Oral Abstracts

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ABUSE AND DETECTION OF NEW PSYCHOACTIVE SUBSTANCES IN SINGAPORE

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Abstract: The abuse of New Psychoactive Substances (NPS), commonly known as "designer drugs", "legal highs", "herbal highs", "research chemicals" or "bath salts" has increased substantially in recent years. Typically, these NPS are "designed" by introducing slight structural modifications to the psychoactive substances to circumvent drug control. This presentation will share with the audience how our analytical toxicology laboratory detects the presence of NPS in biological samples submitted for toxicology screening, the abuse trend of NPS in Singapore, and some case studies in clinical and postmortem cases.

Learning Objectives:

- 1. Legislative control of New Psychoactive Substances (NPS) in Singapore
- 2. Abuse trend of NPS in Singapore

Methods: A review of past clinical and forensic toxicology cases where NPS were detected with various gas and liquid chromatography with mass spectrometers

Results: NPS commonly detected in Singapore were synthetic cathinones (e.g. ethylone, methylone, methylmethcathinone, methylethcathinone), amphetamine-type stimulants (e.g. paramethoxymethamphetamine, methiopropamine), tryptamines (e.g. 5-MeO-DiPT, 5-MeO-MiPT) and synthetic cannabinoids (e.g. JWH-018, AM-2201).