The Subspecialty of Medical Toxicology

Introduction

Medical toxicology is a subspecialty of medicine focusing on toxicology and providing the diagnosis, management, and prevention of poisoning and other adverse effects due to medications, occupational and environmental toxicants, and biological agents. Medical toxicologists are involved in the assessment and treatment of a wide variety of problems, including acute or chronic poisoning, adverse drug reactions (ADRs), drug overdoses, envenomations, substance abuse, industrial accidents, and other chemical exposures.

Medical Toxicology is a field of medicine dedicated to the evaluation and treatment of poisoned and envenomated patients. This also includes adverse health effects of medications, occupational and environmental toxins, and biological agents.

Medical Toxicologists are involved in the care of people who come into contact with drugs, substances or other agents causing potentially adverse health effects. This entails expertise in many areas, such as: Unintentional and intentional overdoses of such agents, Exposure to industrial chemical products and environmental hazards, Drug abuse management, Diagnosis and management of exposures, Independent medical examinations, assessing injury or disability resulting from toxic exposures.

Medical toxicology focuses on the diagnosis, management and prevention of poisoning due to drugs, occupational and environmental toxins, and biological agents.

Examples of exposures commonly evaluated by medical toxicologists include acute drug overdoses, envenomations, ingestions of food borne or plant and mushroom toxins, hazardous exposures to chemical products, and the management of drug withdrawal syndromes. Medical toxicologists practice in a variety of professional settings including the direct treatment and consultation of acutely poisoned patients in emergency departments or intensive care units, poison control center management, industry and commerce, as well as government regulatory bodies.

Training in Medical Toxicology prepares you to work in a variety of settings including emergency departments and in-patient units where they directly treat acutely poisoned patients, outpatient clinics and occupational health settings where they evaluate the health impact from exposure to toxic substances in the home or workplace, National and regional poison control centers where they provide medical direction for health professionals, personal responders and the general public, academic institutions where they are involved in teaching, research, and improving evidence-based patient care, Industry and commerce where they contribute to pharmaceutical research and development, product safety, occupational health services, and regulatory compliance, Governmental agencies where they provide toxicology expertise at all levels from local health departments to federal entities, and clinical and forensic laboratories where they aid in the design, conduction and interpretation of diagnostic tests and forensic studies.
As the World battles through the Covid 19 Pandemic, the medical research and in particular forensic medicine plays a crucial role in assessing if this Covid 19 virus is a natural occurring or a manmade disaster. Even though there have been mixed reaction on the source and transmission of Covid 19 virus, but the forensics with the help of advances technologies can give an insights into this. A forensic assessment of such kind of viruses can help the world be prepared and ready for such pandemics in the future:

- Forensic medicine can be used in creating a vaccine for Covid 19,
- Preventing Pandemics in the future by looking for possible virus threats
- Shall help governments to maintain peace and not engage in germfare or biowar fare

I hope that the readers of this note understand that the objective of the journal is to publish studies that focus on advancing the care of patients suffering illness related to toxin, drug, or environmental exposures through bedside care, education, research, and public health endeavors.