



## THE IMPACTS OF STRESS AND ANXIETY ON IMMUNITY IN THE PERIOD OF THE COVID-19 PANDEMIC

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The aim of this study was to review the impacts of stress and anxiety on immunity during the COVID-19 pandemic. From a literature review of the narrative type, it was found that anxiety can be described by a feeling of fear, restlessness, and thoughts about the future, which consequently lead to behavioral changes. Stress is both a physiological and psychological reaction, which leads to changes in physical and emotional behavior, involving phases of progression and happening in response to certain unpleasant reactions of internal, external and/or unexpected cause. Therefore, stress encompasses cognitive, behavioral and emotional factors, which are associated with physiological changes, evidencing the communication between the immune, endocrine and nervous systems during stress, which, over time, can lead to worse actions than those already being implicated, leading to variable degrees of morbidity for affected individuals. The immune system recognizes normal and abnormal processes in the body to ensure that in situations of physical stress, that is, organic dysfunctions, the damage evidencing the communication between the immune, endocrine and nervous systems during stress, which, over time can lead to worse actions than those already being implicated, leading to varying degrees of morbidity for affected individuals. The immune system recognizes normal and abnormal processes in the body to ensure that in situations of physical stress, i.e. organic dysfunctions, the damage is resolved as quickly as possible. It maintains homeostasis in the body and in other components of the physiological systems that encompass the mental aspect of people. The immune system is severely affected by stress and anxiety, so it alters and influences numerous effects such as neuroinflammation and chronic hormonal elevations, which intensify other diseases, an example are cardiac and dermatological changes, such as psoriasis and alopecia areata, thus corroborating the consistent knowledge that there is a systemic immunosuppression implicated in the process. An example of the stress that has occurred to the whole world has been covid-19. It is a virus with a high capacity for contagion, thinking about it the government authorities made decisions such as isolation, and this caused stress and anxiety in people, thus being able to alter the immune system. Stressful situations lead to altered production of hormones such as cortisol, adrenaline and noradrenaline, produced by the adrenal glands; may impair some metabolic activities, the result of metabolic modification will be the activation of the Hypothalamic-Pituitary-Adrenal (HPA) axis, leading to a disagreement in the immune system inducing T-cell apoptosis, low production of B cells, and decrease of neutrophils in leukocyte migration to tissue with inflammation.

Keywords: Stress; Anxiety; Immunity; COVID-19.

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