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## Psychological impact of lockdown (confinement) on young children and how to mitigate its effects: Rapid review of the evidence<sup>☆</sup>



### Impacto psicológico del confinamiento en la población infantil y como mitigar sus efectos: revisión rápida de la evidencia

Dear Editor:

In response to the pandemic of coronavirus disease 2019 (COVID-19) caused by the SARS-CoV-2 virus, the Spanish Government declared a state of emergency as an urgent measure to protect the health and safety of the citizens, contain the spread of disease and support the public health care system. Although these restrictive measures can contain the outbreak, there is concern regarding the potential deleterious impact in the physical and mental health of children of the prolonged closure of schools and the lockdown at home.<sup>1</sup>

Confinement is a necessary preventive measure during outbreaks of significant diseases, but it can have a far-reaching and substantial deleterious psychological impact in the population subjected to isolation.<sup>2</sup> This highlights the need to integrate effective measures to mitigate these negative consequences when planning this type of intervention.

The complexities of confinement pose a challenge to policymakers and the authorities and an opportunity to expedite reviews to summarise the existing evidence in order to plan, develop and implement appropriate and effective public health policies fitting the current circumstances.<sup>2</sup> In fact, the World Health Organization (WHO) recommends these rapid reviews.<sup>3</sup>

The aim of this article is to review the available evidence on the psychological impact of confinement in children, seeking to identify the main stressors and protective factors at play.

We performed a rapid review of the psychological impact of lockdowns in children and adolescents following the rec-

ommendations of the WHO.<sup>3</sup> We performed searches in 3 electronic databases (PubMed, EMBASE and Google Academics) and reviewed expert recommendations.

Of the 57 documents initially identified in the search, only 3 met the selection criteria for inclusion in the review. In 2013, Sprang and Silman analysed the prevalence of symptoms of post-traumatic stress in the context of health-related disasters.<sup>4</sup> They found that the mean scores in instruments for measurement of post-traumatic stress features were 4 times greater in children that had been quarantined compared to children that had not. A similar study in university students did not find significant differences in the probability of post-traumatic stress-related symptoms or general mental health problems in the quarantined group versus the non-quarantined group.<sup>5</sup> DiGiovanni et al.<sup>6</sup> found that adolescents had difficulty adhering to quarantine rules and were more likely to break quarantine.

We did not find any study examining which factors are associated with decreased stress or distress in children subjected to a lockdown.

Although there are many recommendations, most of them are based on expert opinion and have not been tested in studies. [Tables 1 and 2](#) present a summary of the expert recommendations most widely agreed on for mitigating the negative impact of confinement in children.<sup>7-9</sup>

Although there is evidence on the association of the duration of lockdowns and their negative impact on mental health in adults (increased risk of mood disorders, symptoms of depression, irritability, stress...),<sup>2</sup> the available evidence in the paediatric population is anecdotal and the conclusions limited.

The complexities of confinement pose a major challenge to policymakers and the authorities but also provide an opportunity to produce rapid reviews to summarise the existing evidence on the issue and help to plan, develop and implement appropriate and effective public health policies fitting the current circumstances.<sup>1,2</sup>

Although the current volume and the quality of the research available on this subject are limited and most studies to date have focused on adults, we must make the effort to extrapolate the conclusions to propose useful interventions during a crisis that is still ongoing. We think that studies should be performed on an urgent basis in the current context to establish the psychological impact of lockdowns and health-related crises in children and to assess the effectiveness of any related short- or long-term interventions.

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**Table 1** General measures to mitigate the negative psychological impact of lockdowns in children and adolescents.<sup>8,9</sup>

- Young children cannot be confined or isolated without their caregivers for a prolonged period of time. If a separation occurs (for instance, due to hospitalisation), regular contact must be guaranteed (for example, by telephone).
- Children should be given an age-appropriate explanation of what has happened and of the purpose of being confined at home.
- Children should be given clear information on how to reduce the risk of contracting the disease using language that can be clearly understood at the corresponding age.
- Teach children the everyday measures to be used to reduce viral transmission.
- Children and adolescents of any age benefit from having structured activities and a clear routine.
- Access to the internet, television and the radio should be allowed, but it is important to avoid having the television on at all times and to monitor the use of social networks to check for messages and publications that are inaccurate and dramatic. The screen time devoted to the crisis event should be reduced to minimise potential confusion, worry and fear.
- Promote virtual contact with family members, classmates, friends and teachers through the internet and the phone to reduce the anxious feelings associated with isolation and frustration.
- Schools play an essential role, not only in providing educational content to children, but also in offering students an opportunity to interact with teachers and receive psychological support.

**Table 2** Measures to mitigate the negative psychological impact of lockdowns in children and adolescents with disabilities, neurodevelopmental disorders or mental health problems.<sup>9</sup>

- It is important to ensure that the medical and mental health team in charge of the child or adolescent is involved to help control any underlying condition.
- Help from a mental health professional should be sought if a child or adolescent exhibits symptoms of severe anxiety or depression, such as suicidal ideation, panic symptoms or marked irritability. It is important to remain alert for the development of symptoms, including changes in appetite, sleep disturbances, aggression, irritability, fear of being alone or social withdrawal.
- Children and adolescents should be told what has happened and the purpose of being confined to the home in a manner that is appropriate to their disorder. For instance, in case of autism spectrum disorder it may be helpful to use visual supports to explain both what is happening (for example, the existence of germs that can harm people) and what the child is expected to do (for example, hand washing, covering coughs, etc.).

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