

INVITED SPEAKERS

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



Dr. Nur Azzalia Kamaruzaman

is currently the Director of the National Poison Centre, Universiti Sains Malaysia (USM). She graduated with a Bachelor's Degree in Biotechnology (majoring in Drug Design and Development), with First Class Honours from the University of Queensland, Australia. She later earned her PhD in anticancer and genotoxicity studies from USM. Her expertise in Biotechnology, Cancer Molecular Biology, Genotoxicity and Toxicology paved the way for her research interests which include finding lead compounds for anticancer and other illnesses, as well as evaluating various toxicology aspects of compounds/substances.

She is active in research, teaching, student supervision, publications, industrial and community engagements and a holder of various national and international grants. She is also a recipient of many national and international awards for innovation and science communication involving cancer research. She is also a member of the Asia Pacific Association of Medical Toxicology (APAMT) and the Young Scientists Network – Academy of Sciences Malaysia (YSN-ASM) as well as an Editor-in-Chief for in-house publication of *PenawaRacun* (Remedy to Poison) Magazine. In 2022, she was only one out of six young Malaysian scientists who were selected to attend the prestigious 71st Lindau Nobel

The Impact of National Poison Centre Data in the Traditional Medicine Industry in Malaysia

The traditional medicine market in Malaysia has been expanding due to increased consumer interest in natural and holistic health approaches. The global shift toward wellness, aging populations, and rising costs of conventional healthcare have all contributed to the rise of traditional medicine. Despite its growth, the traditional medicine industry in Malaysia faces several challenges, one of which is standardization and quality control of products. Every year, the Ministry of Health Malaysia (MOH) seized thousands of illegal health and beauty products worth millions of Malaysian Ringgit. Not only does this issue affect the economy through significant money loss, the existence of such products in the market poses serious health risks to the consumers. The Malaysia National Poison Centre (NPC) plays a crucial role in ensuring safety, quality and proper use of traditional products in the country, aligning with the vision to 'promote health'. While its primary function is to manage poison-related emergencies and offer toxicological information, the NPC has extended its scope to address concerns related to traditional products. On average, the NPC receives approximately 400 samples per year, which range from health supplements, herbal products, cosmetics and processed food (e.g. premixed beverage). The NPC conducts toxicological research on products by evaluating their potential risks and side effects through analyses such as heavy metals, microbial limit test, adulterant tests (namely for men's health, slimming, pain killer/reduction, cosmetics for whitening and antidiabetic). Analyses have found common adulterants such as the use of erectile dysfunction drug i.e. sildenafil and tadalafil for men's health product, sibutramine and fenfluramine for slimming products, metformin for products claim to have antidiabetic effects and steroid i.e. dexamethasone for products to relieve pain. Realizing the magnitude of this problem based on the number and severity of adulterated samples received, the NPC has been actively educating the public by conducting workshops and seminars aimed at companies, herbalists and students regarding safety criteria and certified formulation for product development as well as potential risks and best practices. In addition, the NPC actively engages in public health campaigns to raise awareness about the dangers of counterfeit or unregulated traditional medicine products, especially those sold online or through unverified sources. The NPC is integral to the traditional medicine industry in Malaysia, primarily by enhancing consumer awareness on adulterated products and ensuring that traditional remedies produced and sold by manufacturers are of highest quality and safety. By playing active role through monitoring adverse effects, conducting research, educating the public, and collaborating with regulatory authorities, the NPC contributes to a safer integration of traditional medicine within Malaysia's healthcare system.