Open Access

Editorial on Novel Psychoactive Substances

Sahithi Chandra*

Department of Forensic Medicine, Jawaharlal Nehru Technological University, Hyderabad, Telangana, India

Editorial

New Psychoactive Substances (NPS) are a large category of natural and synthetic substances, including synthetic opioids, synthetic cannabinoids, synthetic cathinones, and other NPS classes, that were not subject to UN drug control agreements from 1961 to 1971. Synthetic opioids, for example, are a huge public-health concern. To assess fentanyl, fentanyl analogues, and other synthetic opioid-related deaths, a literature search was conducted utilising public databases (such as PubMed, Google Scholar, and Scopus). The investigation utilised the terms "fentanyl," "fentanyl analogues," "death," "overdose," "intoxication," "synthetic opioids," "Novel Psychoactive Substances," "MT-45," "AH-7921," and "U-47700." The frequent involvement of fentanyls and synthetic opioids in adverse effects, especially affecting the central nervous system, cardiovascular, and pulmonary systems, was concluded from our literature review. The information revealed a wide range of chemicals and fatal amounts. In the majority of documented cases, multidrugrelated mortality appeared to be fairly common. A multidisciplinary strategy should be used to investigate the role of novel synthetic opioid intoxication in death, with the goal of framing each case and leading the research toward focused toxicological tests.

New Psychoactive Chemicals (NPS) are a diverse group of non-controlled substances sold on the black market (e.g., smart shops, the internet, and the "darknet"). The use of NPS, which is frequently combined with other drugs of abuse and alcohol, has resulted in an increase in emergency room visits due to overdoses and a high number of deaths. By July 2017, the United Nations Office on Drugs and Crime (UNODC) had received 739 distinct NPS reports [1]. Synthetic opioids have overtaken synthetic cannabinoids (179 substances), cathinones (130), and phenethylamines (94) as the fourth largest group of chemicals detected in 2017, according to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) report [2].

Fentanyl, its analogues utilised in medical therapy (e.g., sufentanil, alfentanil, and remifentanil), and innovative non-pharmaceutical fentanyls not approved for human medical use are all classified as synthetic opioids. They're used alone or in combination with heroin or other opioids more frequently [3,4]. This paper examines the literature on fentanyl and synthetic opioid overdose deaths, both alone and in combination with other psychoactive drugs (such as cocaine, benzodiazepine, alcohol, and other opioids), and investigates the

characteristics and complexity of such deaths, analysing all data useful to the forensic pathologist [5].

To review fentanyl-, fentanyl analogs-, and other synthetic opioids-related deaths, a literature search was conducted utilising public databases (such as PubMed, Google Scholar, and Scopus). The investigation utilised the terms "fentanyl," "fentanyl analogues," "death," "overdose," "intoxication," "synthetic opioids," "Novel Psychoactive Substances," "MT-45," "AH-7921," and "U-47700." The information was gathered between 1990 and June 2018. Only fatalities were taken into account. There were no limitations in terms of language. There were various types of papers included. We also looked at the reference lists of the publications we found, as well as PubMed suggestions. All of the eligible papers' full texts were obtained. This review includes a total of 128 articles. The circumstances of death (e.g., trauma, external injuries) and drug exposure were among the data reviewed (pharmaceutical versus illicit drug use).

Conflict of Interest

None.

References

- 1. Lemmens, Harry J.M. "Pharmacokinetic-pharmacodynamic relationships for opioids in balanced anaesthesia." *Clin Pharmacokinet* 29 (1995): 231-242.
- Armenian, Patil, Kathy T. Vo, Jill Barr-Walker, and Kara L. Lynch. "Fentanyl, fentanyl analogs and novel synthetic opioids: A comprehensive review." *Neuropharmacol* 134 (2018): 121-132.
- Zawilska, Jolanta B. "An expanding world of novel psychoactive substances: opioids." Front Psychiatry 8 (2017): 110.
- Hempstead, Katherine, and Emel O. Yildirim. "Supply-side response to declining heroin purity: Fentanyl overdose episode in New Jersey." *Health Econ* 23 (2014): 688-705.
- Carroll, Jennifer J., Brandon D.L. Marshall, Josiah D. Rich, and Traci C. Green. "Exposure to fentanyl-contaminated heroin and overdose risk among illicit opioid users in Rhode Island: A mixed methods study." *Int J Drug Policy* 46 (2017):136-145.

How to cite this article: Chandra, Sahithi. "Editorial on Novel Psychoactive Substances." J Forensic Med 7 (2022): 169.

^{*}Address for correspondence: Sahithi Chandra, Department of Forensic Medicine, Jawaharlal Nehru Technological University, Hyderabad, Telangana, India, E-mail: chandra-s84@gmail.com

Copyright: © 2022 Chandra S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 12 May, 2022, Manuscript No. JFM-22-62275; Editor assigned: 14 May, 2022, PreQC No. P-62275; Reviewed: 19 May, 2022, QC No. Q-62275; Revised: 24 May, 2022, Manuscript No. R-62275; Published: 29 May, 2022, DOI: 10.37421/2472-1026.2022.7.169