

## **A paradigm for understanding and treating psychiatric illness**

## **Um paradigma para entender e tratar as doenças psiquiátricas**

A key problem in diagnosis is the fact that elaborate classification systems that exist today are solely based on subjective descriptions of symptoms. Such detailed phenomenology includes the description of multiple clinical subtypes; however, there is no biological feature that distinguishes one subtype from another. In addition, it is recognized that a variety of disorders can exhibit similar clinical symptoms, and that one disorder can manifest with distinct patterns in different people.

A research approach that describes reliable neurobiological findings based on psychopathological syndrome will be more solid contrasted to a nonetiologic system of classification.

Integrative approaches to understanding complex health issues can transcend disciplinary and knowledge boundaries and provide opportunities to view phenomena from diverse perspectives. A future diagnostic criteria system in which etiology and pathophysiology are essential in diagnostic decision making would bring psychiatry closer to other specialties of medicine. The relationship between stress and illness is a strong example of a field of study that can be more fully understood from an integrative perspective. The potential of an integrative approach to contribute to improvements in human health and well-being are more important than historical biases that have been associated with an integrative science approach.<sup>1</sup>

This approach says very clearly and without a doubt that the causes, development, and outcomes of disorders are determined by the relations of psychological, social, and cultural factors with biochemistry and physiology. Biochemistry and physiology are not disconnected and different from the rest of our experiences and life events.

This system is based on current studies that reported that the brain and its cognitive processes show a fantastic synchronization. Consequently, accepting the brain-body-mind complex is possible only when the three systems—nervous, endocrine, and immune—have receptors on critical cells that can receive information (via messenger molecules) from each of the other systems.<sup>2</sup> The fourth system, the mind (our thoughts, our feelings, our beliefs, and our hopes), is part of the functioning of the brain integrating the paradigm of psychoendoneuroimmunology. The interaction of the mind, an explicit functioning of the brain, with other body systems is critical for the maintenance of homeostasis and well-being.<sup>3</sup>

It is now broadly accepted that psychological stress may change the internal homeostatic state of an individual. During acute stress, adaptive physiological responses occur, which include increased adrenocortical secretion of hormones, primarily cortisol. Whenever there is an acute interruption of this balance, illness may result. Of special interest are the psychological stress (stress in the mind) and the interactions of the nervous, endocrine, and immune systems that will be reviewed in this issue.

The social and physical environments have an enormous impact on our physiology and behavior, and they influence the process

of adaptation or “allostasis”.<sup>4</sup> It is correct to state that at the same time that our experiences change our brain and thoughts, namely, changing our mind, we are changing our neurobiology. This action of the brain is the body’s first line of defense against illness, against aging, and for health and welfare.<sup>3</sup> Therefore, only the adoption of a multidisciplinary approach that will bring together the knowledge and the technology of the four P’s, which consist of physics, physiology, psychology and philosophy, can integrate the whole system. Genes, early life stress, adult experiences, life style, and stressful life experiences all add to the way the body adapts to a changing environment; and all these factors help to determine the cost to the body or the “allostatic load.” Most of these studies involve neurobiology and psychology, but they are imperfect without the contribution from other fields such as cultural anthropology, economics, epidemiology, political science, and sociology.<sup>4</sup>

Emergent data in the field of psychoneuroimmunology contributes to the understanding of the mechanisms by which traumatic events affect health. The interaction between behavior, neurobiology, and endocrine system that may cause immunosuppression is the most interesting discovery in current medicine, and its implications are important for the prevention and treatment of somatic diseases.<sup>5</sup>

Therefore, we are greatly pleased to present this supplement entitled “Psychoendoneuroimmunology: a paradigm for understanding and treating psychiatric illness” to the readers of the Revista Brasileira de Psiquiatria.

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