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Foreword



The topic of this Supplement on *Role of Environment in Initiation and Progression of Illnesses* covers the most challenging issues facing the world today in terms of pollution, climate, nutritional, behavioral and societal changes as well as their long-term and epigenetic impact on the development and progression of cardiac, metabolic, mental and neurological disorders. Air pollution affects 90% of the world's population and has become one of the most important cause of premature death. Most of the world's population lives in cities that have both health risks and benefits. For instance, the prevalence of mood and anxiety disorders is higher in urban compared to rural areas. Being a significant health and social problem, cardiometabolic diseases are strongly influenced by the environment. Obesogenic (obesity-promoting) environment is mostly related to built/human-made environment that influences lifestyles in addition to agro-alimentary factors. Nature and nurture interact in a complex manner in the development of diabetes. Also, increasing evidence shows that lifestyle, nutrition, stress, physical activity and environmental factors influence epigenetic mechanisms that modulate gene expression through DNA methylation, histone acetylation and microRNA expression. Environment can shape epigenetically the structure and function of brain and body systems that display considerable adaptive plasticity throughout development and adult life. Accordingly, disorders are often multimorbid involving both brain and body, such as depression with diabetes and cardiovascular disease. Moreover, diverse environmental stressors such as traumatic brain injury contribute to the severity and duration of a variety of neuroinflammation-driven diseases. The reviews included in the Supplement present overviews and emerging evidence about the

linkages between environmental stressors, neuroinflammation, mental health and metabolic and neurodegenerative diseases.

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Declaration of Competing Interest

The authors have no conflict to declare.

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