Reward Deficiency Syndrome (RDS): Entering the Genomics and Neuroscience Era of Addiction Medicine

Kenneth Blum and Rajendra D. Badgaiyan

1Department of Psychiatry & McKnight Brain Institute, University of Florida College of Medicine, Gainesville, FL, USA
2Human Integrated Services Unit, University of Vermont Center for Clinical & Translational Science, Department of Psychiatry, College of Medicine, Burlington, VT, USA
3Dominion Diagnostics, LLC, North Kingstown, RI, USA
4Department of Addiction Research & Therapy, Malibu Beach Recovery Center, Malibu Beach, CA, USA
5RDSolutions, Inc., Salt Lake City, UT, USA
6Victory Nutrition International, LLC, Ledgeview, PA, USA
7Department of Psychiatry, University of Minnesota, Minneapolis, MN, USA
8Neuromodulation Scholar, Laboratory of Molecular Imaging and Functional Imaging, University of Minnesota, Minneapolis, MN, USA

Correspondence to:
Kenneth Blum, PhD, DHL
Department of Psychiatry and McKnight Brain Institute
University of Florida College of Medicine
Box 100183 Gainesville, FL, 32610-0183, USA
Tel: +1-352-392-6680
Fax: +1-352-392-8217
E-mail: dhd2gene@ufl.edu

Received: January 06, 2015
Accepted: January 14, 2015
Published: January 15, 2015


Copyright: © Blum and Badgaiyan. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY) (http://creativecommons.org/licenses/by/4.0/) which permits commercial use, including reproduction, adaptation, and distribution of the article provided the original author and source are credited.

Published by United Scientific Group

Editorial

The United Scientific Group (USG) has decided to establish a new journal on “Reward Deficiency Syndrome (RDS)”. We the Editors in Chief have been selected to develop the most intensive compilation of current research into all related fields of diagnosis, neuroimaging, neurogenetics, neurobiology, neuroepigenetics, neuropsychoharmacology, nutrition, toxicology, treatment, prevention tactics and strategies for attenuation of relapse and enhancement of quality of life during recovery. Each paper following rigorous peer review will be a selected publication in an open access forum. Initially there will be four issues a year. The journal will be devoted to not only original research but current opinions as well as will seek out novel an important research especially as it relates to both basic scientific concepts and translational applications.

This journal seems quite relevant given the horrific statistics of the multitude of society caught up in throws of many addictive behaviors (Reward Deficiency Syndrome [RDS]): drugs & alcohol, food, smoking, overeating (obesity) and other eating disorders (e.g. anorexia, bulimia), pathological gambling, sex; internet gaming and other known repetitive behaviors (Process Addictions). A quick PUBMED search reveals that there are currently at least 37,023 studies published in peer reviewed journals. Currently, the newest addition in the field of addiction medicine is the Journal of Behavioral Addictions edited by one of our Associate Board members Zsolt Demetrovics.

Moreover, it is noteworthy that in 1884 the Proceedings of the Society for the study and cure of inebriety was subsequently published under the title of the British Journal of Inebriety. This has been morphed by an earlier journal published in America known as the American Journal of Inebriety. It is quiet relevant that these two journals worked closely with the American physician E.M. Jellinek who in 1960 coined the “Disease Concept of Alcoholism” [1]. In 1891 the German scientific community established the Journal Sucht, which means addiction (drgensucht =drugs; trinksucht=alcoholism).

One hundred years ago these journals on addiction were focused on issues related to women’s drinking and the impact on motherhood, eugenics, and alcohol as an agent of physical and social degeneration, the prevention and treatment of the inebriate and of cause the need for legislation to prevent female inebriates from barring children. This legislation in America led to the undertow of the temperance sentiment and subsequent prohibition of alcohol beverage sales.
Currently, in an explosive era of genomics and neuroimaging our understanding of the neurochemical and genetic aspects of not only drugs of abuse but many process addictions on a molecular level has revealed an enormous amount of information particularly related to uncovering neuro-scientific based mechanisms.

While the epidemic of addictive behaviors unfortunately continues on a global sphere, we the editors of this important and, promising new and exciting journal on RDS strongly believe that the bringing together of the greatest global scientific minds from many disciplines including but not limited to: psychiatry, psychology, neuroscience, molecular genetics, pharmacology, nutrition, physiology, physics, mathematics, bioinformatics, neuroquantology, nursing biology, and medicine, will enlighten the entire field and provide new insights, quests and novel approaches that will be a springboard for future generations.

Indeed it will serve as a scientific “blueprint” for those of us entrenched in the treatment of the millions caught up in the devastation of impairments of the brain reward circuitry. We are also cognizant of the potential benefits to the families and friends of addicted loved ones that may accrue from the untiring commitments and thought provoking concepts of our scientific associates that have joined us in this mysterious journey. We are reminded of the words of David Smith (founder of the Haight-Ashbury Medical Free clinic in 1969) – “Love Needs Care” and that is what we as editors will attempt to accomplish by engaging our peers in this timely endeavor. Let’s welcome this new journal to the addiction field so needful of sound exploration of the best kind.

Funding Sources
This work is supported by NIH grant: R01NS073884 and VA grants: CX000479, CX000780.

Acknowledgments
The authors appreciate the expert edits of Margaret A. Madigan.

Authors Contribution
Equally contributed to the writing of this article.

References