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Letter to the Editor

COVID-19: The need for screening for domestic violence and related neurocognitive problems



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During the novel coronavirus disease (COVID-19) confinement, domestic violence (DV), i.e., physical, emotional or sexual abuse by one family or household member against another, has vastly increased worldwide ([Joint Leaders' statement, 2020](#)). DV is a highly prevalent issue of public health as global estimates indicate that about 1 in 3 (35%) women have experienced either physical and/or sexual intimate partner violence, and at least 1 in 7 children has experienced abuse or neglect at home ([Preventing Child Abuse, 2020](#)). In turn, intimate partner violence affects between 8 and 25% of children per year ([Gilbert et al., 2009](#)).

Measures of quarantine can protect people from contracting COVID-19 and prevent the rapid spread of the virus. However, it increases the likelihood of victims to continued exposure to DV. That is, for those exposed to DV, home is not a safe place, especially if the survivors are quarantined with the perpetrators ([Kofman and Garfin, 2020](#)). In this context, children and women are particularly vulnerable to be exposed to DV.

In addition, the COVID-19 crisis gives rise to certain adverse experiences such as social isolation, school closures, unemployment, income insecurity or financial deprivation, while also social services are limited and resources for support and advice are reduced ([Usher et al., 2020](#)). It is known that psychological stressors can increase the risk for DV ([Lee, 2020](#)). Indeed, those involved in DV prior to a crisis are more likely to experience DV following the event due to increased levels of stress in the perpetrators during and after the crisis ([Gracia and Musitu, 2003](#); [Simon et al., 2009](#)).

DV can result in stress related mental disorders, e.g., depression, anxiety, and traumatic stress disorder ([Lagdon et al., 2014](#); [Lupien et al., 2009](#)), in both the victims and the perpetrators. Moreover, a large body of literature reminds us that DV is an environmental stressor which determines alterations in the development and functioning of the brain, leading to neurocognitive deficits in its victims ([Pechtel and Pizzagalli, 2011](#)). Therefore, it could be hypothesized that individuals exposed to DV during COVID-19 confinement will be more likely to develop neurocognitive impairments than individuals not exposed to DV, and victims of DV with a pre-existing neurocognitive deficit will be more vulnerable to neurocognitive impairments than victims without a pre-existing neurocognitive deficit.

As a chronic stressor, DV has negative effects on neurobiological mechanisms altering the functioning of midbrain structures, the limbic

system, corpus callosum, including altered white matter integrity in relevant regions for attention and affective control ([Corbo et al., 2016](#)) and processing the trauma information (e.g., visual cortex with witnessing DV) but also key areas in emotion processing, such as the anterior cingulate cortex ([Binder, 2016](#)), and several other connected regions involving the Hypothalamic-Pituitary-Adrenal axis ([Tsavoussis et al., 2014](#)). These brain alterations may trigger altered brain reactivity to stressful life events increasing vulnerability for the development of psychopathology ([Ganzel et al., 2010](#); [Heim et al., 2008](#)). Together with social, behavioural and emotional consequences on victims, which interact with cognitive impairments, neurocognitive problems increase the likelihood of transgenerational transmission of DV.

The COVID-19 outbreak represents an opportunity to examine adding effects of acute stress due to quarantine conditions to previous vulnerability to stress in victims of DV. A better understanding of the relationship between DV and neurocognitive functioning in victims will hopefully contribute to the development of most adequate preventive and intervention measures and strengthen the collaboration between child welfare agencies, hospital services and schools, helping to improve developmental and behavioural outcomes in DV survivors during and after the pandemic and future crises.

The clinical implementation of measures for the detection of DV is a priority. To this aim, extra training and education on DV and its consequences for mental and other health professionals are needed. During COVID-19 outbreak -and later on-there is a demand of preventive programs and funding sources to guarantee (online) services assisting victims of DV. There is a greater need for governmental investments in adults and youth-serving systems within and beyond public health to effectively address DV and prevent its short- and long-term negative health and social sequelae beyond the public health crisis of COVID-19. Given the likely increase in DV during the COVID-19 pandemic, it is vital that we assess for the adverse experiences more intentionally and deeply when the pandemic ends.

In sum, addressing trauma and stress exposure in the COVID-19 crisis needs to be a priority from a health care but also from an economic point of view. The victims of DV would benefit from monitoring of their neurocognitive functioning after COVID-19 outbreak to increase chances for a normal development of neurocognitive functions in children

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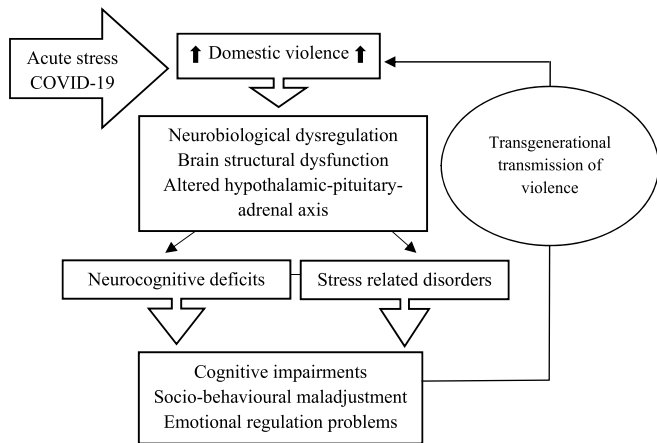


Fig. 1. Conceptual framework about the effects of domestic violence on the victims.

and adolescents. Assessing DV is standard practice in some institutions already but might become a standard practice in all mental health settings in order to mitigate the impact of DV for a generation of youth.

This letter suggests considering assessment tools to be implemented not just during extraordinary periods, such as that of COVID-19, but also as a future and possible method of clinical practice. Additionally, neurocognitive interventions are proposed to be validated to provide neuropsychological assistance, in addition to psychological and social support for survivors of DV.

Current research on a broad range of psychiatric and psychosocial impacts of the COVID-19 pandemic on people at the individual, community and international level (Kola, 2020), has neither assessed or at least discussed the need for screening the presence of DV nor the assessment of neurocognitive functioning. With this background (see Fig. 1), the present letter aims to draw attention to individuals with DV exposure, that have been relatively neglected up to now by the literature on the COVID-19 pandemic. We put forward to initiate research aimed at a better understanding of the indirect neurocognitive effects of COVID-19 quarantine on DV survivors.

We furthermore point out the importance of monitoring DV and the necessity of the implementation of accurate evaluations of neurocognitive functioning in health care settings during and after the COVID-19 outbreak to prevent cognitive and social problems in DV survivors on the long run. Neurocognitive deficits in DV victims can result in cognitive and behavioural problems and social maladjustment (Ingram et al., 2020) during and after the COVID-19 crisis, which may, as a long-term consequence, potentially imply transgenerational transmission of violence, i.e., abuse of children and adolescents as well as parental or intimate partner violence in the next generation.

Conflict of interest

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