Multi-factorial Approaches to Substance Use Disorders and Addiction

By Harris B. Stratyner, PhD, CASAC

One cannot get through a day (certainly not in the United States) without hearing about the devastation that substance abuse, addiction, and, in many cases, co-occurring disorders (i.e., substance abuse or addiction in conjunction with a major psychiatric clinical syndrome and/or personality disorder) cast upon countless numbers of lives. For years, there has been a controversy as to whether addiction was simply a moral failing or a brain disease. Obviously, the latter is true.

As with any disease, addiction and co-occurring disorders are frequently considered to be primary, progressive, chronic, and, if untreated, fatal. With the advent of more sophisticated neurobiological and multivariate research, we can get beyond trivializing this serious disease entity by labeling it as a weakness or character defect, and get on with the significant work of focusing on those neurological pathways and their etiology that are responsible for addictive patterns of behavior.

In the first article, Kimberly Hoppes, PsyD, reviews the theory, application, and experiential findings of mindfulness-based cognitive treatment for mental health and addictive disorders. Dr. Hoppes discusses the merits of studying extended abuse of substances on neural pathways through positron emission tomography research. She elaborates on the value of developing both pharmacologic and non-pharmacologic interventions, such as mindfulness-based cognitive treatment, to repair neural activity that has been negatively impacted, resulting in affective and emotional instability.

Yasmin L. Hurd, PhD, presents a review on "current directions in the neurobiology of addiction disorders relevant to genetic risk factors." Dr. Hurd puts forth a cogent argument for studying those genetic factors as well as behavioral traits that predispose one to addiction against the backdrop of psychostimulant and opioid use.

Iliyan S. Ivanov, MD, and colleagues continue the discussion of the disease model of substance abuse and addictive disorders. Furthermore, they make a case for the importance of emerging pharmacologic intervention in the treatment of substance abuse and addictive processes in conjunction with psychosocial interventions that interrupt and/or mollify the compulsivity of drug use and the likelihood of relapse.

Bernardo Dell'Oosso, MD, and colleagues present research that studied the augmentation of selective serotonin reuptake inhibitors with quetiapine in four individuals with treatment-resistant obsessive-compulsive disorder and comorbid mood and anxiety disorders. Their 6-month case study may, at first, seem unrelated to substance abuse and addiction. However, when one takes into consideration that the addictive process can be seen under the rubric of compulsive behavior or a form of self-medicating behavior for compulsivity, their report takes on great significance in an issue dedicated to substance use disorders.

It is clear from the articles collected in this issue of CNS Spectrums that a great deal of meaningful research has taken place to further the understanding of how addictive processes can be interrupted through pharmacologic and psychological interventions.

Clearly, there is a need for further studies, especially investigations that focus on evidence-based practice. The link between the laboratory and the practitioner's office must be emphasized on the journey to discovering significant treatments for the disease of addiction—treatments that are compassionate, precise, and cost-effective.

As researchers, clinicians, and educators, we must all work together with the common goal of dealing with this worldwide problem of substance abuse, addiction, and co-occurring disorders that has taken on epidemic proportions. It is with these thoughts in mind, that CNS Spectrums is to be applauded for their efforts in getting the word out on the latest scientific breakthroughs.