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Non-prescribed ketamine use is rising in the UK

More awareness, research, and treatments are needed

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The rise in non-prescribed use of ketamine across the UK in recent years is concerning because of the potential effects on physical and mental wellbeing and overall quality of life. Despite its classification as a class B drug under the Misuse of Drugs Act 1971, public awareness of the risks and long term harms associated with ketamine remains insufficient.

Ketamine is used clinically as a general anaesthetic, with subanaesthetic doses prescribed for chronic pain, treatment resistant depression, and suicidality.[1] Recent studies have shown promise for its use in the treatment of post-traumatic stress disorder and opioid and alcohol dependence.[2] Although intranasal esketamine is licensed for treatment of depression, it is not approved by the National Institute for Health and Care Excellence. Generic racemic ketamine is often used as a cheaper off-label alternative.

However, ketamine is increasingly used recreationally at individual doses of 250 mg or more,[3] much higher than those prescribed for depression (0.1-0.75 mg/kg intravenously),[4] producing euphoria and dissociative states.[5] Its low cost has made it popular among young people, particularly 16-24 year olds. The prevalence of self-reported use in the past year in this age group rose from 1.7% to 3.8% between 2010 and 2023.[6]

As ketamine use increases, more individuals are seeking treatment for addiction. The number of people starting treatment for ketamine addiction in 2023-24 was 3609, more than eight times higher than the 426 reported in 2014-15.[7] However, ketamine use disorders remain inadequately defined within current classification systems. Neither ICD-11 nor DSM-5 include ketamine specific criteria for dependence or withdrawal, or thresholds for clinically relevant harm.[8]

Acute harms of ketamine use relate to vulnerability and injuries. Long term use can seriously harm both physical and mental health, diminishing quality of life, affecting personal relationships, and impairing academic or professional performance.[9] Ketamine induced uropathy from ulceration and thickening of the bladder is a common and serious complication. In the UK, 27% of regular ketamine users report at least one urological symptom—dysuria, frequency, incontinence, haematuria, or retention—with severity correlated with dose and frequency of use.[10] Treatment requires abstinence.[11] If abstinence is not achieved, irreversible bladder and kidney damage can occur, requiring urinary tract reconstruction. Long term ketamine use is also associated with "K cramps"—severe abdominal pain. This may be related to liver disease that is similar to primary sclerosing cholangitis but less inflammatory and progressive.[12]

Cognitive impairment and psychiatric comorbidities are often observed in people who use ketamine long term.[13] Ketamine related neurotoxicity affects working, semantic, spatial, and episodic memory, and executive functions.[13] Severe depressive symptoms have been reported in 35% of long term users.[14]

Barriers to appropriate care

Patients attending the emergency department report that healthcare professionals do not seem aware that ketamine can cause addiction.[15] Patients may also not disclose ketamine use because of self-stigma and legal status. Thus, doctors face the challenge of identifying use when it is not volunteered and distinguishing occasional recreational use from addiction. Ketamine users surveyed online rarely attend the emergency department, and those who do are more likely to want to change their behaviour than the general population of people who take ketamine, suggesting they may represent a more severely affected group.[16]

Physical health harms are associated with frequency of use, so all those disclosing use should be asked about frequency. Patients attending with urinary or abdominal symptoms, particularly young people, should routinely be asked about ketamine use. End organ damage is associated with heavy chronic use, so when this is detected, doctors should check liver function and refer to urology and addiction services.

Specialist addiction services are primarily based on psychosocial approaches that are not substance specific. People who use ketamine report that services lack an understanding of ketamine addiction and offer minimal treatment options specific to the drug. As a result, treatment is often partially effective.[15] Their suggestions to increase uptake of treatment include management of physical health sequelae, particularly pain; a harm reduction approach, including advice to avoid use of shared straws or banknote, check drugs, avoid polysubstance use, and maintain hydration and nutrition; addressing underlying mental health problems; and specific medication. However, despite case studies suggesting that benzodiazepines mitigate ketamine withdrawal and naltrexone supports relapse prevention, there are no clinical trials or formal observational research on either intervention.[17]

Developing consensus diagnostic criteria, a national registry, and screening tools could support earlier identification, guide treatment, and help evaluate emerging therapies. Balancing ketamine's medical value with rising non-prescribed use is a complex challenge. The growth of private clinics offering ketamine to treat depression and other psychiatric

conditions, alongside upbeat media coverage, risks normalising unsupervised or self-directed use. The Home Office is considering reclassifying ketamine as class A, but opinions remain divided. A proportionate response should go beyond legislation to include clear governance of therapeutic use, investment in treatment and prevention, and balanced public messaging.

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