

6th Global Summit on

Toxicology & Applied Pharmacology

October 17-19, 2016 Houston, USA

Therapeutic applications of nicotine

Noreen Khan-Mayberry

NASA Office of Inspector General, USA

Nicotine has long been regarded as one of the most toxic chemicals/drugs to human health. However, for centuries, it has also been used therapeutically. Recently, investigations into its use for treating diseases such as ADHD, depression, Alzheimer & Parkinson diseases, digestive disorders, pain management and cognitive enhancement, have been eliciting more attention due to the development of non-prescription therapeutic products. Given that the toxicity of over the counter (OTC) nicotine products for use in cessation of smoking is generally accepted as low-to-none, when used as directed, product developers assume that these same levels are toxicologically safe for non-smoking cessation products. This may be the case, since the bulk of safety assessments for these products (such as electronic cigarettes) only point to risks from mishandling by non-target populations (children, pets, abusers) – not the levels of nicotine. Given the multiple routes of exposure (inhalation, ingestion and dermal absorption) that are already approved for nicotine replacement therapy (NRT) we explore and debate the best way for Toxicologists to assess non-NRT replacement therapeutic products.

Biography

Noreen Khan-Mayberry, Toxicologist & Wellness Media Expert, also known as "The Tox Doc", is a toxicologist who specializes in environmental, space, food and nutritional toxicology. Her personal mission is to translate the language of science for non-scientists in order to educate and inform the public of critical issues that affect their health and quality of life. Dr. Noreen has completed her Doctor of Philosophy (PhD), Environmental Toxicology in 2003 at the Texas Southern University. She is serving as an Editorial Member of *the Journal of Clinical Toxicology* and *The International Journal of Disaster Advances*. She has been with NASA since 2004 & worked as the first female Space Toxicologist. She has authored a number of research articles in Space Toxicology & Planetary Dust Toxicity.

noreen.n.khan-mayberry@nasa.gov

Notes: