

## **INVITED SPEAKERS**

### **Strengthening poisoning reporting system in Malaysia: Working together for a safer nation**



#### **Dr. Chi-Keung Chan**

graduated from the Faculty of Medicine of the University of Hong Kong in 1995. He obtained the fellowship in Emergency Medicine in 2004 and worked in the Hong Kong Poison Information Centre since its establishment in 2005. He was admitted to be the First Fellow in Clinical Toxicology in Hong Kong in 2016 and he is currently a specialist in clinical toxicology registered under the Medical Council of Hong Kong and currently practicing as Consultant at the Hong Kong Poison Control Centre/ Hong Kong Poison Information Centre/ Department of Clinical Toxicology, United Christian Hospital, Hong Kong.

#### **Epidemiological research on drug abuse in Hong Kong utilizing small data from HKPIC and big data from Hospital Authority**

This study investigates drug abuse patterns in Hong Kong by integrating small data from the Hong Kong Poison Information Centre (HKPIC) with big data from the Hospital Authority (HA). To explore the impact of drug abuse in our society, a population-based cohort study comparing mortality and healthcare services utilization rates between abusers and non-abusers was proposed. Utilizing existing population databases from HA and retrospective cohort data analysis provides a quick, efficient and cost-effective solution to this research question. However, big data from population databases can be nonspecific, heterogeneous, and inadequately maintained, with ambiguous or mis-coded data affecting research quality. A carefully planned search strategy, incorporating desirable data, is crucial for success. In contrast, data collected by poison centre tends to be comprehensive and highly specific, though its data volume is much smaller compared to population databases. This presentation outlines how to use our poison centre's "small data" to validate and refine the search strategy in the HA's "big data." Our findings highlight the importance of integrating diverse data types in public health research, offering a robust framework for addressing drug abuse challenges in urban settings.