PROFILE OF NEW PSYCHOATIVE SUBSTANCES IDENTIFIED IN MINAS GERAIS STATE

Luísa Linhares Moraes[1]; Pablo Alves Marinho[2]; Arlene Lima Morais Coutinho[2]; Bárbara Ferreira Coelho Lara[2]; Beatriz Colen Fonseca[2]; Cintia Fontes Alves[2]; Cláudia Dorinda Ramos Ricoy[2]; Fernando Pereira Macedo[2]; José Coelho Neto[2]; Karine Moreira Oliveira[2]; Paulo Eduardo Nunes[2]; Andrade Barbosa[2]; Renata Fontes Prado Faraco[2]; Ricardo Martins Duarte Byrro[2]; Rogério Araújo Lordeiro[2]; Stela Maris Martins de Castro[2]; Washington Xavier de Paula[2]; Yuri Machado[2]; Clésia Cristina Nascentes[1].

[1]Federal University of Minas Gerais - Minas Gerais; [2]Criminalist Institute of Minas Gerais - Minas Gerais.

INTRODUCTION: According to the United Nations Office on Drugs and Crime, a new psychoactive substance (NPS) is a substance of abuse, either in a pure form or a preparation, that is not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances, but which may pose a public health threat. Although there have been many cases of intoxication and deaths due to their use worldwide, there is limited knowledge about the effects of these substances, as well as the profile of NPS seized, especially in Brazil. This lack of information hinders the effectiveness of law enforcement, forensic investigations, and public health responses. Thus, considering that NPS identifications have increased in Brazil in recent years, monitoring these substances is essential. **OBJECTIVE:** To identify the main NPS seized in the state of Minas Gerais between 2022 and 2024. **MATERIALS AND METHODS:** The results of forensic chemical analyses carried out at the Institute of Criminalistics of Minas Gerais between 2022 and 2024 were examined. The variety of seized NPS, the most prevalent compounds, and possible trends were identified. **RESULTS AND CONCLUSION:** According to the number of NPS identifications made during the study period (n=914), phenethylamine, mainly NBOH compounds, accounted for 47% of identifications, followed by synthetic cannabinoids with 37%. Among synthetic cannabinoids, MDMB-4-en-PINACA, ADB-BUTINACA, MDMB-BUTINACA, 5F-ADB, and ADB-4en-PINACA were the most prevalent. Hallucinogenic or dissociative NPS represented 11.5% of results, with ketamine being the most frequently identified substance. Synthetic cathinones represented only 2.2% of the identifications, with dipentylone being the most identified. We highlight the identification of bromazolam, an

illegal benzodiazepine, and metonitazene, a potent synthetic opioid, in herbal samples, always in association with synthetic cannabinoids, in 2022 and 2023. Regarding the types of drugs presentation, blotter papers were the most analyzed samples, representing over 75% of seizures, followed by homemade tablets (8%) and herbal materials (5%). In this context, forensic laboratory monitoring of NPS is highly relevant to identify and assess usage and seizure trends, supporting the development of rapid interventions in public health and law enforcement. **ACKNOWLEDGMENT**: CNPq, PCMG and INCT-SP.

KEYWORDS: New psychoactive substances; monitoring; synthetic drugs.