

**Natureza do trabalho:** Resumo

**TÍTULO**

*THEORY OF DEPRESSION INDUCED BY INFECTIOUS AGENTS*

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**RESUMO**

**Introduction:** Depression represents the fifth largest public health issue in the world, according to WHO, about 340 million people get killed. It is estimated that the trend in 2020 will occupy the second place. Many theories have been studied in order to explain the triggering factors such as monoamine hypothesis, Selye, and cytokinergic theory. The PATHOS-D indicates the depression is induced by infectious agents.

**Literature Review:** The PATHOS-D (Host Pathogen Defense) theory relates the increase of inflammatory mediators in blood with the development of depression. The alleles studied trigger symptoms and behaviors that throughout the evolution of mammals decreased mortality by infections. The anti-pathogenic effects must overcome those who lead to depression. However, it is questionable whether depressive symptoms may promote survival in response an infection.<sup>7</sup> The PATHOS-D evidences that a pathogen reacts by activating the immune and nervous system responses. Cytokines such as IL-6, IL-1B, TNF, INF are released against pathogen and interact with the nervous system and could cause depressive symptoms, what causes a State of hypervigilance. This state could prevent reinfection, protect the host and allow the elimination the pathogen and heal the damage induced by pathogen. For survival, the immunological benefits must overcome the depressive disorders caused by this allelic interaction studied. For this reason, the alleles that cause depressive symptoms in the individual, but can act and recover an infection, were not eliminated during the evolutionary process. **Conclusion:** The reports the PATHOS-D theory, linking the alleles responsible for this disease to the defense mechanisms against pathogens, corroborating and extending for cytokinergic theory.