ORAL PRESENTATIONS

[ID-O#032] Acute Toxicity Presentations Relating to Alpha-pyrrolidinovalerophenone (alpha-PVP) and Alpha-pyrrolidinohexanophenone (alpha-PHP) Reported to Euro-DEN Plus Between 2013 and 2022.

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Objective: The WHO Expert Committee on Drug Dependence recommended that the synthetic cathinones alpha-PVP and alpha-PHP should be in Schedule-II of the 1971 Convention on Psychotropic Substances. We summarise here Euro-DEN Plus exposures to alpha-PVP and alpha-PHP.

Methods: The Euro-DEN Plus database was interrogated to identify presentations involving alpha-PVP and/or alpha-PHP between October 2013 and December 2022. Demographics and clinical features were extracted from identified cases. Statistical analysis between the alpha-PVP and alpha-PHP presentations was undertaken by unpaired T-test or Chi-squared testing as appropriate.

Results: There were 40 alpha-PVP presentations from eleven countries [Spain–8, Germany–7, Belgium–5, UK–4, France–3, Malta–2 and 1 in each of Ireland, Lithuania, Poland, Netherlands and Slovakia]; 36 (90%) were male. There were 8 alpha- PHP presentations from four countries [France–4, UK–2, Belgium–1, Netherlands–1]; all were male. The alpha-PHP presentations were significantly older than the alpha-PVP presentations (42.6±2.1years -vs.- 30.9±8.6years, p<0.001). All alpha-PHP presentations involved at least one other drug or ethanol whereas
13 of the alpha-PVP presentations only involved alpha-PVP. There was no difference in the frequency of any neuropsychiatric symptom/sign (anxiety, hallucinations, agitation/aggression, psychosis, seizures and/or drowsiness) both groups (alpha-PVP: 80% -vs.- alpha-PHP: 87.5%, p=0.062). The presence of any cardiovascular symptom/sign (palpitations, chest pain, hypertension and/or arrhythmias) was more common with alpha-PHP (62.5%) compared to alpha-PVP (25%),p=0.04). Alpha-PHP use was associated with a higher heart rate (121.5±16.6-vs.- 99.8±30.4, p=0.06) and systolic blood pressure (166.9±44.0 -vs.- 135.9±19.4, p=0.002). There were no deaths with either drug.

Conclusions: Alpha-PVP and alpha-PHP toxicity appears to be similar to that seen with other synthetic cathinones such as mephedrone and 3,4-Methylenedioxypyrovalerone (MDPV).
Presentations involving these drugs have increased despite WHO recommendations regarding their control and further actions are required to reduce the harms associated with the use of alpha-PHP and alpha-PVP.