Positive Choices
Drug and Alcohol Information
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Ketamine: current trends and what they mean for young people

Introduction

You may have noticed some recent media attention around ketamine for a couple of reasons. A ketamine nasal spray was recently subsidised by the government for people living with treatment resistant depression (when someone has tried anti-depressants or other treatments and not responded). At the same time, summer festival coverage highlighted the non-prescribed use of ketamine at music events, alongside broader commentary about rising non-prescribed use.

In Australia, there is some evidence that more people in their 20s are illegally using ketamine in 2023 compared to 2019. Data from Australia's largest and most recent national drug survey found that 4.6% of people aged 18-24 years old had used ketamine in the last 12 months. While rates of use remain low, this is an increase from 2016 where 1.6% of young adults reported using ketamine.

There isn't enough evidence to say if there has been an increase among school aged Australians, though the data suggest rates of use remain low (less than 2%).

What is ketamine?

Ketamine is a type of drug known as a 'dissociative'. Medically, ketamine is mainly used as an anaesthetic and to manage pain. More recently, ketamine has been used to treat treatment-resistant depression. In the treatment of depression, ketamine is given under the supervision of a clinician, and the dose is carefully controlled.

Outside of medical settings, some people access ketamine illegally and use it for its drug effects (i.e. to get 'high').

What are the effects?

Non-prescribed use of ketamine is usually taken intranasally ('snorted'), with effects fast-acting (usually 5-15 minutes after use) and generally involves doses much lower than those used in anaesthesia. Effects include:

- dissociation
- relaxation
- a 'body high' or feeling of 'floating'
- euphoria
- feeling creative
- hallucinations
- confusion
- loss of coordination
- drowsiness

At higher (but still below anaesthetic) doses, people may experience a state often called a 'k-hole'. This is a state of strong dissociation. It may include 'out of body' experiences, changes to senses, and feelings that time and space have changed. For some, a k-hole experience may be quite distressing, especially if it is unexpected.

Harms associated with regular and repeated ketamine use

Regular and repeated ketamine use can lead to urinary tract damage. The urinary tract includes the kidneys, ureters, bladder, and urethra. Common symptoms include:

- needing to urinate more often
- incontinence (not being able to hold in urine)
- dysuria (bladder pain)
- haematuria (blood in the urine)

Long term use of ketamine can also cause stomach pain called 'K cramps'. It can also damage the bile ducts, which are the tubes that carry bile to the liver, and it may damage the liver itself. Ketamine can also affect the brain, leading to problems with memory and thinking.

Internationally, in places such as the United Kingdom, hospitals have seen an increase in urinary tract-related ketamine admissions. These admissions have mainly been for young adults. A similar rise is currently not reflected in Australia, and may be due to differences in illicit drug use and drug markets between the UK and Australia.

Aligning with increases in urology related concerns, the UK has also seen an increase in treatment episodes for ketamine dependence.

Ketamine and other drugs

Using ketamine together with alcohol or other drugs can carry additional risks. When ketamine is combined with alcohol, nausea and vomiting are more likely. In Australia there has been an increase in deaths over the past 2 decades involving ketamine taken together with other drugs, including opioids, cocaine, and benzodiazepines.

Is it actually ketamine?

Unlike ketamine used medically, ketamine sold illegally could contain unexpected substances or be of a varying strength or purity to what is expected. Drugs thought to be ketamine have been tested and found to be analogues (drugs with a similar structure to ketamine but that we often know very little about) or contain other substances. These substances include opioids, MDMA, and methamphetamine. For more information and drug alerts, visit theknow.org.au.

What's next?

Researchers are looking at long-term ketamine effects and Australia-specific trends and behaviours. There is also research looking into ketamine as a treatment option for substance use disorders such as methamphetamine use disorder.

This blog post was developed by the Positive Choices team in collaboration with Stassi Kypri at the National Centre for Clinical Research on Emerging Drugs, UNSW.