Prevention of Mental and Neurodegenerative Disorders – Sleep and Circadian Perspectives

Abstract:
Prevention is the ultimate goal of medicine. However, prevention is often met with difficulties and doubtful effectiveness. Abnormal sleep/circadian functioning not only amplifies individual’s pathological state but often occurs early in the disease process and acts as a precursor for subsequent development of many physical, mental and neurodegenerative illnesses, underscoring the critical role of sleep and circadian process in disease prevention. From the prevention angle, there is a need for further deep phenotyping and better understanding of a clear roadmap, particularly during critical periods of illness formation- from mood disorders to neurodegeneration. In other words, appropriate development of effective intervention intervention during these critical periods will provide golden opportunity to prevent the onset of subsequent development of chronic mental and neurodegenerative illnesses.