New study highlights risks of synthetic cannabis

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Synthetic cannabinoids, often known as synthetic cannabis or by common trade names such as ‘Kronic’ and ‘Spice’, are more potent than cannabis and exhibit effects more typically associated with psychostimulants, a new study has found.

Led by researchers from the National Drug and Alcohol Research Centre (NDARC) at UNSW Sydney, the study reviewed all recorded cases of synthetic cannabinoid-related sudden or unnatural death in Australia between 2000 and 2017.

There were 55 cases identified where synthetic cannabinoid use was contributory to death. The most common cause of death was accidental drug toxicity, however a fifth of cases were attributed to cardiovascular disease.

NDARC’s Professor Shane Darke notes that there was a high representation of relatively older males dying following use of synthetic cannabinoids, with approximately half of the deaths occurring in men aged 40 or more.

“It’s important that people are aware of the risks associated with synthetic cannabinoids. There is evidence of people switching to these drugs as substitutes for cannabis due to accessibility or in an attempt to quit,” Professor Darke said.

“People are consuming a drug that they may expect to have effects similar to cannabis, but actually more closely resemble methamphetamine. Synthetic cannabis can cause a heart attack, particularly in those with existing heart conditions.”

A range of different chemicals that vary substantially in potency and effects are sold as synthetic cannabis and new products are being created on a regular basis.

Professor Darke said people may not be aware of the difference between cannabis and synthetic cannabis, nor know the particular chemical they’ve consumed.

“It’s reasonable to be confused. Synthetic cannabis products are often labelled as having cannabis-like effects and are professionally marketed. These products may contain different types of chemicals in varying quantities, meaning the effects experienced can differ between products.”

“These products have side effects that are far broader and more severe than cannabis – the most severe being death.”

The potential harms of synthetic cannabinoids include:

- Cardiovascular problems such as high blood pressure, increased heart rate, arrhythmia (abnormal heart rhythm) and heart attack
- Seizures and strokes
- Delirium, psychosis and hallucinations
- Severe hyperthermia
- Severe respiratory depression
• Acute kidney injury

*Characteristics and circumstances of synthetic cannabinoid-related death*, published in *Clinical Toxicology*, is the first national clinical profile of synthetic cannabinoid-related death.

The study confirms mortality associated with synthetic cannabinoids and details the characteristics of those who have died.

[Click here](#) to access the paper.

**Citation:** Shane Darke, Johan Duflou, Michael Farrell, Amy Peacock & Julia Lappin (2019): Characteristics and circumstances of synthetic cannabinoid-related death, Clinical Toxicology, DOI: 10.1080/15563650.2019.1647344

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