

**7TH LUBLIN INTERNATIONAL MEDICAL
CONGRESS FOR STUDENTS AND YOUNG
DOCTORS**

LUBLIN, 26TH - 28TH NOVEMBER 2020

STUDENTS' SCIENTIFIC SOCIETY
OF THE MEDICAL UNIVERSITY OF LUBLIN



Published under the CC-BY-NC-SA license

LUBLIN 2020

PSYCHOACTIVE SUBSTANCE ABUSE: SPECTRUM OF ABUSED DRUGS AND OVERDOSE TRENDS

Algirdas Konradas Liekis, Ignas Planutis

Scientific supervisor: Jurgitas Stasiuniene, PhD

Vilnius University, Department of Pathology, Forensic Medicine and Pharmacology

Introduction: The object of the study was to determine which psychoactive substances were the most frequently found in the body fluids of the deceased in Vilnius county as well as the characteristics of the deceased themselves such as age and sex.

Methods: A retrospective data analysis of the State Forensic Medicine Service autopsy records was performed. 239 depersonalised records from the years spanning from 2013 to 2020 were identified and analysed with the R commander software.

Results: From the 239 deceased persons identified in the analysis 84% (200) were males, while 16% (39) were women. The average age of the deceased was 39.98(±10.33).

Toxicological reports reveal that during the study period of 2013-2020 the most frequently encountered drugs were opiates and opioids. Among them, the most commonly encountered were morphine (105 cases, but morphine is a metabolite of heroin and codeine), methadone (39 cases), codeine (34 cases), heroin (31 cases), while fentanyl derivatives were involved in 21 cases. Opioids users were also frequently found to have satellite substances in their blood. Of these diphenhydramine was discovered in 59 cases cases, while clonazepam was found in 26 cases. Over half of the cases (54% or 129) involved concomitant alcohol intoxication. The average blood concentration of ethanol was 1.68 ±0.89 g/l, while the average concentration in urine was 2.16 ±1.1 g/L. Manner of death was something other than overdose in 41% (91 cases), while the remaining 59% (148 cases) were overdose deaths. In a total of 6 cases the substance responsible for the fatal intoxication was not successfully identified.

Conclusions: The majority of deceased were middle-aged males. The most frequently found drugs were opiates, though a growing trend towards more opioid related deaths is observed. Concomitant alcohol intoxication was involved in more than half of the cases.

Keywords: drug abuse, psychoactive substances, overdose, alcohol intoxication, drug intoxication.