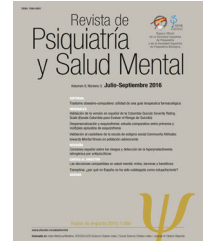




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## EDITORIAL

### Informing the response to COVID-19 in Spain: priorities for mental health research



### Respondiendo a la pandemia de COVID-19 en España: prioridades en la investigación en salud mental

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More than one year after the first case of COVID-19 was identified in Spain, it is clear that the current pandemic has a major, and potentially long-lasting effect on mental health and wellbeing. The COVID-19 outbreak and the policies to prevent its spread have disrupted the day-to-day life of the population. The pandemic has affected every country in the world, with some of the most deeply affected countries in Europe, including Spain, Belgium, France, Italy, the Netherlands, Sweden, and the United Kingdom. Early reports on COVID-related psychological distress concerned mental health experts and led the UN to release a policy briefing which warned that a 'long-term upsurge in the number and severity of mental health problems is likely.'<sup>1</sup>

Shortly afterwards, health policy makers, hospital managers, and those with direct management positions in mental health services, established directives, actions, and programs aimed at addressing the immediate impact of

the pandemic and the confinement in the population and the provision of mental health services. These decisions were guided by the need to ensure that the totality of the health system, both private and public in the case of Spain, was aligned with the priority of confronting the pandemic and with the constraints in mobility and social distancing imposed for the lockdown measures. Those involved in the decision could only rely on evidence gathered as part of previous pandemics occurring in countries with populations and health services very different from our own, and from predictions of needs and potential solution measures that were not strongly supported by evidence.

Starting in March 2020, Spain was one of the western pandemic hotspots, alongside the Italian region of Lombardy and New York. One year later, it is a good occasion to reflect on what evidence we need to formulate our mental health policy planning and identify research gaps. These priorities are based on our experience gathered both as clinicians in the design, planning, and coordination of mental health services responses to the COVID-19 pandemic in Madrid, but

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also as researchers planning and conducting studies that aim at providing evidence that supports our decisions.<sup>2</sup>

### Identification of short-term and long-term mental health problems derived from the COVID-19 pandemic and the epidemic control decisions in the general population.

The evidence regarding the mental health consequences of the confinement due to the COVID-19 pandemic in the general population is inconclusive. The lockdown measures have varied across countries and have been changing during the pandemic. Spanish lockdown was one of the most restrictive in Europe. The State of Alarm declared by the Spanish Government to curb the spread of the infection entailed a national lockdown starting on March 15<sup>th</sup> and put up distancing measures such as the cancelation of mass events or the closure of non-essential customer-facing business and educational institutions (*Real Decreto 463/2020*). A few studies have researched the mental health consequences of the lockdown during the first wave of the pandemic in the Spanish adult population. These studies have shown a general worsening in mental health.<sup>3</sup> However, the validity of these findings may be somewhat hindered by at least one of the following drawbacks: i) non-probabilistic sampling approaches or convenience samples evaluated through online surveys, which increases the risk of selection bias; ii) cross-sectional design or lack of information on the pre-pandemic period, which does not allow for a proper assessment of the determinants of the observed changes in mental health indicators; and iii) assessment of dimensional measures of psychological distress only which are of little use for service planning.

Clearly, we need well-conducted cohort studies in representative Spanish samples that can track longitudinal changes in mental health from before to during the pandemic with sufficient time to capture not only the short terms impacts of COVID-19,<sup>4</sup> but most importantly the long-term mental health effects of the pandemic and the epidemic control decisions on the general population. These should include the collection of high-quality data on the mental health effects of the pandemic across the whole population. These studies should include in their design instruments that can identify the non-intended consequences of the epidemic-control decisions, such as an increase in loneliness, substance use, and technology consumption.

We also need to know not only the population-level impact in terms of MH morbidity but also in terms of mortality, in particular suicide mortality. There is increasing concern that the COVID-19 pandemic could exacerbate suicide risk. Although we initially observed and reported a decrease in suicide-related psychiatric emergency department visits during the initial months of the pandemic in Madrid,<sup>5</sup> studies in other countries found how, by contrast, monthly suicide rates increased by 16% during the second wave.<sup>6</sup> There is a need for a refinement of the reporting of completed suicide in Spain, and to address the current limitation on prompt access to mortality data. The current pandemic highlights the need to advance towards a systematic collection, and reporting of information on the annual

rate of suicidal attempts for refining our analysis capacity of suicidal behaviour at the population level for both monitoring and evaluation of interventions and policies.<sup>7</sup>

### Identification of short-term and long-term mental health problems derived from the COVID-19 pandemic and epidemic control decisions in vulnerable populations

Despite its global nature, the COVID-19 pandemic does not have the same consequences for everyone. Identifying vulnerable groups is critical for mental health research, so that policy makers can introduce strategies that reduce the additional pandemic burden. These vulnerable populations include people with mental illness,<sup>8</sup> COVID-19 patients<sup>9</sup> or healthcare workers (HCWs).

In Spain, the national health system collapsed during the first wave, and HCWs reported having to work during extended hours, often following redeployment to frontline positions, and experienced a remarkable risk of infection. According to a nationwide seroprevalence study, one out of four were infected,<sup>10</sup> so substantial attention was directed towards HCWs' mental health outcomes.<sup>11</sup> However, the published studies from Spanish samples are cross-sectional.<sup>12</sup> The validity of their findings may be somewhat hindered by a non-probabilistic sampling approach and have a design that does not preclude the presence of some degree of reverse causation in the studied associations.

It is necessary to expand the still scarce literature in this area that allows us both to assess the long-term mental health impacts and needs of the COVID-19 pandemic in frontline workers, both in the healthcare sector as well as the long-term care sector. Also, to assess how the organizational changes driven by the pandemic may have impacted mental wellbeing among the professionals. This may permit us to inform healthcare and long-term care management decision makers in future pandemic peaks and healthcare crises.

### Mental Health system response

The COVID-19 pandemic has had many immediate direct and indirect impacts on the capacity to deliver mental health support in Spain. One challenge has been an immediate overburdening of some of our health systems; this has included some re-tasking of healthcare workers away from their normal roles, including the provision of mental health services, towards COVID-19 focused activities. Mental health services have also been hampered by public health restrictions which have limited the provision of face-to-face services. Services have been affected by temporary suspensions and restarts, with barriers to in-person support and a need to move towards the rapid adoption of innovative forms of remote service delivery (i.e., contact through teleconferencing or digital self-help). There are also indirect impacts on mental health system capacities during the pandemic, with non-health system measures, such as the closure of schools, which reduce the availability of staff to provide mental health services because of additional childcare and home education responsibilities.

The analysis of available longitudinal datasets and health register data can provide much needed information on the associations between policy responses and mental health impacts, and on the link between established social determinants and risks to mental health with the conditions arising from COVID-19 containment and mitigation measures. This may help to adapt approaches to meet the needs of different population groups. This will also serve as a source of evidence for the identification of key groups to be supported by public health and wider public policy interventions with a view to protecting mental health and wellbeing.

### Systematic study of neuropsychiatric sequelae after recovery from acute COVID-19

A comprehensive understanding of patient care needs beyond the acute phase will help in the planning of the mental healthcare needs. While the definition of the post-acute COVID-19 timeline is evolving, it has been suggested to include persistence of symptoms or development of sequelae beyond 3 or 4 weeks from the onset of acute symptoms of COVID-19.<sup>9</sup> Individuals with COVID-19 experience a range of psychiatric symptoms persisting or presenting months after initial infection. COVID-19 survivors have reported a post-viral syndrome of chronic malaise, diffuse myalgia, depressive symptoms, and non-restorative sleep. Cognitive impairment has been noted with or without fluctuations, including brain fog, which may manifest as difficulties with concentration, memory, receptive language and/or executive function. Many of these findings are based on self-referred samples of subjects that required no hospitalization because of COVID and that report clinical findings without a proper clinical evaluation. For an adequate identification of the magnitude of the problem in Spain and proper planning of care needs, we need to know the exact percentage of the infected population that develop any long-lasting neuropsychiatric complications, the risk factors associated with these complications and their impact on functioning. Eventually, the clinician is confronted with management decisions for which the evidence is still not available. In addition, we need to know the long-term outcomes of neuropsychiatric syndromes that had their first onset in the context of the COVID infection.<sup>8,13</sup>

### Develop and assess MH interventions

Throughout the health systems, there is a great necessity for MH interventions that target the most prevalent mental health problems due to the COVID-19 pandemic, most notably symptoms of distress, anxiety, depression, and posttraumatic stress disorder (PTSD). Given the predicted increase in mental health problems, any response should be highly scalable and able to address the needs of many people, maximizing the use of resources. Moreover, it is essential to conduct good scientific research to identify the effects of the MH interventions.

The DEPRESSD Project (<https://www.depressd.ca/covid-19-mental-health>) is a living systematic review that has identified 67 completed trials of psychological interventions in the context of the pandemic. Most of them come from China (n = 55) and they mainly focus on vulnerable popu-

lations, especially COVID-19 patients (n = 36) and HCWs (n = 8). In Spain, many hospitals have offered mental health support to their staff,<sup>14</sup> but interventions relied mostly on previous resources and were hardly scalable (e.g.,<sup>15</sup>). In light of the frequency of psychological distress, the Spanish National Health system should respond to the call for mental health actions, not only for HCWs, but also for other vulnerable groups and the general population. There is now a strong interest in the potential of digital technologies and tools to deliver better mental health outcomes. However, before its adoption within our public mental health system, we need to assess its acceptability, safety, and impact in real world clinical settings.

In this regard, the European Union (EU) has funded several projects to investigate the long-term behavioral and health effects of the COVID-19 crisis (i.e. Horizon 2020, SC1-PHE-CORONAVIRUS-2020-2C - Behavioural, social and economic impacts of the outbreak response). This is the case with RESPOND (Improving the PREparedness of Health Systems to Reduce Mental Health and Psychosocial Concerns resulting from the COVID-19 PaN-Demic [www.respond-project.eu/](http://www.respond-project.eu/)), an international study that brings together scientists from 13 universities and research centers from all over Europe, including Spain. The RESPOND project aims to identify vulnerable groups that have been affected by the COVID-19 pandemic and to assess the impact on mental health and well-being. Also, the study offers the opportunity to implement scalable psychological interventions developed by the World Health Organization (WHO) into a stepped care system to respond to the psychological needs of vulnerable groups affected by the pandemic in European countries. In Spain, the study will focus on front-line health workers and it will take place in the regions of Madrid and Barcelona. The interventions will be delivered remotely using digital tools to make them accessible, despite possible restrictions.

### Conclusion

It will take time to know what the ultimate impact of the COVID-19 outbreak is on mental health. The psychological toll of the pandemic is unquestionable, but the reality is complex. As the pandemic persists, its consequences are predicted to gradually appear, including rising unemployment, financial loss, reduced participation, or inadequate supplies derived from significant cuts in spending on social care and healthcare. The effects on mental conditions are expected to stay and peak later, with variations across populations and nations. In addition, we need to keep in mind that the evidence gathered as part of the research carried out in the context of the COVID 19 could be later used to optimize public health preparedness to future pandemics and to foster resilience and and mitigate mental health inequalities across populations affected in the future. Therefore, we need an ambitious international but also national level research agenda. One that can provide our national and regional level healthcare authorities and health managers with transferable evidence-based practices, methodologies and guidance for scaling up mental health and broader social and economic support measures

for the general population and vulnerable groups for COVID-19 related mental health problems.

## Conflicts of Interest

None

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