Psychostimulants Play a Major Role in Fatal Strokes Among Young Adults

Release Date: Wednesday, April 3, 2019 12:01 am EDT

Terms: Journal of Forensic Sciences, Wiley Research Headlines, All Journals and Research, Health Sciences

Dateline City: Hoboken, NJ

Contacts: Josh Glickman +1 201-748-6572 (US) Penny Smith +44 (0) 1243 770448 (UK) newsroom@wiley.com

An estimated 76 million people use psychostimulants, which include illicit drugs such as methamphetamine, cocaine, and 3,4-methylenedioxymethamphetamine, as well as prescription stimulants. A new Journal of Forensic Sciences study from Australia is the first to present national data of psychostimulant use in young adults who experienced a fatal stroke.

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Investigators found that from 2009–2016, psychostimulant users constituted nearly a fifth of the 279 cases of fatal stroke in adults aged 15–44 years, the majority of which had evidence of consumption immediately prior to the fatal stroke.

Methamphetamine was overwhelmingly the drug implicated. The median methamphetamine concentration was similar to that reported for all methamphetamine-related deaths in Australia but less than half that of deaths attributed solely to methamphetamine toxicity. This suggests that high concentrations are not essential to cause a methamphetamine-related stroke.

Cases of haemorrhagic stroke were also documented involving other illicit and licit psychostimulants. In no cases were medications for attention deficit hyperactivity disorder identified.

"This is the first study to show the major role that psychostimulants play in causing fatal strokes amongst young adults," said lead author Prof. Shane Darke, of the University of New South Wales, in Australia. "All of these deaths were preventable. Users of these drugs, however, appear to be largely unaware of the risk. Psychostimulant users, and those treating them, need to be aware of their elevated stroke risk, which may have devastating consequences."

Additional Information


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Language: English