



K7 Illicit Drug Related Fatalities in Taiwan During 1991-2003

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The goal of this presentation is to understand the epidemiology of illicit drug abuse in Taiwan during 1991-2003.

This presentation will impact the forensic community and/or humanity by providing data which supports that MAP-induced toxicity is closely related to the violent and destructive behaviors of MAP abusers.

Methamphetamine (MAP) and narcotics are considered two major illicit drugs that have resulted in serious social problems in Taiwan and other parts of the world. In addition to illicit drugs of narcotics-related substances (57.8% including opiate, morphine, and heroin), MAP constitutes the majority (41.8% including MAP seminished material, MDMA and cannabis) of illicit drugs seized by the Investigation Bureau, Ministry of Justice and the National Police Administration (Taiwan 2003). By the end of 2003, violation of the Laws for the Control of Narcotics and the Laws for the Control of Illicit Substance constituted 16,013 cases in prison, which represented 39% of the 41,245 prisoners in Taiwan. This retrospective study of illicit drug-related decedents is proposed to understand the characteristics of MAP-related and narcotics-related fatalities by analyzing toxicological profiles, sex, age, and manners of death. During 1991 to 2003, illicit drug-related cases comprise 1,145 out of 14,887 forensic autopsy cases (7.7%) collected from the Institute of Forensic Medicine (Taiwan). MAP-related, narcotics-related, and multi-drug-related fatalities (constitute both MAP and narcotics-related substance in blood fluid) represent 371 (44%), 295 (35%) and 175 (21%) of the forensic autopsy cases, respectively. The mean age (average 30.1±1.7 years old) of MAP-related, narcotics-related, and multi-drug-related was 32.1±2.0, 30.2±1.5 and 28.1±1.7 years old. Males predominated (average 75%), MAP-related (73%), narcotics-related (78%), and multi-drug related (74%) fatalities. Manners of death of 371 MAP-related fatalities during 1991-2003 of natural, accidental, homicidal, suicidal, and unknown cause are 13%, 46%, 20%, 15%, and 6%, respectively. Manners of death of 295 narcotics-related fatalities during 1991-2003 of natural, accidental, homicidal, suicidal cause and unknown cause are 9%, 76%, 5%, 6%, and 4%, respectively. Mean concentration of MAP in blood and urine of MAP-related fatalities are 4.75±0.73 mg/L and 17.38±2.81 mg/L, respectively. Mean concentration of morphine in blood and urine of narcotics-related fatalities are 0.50±0.06 mg/L and 8.39±1.45 mg/L, respectively. Whereas higher and lower than 3 mg/L MAP concentration of blood indicated an over-dosage of illicit drug directly related to the accidental and suicidal causes of death and homicidal cause, respectively. The percentage of homicidal cause of MAP-related fatalities (20%) is higher than that of narcotics-related fatalities (5%). In conclusion, this data supports that the MAP-induced toxicity is closely related to the violent and destructive behaviors of MAP abusers.

Illicit Drug, Methamphetamine, Narcotics