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Editorial

Covid-19: An Urgent Need For A Psychoneuroendocrine Perspective



Covid-19 represents an unprecedented challenge to the world in general and the medical community in particular. Epidemiologists and clinicians are fully mobilized to meet the challenge of finding how to deal with a rapidly propagating viral infection with no vaccination and specific therapy at hand and so many unknowns concerning the prevalence of asymptomatic infection and length and efficacy of the immune response. Physicians and nurses are at the forefront of the war against the epidemic and researchers in epidemiology, virology, vaccinology and immunology are mobilized to address the unknowns. This does not mean that researchers in other scientific disciplines are not concerned especially when it comes to assessing our ability to adapt to the profound changes imposed by this fight on our professional and personal life and our capacity to deal with the uncertainty and loss of control created by the present crisis.

Thanks to several decades of research mainly published in *Psychoneuroendocrinology*, the leading journal in the field, the psychoneuroendocrinology scientific community has acquired an incredible amount of knowledge on how stress is perceived, represented and embodied. That is, how stress ultimately gets under the skin to modulate the progression of conditions ranging from modern chronic disorders such as obesity and type II diabetes to acute illness such as the common cold. We have also learned how a microbial infection in itself or combined with other stressors, can influence brain functions and induce changes in mood and behavior. Research in psychoneuroendocrinology has recognized the importance of socio-economic factors, racial disparities, gender diversity and early life experience in the way we are able to respond to challenging life events. It has also helped to quantify the influence of these factors by forging original concepts like allostatic load and it has contributed to the clarification of the mechanisms that are responsible for the effects of these factors.

The knowledge that has accumulated in the field of psychoneuroendocrinology can be applied to better understand what are the short-term and long-term consequences of life in the era of Covid-19 for the general population as well as for the care providers. We know about the adverse psychological effects of confinement, lack of social support, uncertainty and loss of control. We have identified their psychological and biological sequelae which can be responsible for conditions as disastrous as post-traumatic stress disorders. We also know about the factors that promote resilience in such conditions. We now understand

how these factors translate into the activation of neuroendocrine and neuroimmune systems by mobilizing specific neuronal networks in the brain. In addition, we have learned from our clinician colleagues that acute illness may lead to severe sequelae in intensive care unit survivors in the form of long-lasting cognitive dysfunction and depressive symptoms of which the exact mechanisms remain to be elucidated.

All this means the time is now ripe for the psychoneuroendocrinology scientific community to make its specific contribution to Covid-19. This can be done in several ways and *Psychoneuroendocrinology*, together with its sister journal, *Comprehensive Psychoneuroendocrinology*, is ready to play its role in this endeavor. We have recruited stress experts in psychoneuroendocrinology and in psychoneuroimmunology to encourage the publication of high-quality scientific articles dealing with the stress aspects of Covid-19 and its sequelae. In addition to original research articles we are ready to examine a wide variety of scientific contributions ranging from clinical protocols with clearly defined outcomes to original research articles.

The editorial task force assembled for this purpose will only process scientific contributions that obey the aims and scope of the journal, respect the requirements of scientific rigor and reproducibility with full access to original data sets, and are likely to make the field of research move forward. We are committed to turn out review of the manuscripts submitted for publication to our journals in the shortest interval that is possible. Together with Elsevier we have decided to encourage this move by rewarding the authors of the two articles with the highest number of downloads within 6 months from their publication with \$500. Needless to say, publication will be free of charge.

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