etc.). In a hospitalisation setting, the protocol of performing the PCR for SARS-CoV-2 has been adapted to patients requiring admission to acute units. During the state of alarm, visits by family members and home-visits have been restricted, but little by little there has been a return to normality with the de-escalation phase. Electroconvulsive therapy (ECT) is another procedure that has required adjustments to be made. When the pandemic was at its peak there was a difficulty to find available anaesthetists, as they were providing care to critically ill patients with COVID-19. Now, when it has been possible to resume activity, security measures have been implemented in the ECT protocols,<sup>17</sup> including the intensification of protection measures for healthcare personnel and patients to reduce the risk of infection. Even so, the response to mental health services has differed between countries, regions and health areas. In the United Kingdom, as in Spain, the mental health services and primary care have been flexible in attending to patients, prioritising the most serious cases and intensifying collaborative work.<sup>18</sup> In some countries, such as the United States, accessibility to health services is more difficult because of the state health system.

Therefore, it remains to know the real impact of the pandemic on the mental health of the general population. It has been hypothesised<sup>19</sup> that there will be a “wave” of mental illness associated with the risk factors of the pandemic: social isolation, loss of employment, economic and housing problems, gender violence, trauma related to work and grief due to loss of family members. Future longitudinal studies are necessary to establish the true impact of the pandemic on mental health. A recent study on the impact of the COVID-19 pandemic on the mental health of children and adolescents reported the importance of evaluating anxiety and depressive symptoms in this group.<sup>20</sup> The authors found high rates of depressive symptoms in the Chinese population, as well as an increase in behavioral addictions (such as the use of Smartphone).<sup>20</sup>

In conclusion, the COVID-19 pandemic has forced mental health services and professionals to adapt. Some of these changes, such as the development of telepsychiatry or the promotion of mental health prevention in health workers, should be continued over time until they form a part of the department's everyday portfolio. The commitment to home intervention in mental health, with the promotion of home hospitalisation devices and intensive home care, is another positive aspect that should be maintained in the future as an alternative to conventional hospitalisation. It is not known whether there will be another wave in the coming months, and that adds further weight to taking advantage of the changes and the teamwork carried out during the pandemic. In the post-COVID period, the early detection of negative consequences for mental health of patients, families, and professionals, as well as the evaluation of the effectiveness of the preventive interventions implemented during the pandemic, is of special importance. It will be an opportunity to strengthen our public health system and mental health research, which has been weakened by the stressful situation suffered throughout these months.

## Conflict of interests

Dr. González-Rodríguez has received fees and/or conference registrations from Janssen-Cilag, Lundbeck-Ostuka, and Angelini, and Dr. Labad has been a consultant or has received fees or research funds from Janssen-Cilag, Lundbeck-Otsuka and Angelini, but these personal relationships are not related to the content of our manuscript.

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