

## **INVITED SPEAKERS**



### **Professor Indira Madhavan**

is a Professor in the Department of Medicine at Government Medical College, Ernakulam, Kerala, India, with a robust background in medical education and toxicology. She holds an MSc in Medical Toxicology from the University of Colombo and an MD in General Medicine from The TN Dr. M.G.R. Medical University. Dr. Indira's extensive experience includes roles as a Senior Resident and Assistant Professor at various medical institutions in Kerala, culminating in her current professorship since 2020. Her research interests focus on the epidemiology of poisoning, particularly pesticide and rodenticide poisoning, and she is actively pursuing a Ph.D. on rodenticide poisoning under the Kerala University of Health Sciences. Dr. Indira has published 16 research articles and is a scholar of the Global Research Academy for Clinical Toxicology. Additionally, she has enrolled in an online MSc program in Clinical Trials at the University of Edinburgh, reflecting her commitment to advancing her expertise in clinical research. Her work aims to contribute significantly to the understanding and prevention of poisoning incidents in the region.

### Laboratory Diagnosis of Club Drug Toxicity: Pearls and Pitfalls

The recreational use of club drugs is on the rise globally, with India and Southeast Asia witnessing a significant increase in related poisonings, particularly in urban areas where these substances are more accessible to the youth. We developed these guidelines through a systematic review of prevalent cases and expert consensus, to equip healthcare professionals with evidence-based recommendations to optimize care in managing club drug toxicity in the emergency department, in India and South East Asia. In most clinical settings, the priority should be given to immediate resuscitation rather than waiting for toxicology results. Recommendations against routine laboratory testing in the emergency department are supported by the limited accuracy of current methods, false positive results and limited accessibility of the tests. Diagnosis of stimulant overdose which includes MDMA, cocaine and amphetamine is done clinically based on toxidromes. Urine toxicological screening is routinely not recommended. Routine use of urine toxicological screening for opioid overdose is not recommended as false negatives results also can occur. Routine use of urine tox screen is not recommended for cannabis. It has no role in diagnosing acute intoxication in a chronic user and does not alter the management as well. Samples usually tested are plasma, urine, saliva, and hair. Detection windows depend on factors like frequency of use, timing of sample collection, body fat, and urine dilution. Synthetic cannabinoids are usually undetectable on conventional screens. We do not recommend routine serum or urine testing for the management of patients with suspected Benzodiazepine overdose. Laboratory testing of GHB is not routinely recommended in acute overdose. Urine testing is not useful after 12 hours of exposure or when the time of exposure is unknown. Laboratory testing of LSD, dextromethorphan and ketamine is not routinely recommended in acute clinical settings. Withdrawal syndromes are diagnosed clinically. Blood or urine concentrations of the drugs are likely to be negative in the withdrawal state and hence not recommended for diagnosis.