

## Welcome Message for Journal of Addictive Behavior and Therapy

**Mohammed Akbar\***

Division of Neuroscience and Behavior, National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, Bethesda, MD, USA

\***Corresponding authors:** Mohammed Akbar, Division of Neuroscience and Behavior, National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, Bethesda, MD, USA, E-mail: akbarm@mail.nih.gov

**Received date:** May 04, 2017; **Accepted date:** May 5, 2017; **Published date:** May 10, 2017

**Citation:** Akbar M (2017) Welcome Message for Journal of Addictive Behavior and Therapy. *J Addict Behav Ther* 1: e101.

**Copyright:** © 2017 Akbar M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Editorial

I am pleased to welcome you to our new scientific journal "Journal of Addictive Behaviors and Therapy (JABT)". The JABT is a peer-reviewed, open access journal with rapid publication of accepted articles. The extraordinary increase of substance abuse and addiction has become a challenge for health care professionals, affected families, government officials and pharmaceutical industries. Substance abuse, including alcohol, opioids, and nicotine, or addictive behavior such as gambling and sexual activities, takes a high toll on individuals and the society through direct adverse pathophysiological effects and large health care costs. In the United States, addiction has been steadily growing to become one of the costliest public health concerns, exceeding a few hundred billion dollars per year. Addiction increases incidence of illness, injuries and death including cancer, cardiovascular diseases and HIV/AIDS. Addiction is also associated with social problems such as violence, criminal activities, stress, child abuse and intoxicated driving. Prenatal drug, tobacco and alcohol exposure results in lower birth weight, increased risk of attention deficit hyperactivity disorder, conduct disorders, and childhood obesity [1-3]. Additionally, drug and alcohol misuse has tremendous effect on crime, education, homelessness and workplace performance.

Addiction is a brain disorder, defined as a chronically relapsing compulsion to seek or take the drug with loss of control over the intake and the emergence of various negative emotional states, such as dysphoria, irritability and anxiety [4]. Misused drugs and alcohol elicit a rewarding stimulus or relief from unpleasant states that results in increased drug or alcohol use in the future. Long term use engages compensatory adjustments by the brain to continue normal functioning as a result of neuroadaptation that includes sensitization and tolerance, and increased sensitization and tolerance such that addiction ensues [5]. The reinforcing and neuroadaptive effects of drugs and alcohol are mediated by a wide spectrum of neurotransmitter systems and brain circuits.

Variables, such as, age, gender, genetic and environmental factors influence vulnerability to developing addiction. Young people and adolescents having low self-esteem are susceptible to drug and alcohol addiction [6]. In comparison to males, females are more likely to become substance dependent

more quickly and have a higher rate of relapse, perhaps because females are more likely to have a history of trauma, including physical, emotional and sexual abuse [7]. Genetic influences on alcohol and drug dependence have been identified [8]. Family conflicts, personality, and peer social influence contribute to risk of becoming substance of abuse dependent [9]. It is important to identify and develop new prevention and treatment strategies to overcome severe addiction associated with pathophysiological consequences. Epigenetics studies have shown that both single nucleotide polymorphism (SNP) and pre- and post-natal environmental exposure influence DNA methylation that may alter normal development and promote the emergence of disease conditions [10]. Exposure of substance use as early as preconception has been shown to alter DNA methylation patterns in brain [11], resulting in activation of a few genes specifically involved in reward processing, memory and neuro-adaptations associated with the onset and persistence of addiction process [12,13]. Thus, further studies in this area may provide potential information on identifying biomarkers that can be used for monitoring the prevention and treatment of addiction. To complement cognitive behavioral therapies and other non-pharmacological treatments, medications, including the repurposing of FDA approved drugs, continue to be investigated in preclinical studies and in clinical trials for preventing and/or treating substance abuse disorders.

Hence, there is an urgent need for researchers to work together and share knowledge in addiction research. For that purpose, we are launching the JABT to disseminate this knowledge among researchers, clinicians and academicians in a timely manner. Therefore, we welcome you to submit your work to our new, peer-reviewed open access journal for rapid and high quality research publications.

### References

1. Mick E, Biederman J, Faraone SV, Sayer J, Kleinman S (2002) Case-control study of attention-deficit hyperactivity disorder and maternal smoking, alcohol use, and drug use during pregnancy. *J Am Acad Child Adolesc Psychiatry* 41: 378-385.
2. Wakschlag LS, Pickett KE, Cook E Jr, Benowitz NL, Leventhal BL (2002) Maternal smoking during pregnancy and severe antisocial behavior in offspring: a review. *Am J Public Health* 92: 966-974.

3. Toschke AM, Montgomery SM, Pfeiffer U, von Kries R (2003) Early intrauterine exposure to tobacco-inhaled products and obesity. *Am J Epidemiol* 158: 1068-1074.
4. Koob GF, Volkow ND (2010) Neurocircuitry of addiction. *Neuropsychopharmacology* 35: 217-238.
5. Robinson TE, Berridge KC (1993) The neural basis of drug craving: an incentive-sensitization theory of addiction. *Brain Res Brain Res Rev* 18: 247-291.
6. Abood D, Conway T (1992) Health value and self-esteem as predictors of wellness behavior. *Health Values* 16: 20-26.
7. Lynch WJ, Roth ME, Carroll ME (2002) Biological basis of sex differences in drug abuse: preclinical and clinical studies. *Psychopharmacology (Berl)* 164: 121-137.
8. Mayfield RD, Harris RA, Schuckit MA (2008) Genetic factors influencing alcohol dependence. *Br J Pharmacol* 154: 275-287.
9. Whittessal M, Bachand A, Peel J, Brown M (2013) Familial, social and individual factors contributing to risk of adolescent substance use. *J Addict* 2013: 579310.
10. Cecil CAM, Walton E, Viding E (2016) Epigenetics of Addiction: Current Knowledge, Challenges, and Future Directions. *J Stud Alcohol Drugs* 77: 688-691.
11. Govorko D, Bekdash RA, Zhang C, Sarkar DK (2012) Male germline transmits fetal alcohol adverse effect on hypothalamic proopiomelanocortin gene across generations. *Biological Psychiatry* 72: 378-388.
12. Gangisetty O, Bekdash R, Maglakelidze G, Sarkar DK (2014) Fetal alcohol exposure alters proopiomelanocortin gene expression and hypothalamic-pituitary-adrenal axis function via increasing MeCP2 expression in the hypothalamus. *PLoS ONE* 9: e113228.
13. Nestler EJ (2014) Epigenetic mechanisms of drug addiction. *Neuropharmacology* 76: 259-268.