Adverse experiences resulting in emergency medical treatment seeking following the use of lysergic acid diethylamide (LSD) and magic mushrooms

EMMA I. KOPRA¹, <u>JASON A. FERRIS</u>², JAMES J. RUCKER^{1,3}, BENJAMIN MCCLURE⁴, ALLAN H. YOUNG^{1,3}, CAROLINE S. COPELAND^{5,6}, ADAM R. WINSTOCK^{7,8}

¹Department of Psychological Medicine, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom, ²Centre for Health Services Research, Faculty of Medicine, The University of Queensland, Brisbane, Australia, ³South London and Maudsley NHS Foundation Trust, London, United Kingdom, ⁴Belfast Health and Social Care Trust, Belfast, United Kingdom, ⁵Institute of Pharmaceutical Sciences, Faculty of Life Sciences and Medicine, King's College London, London, United Kingdom ⁶National Programme of Substance Abuse Deaths, Population Health Research Institute, St George's, University of London, London, United Kingdom, ⁷Institute of Epidemiology and Health Care, University College London, London, United Kingdom, ⁸Global Drug Survey Ltd, London, United Kingdom

Presenter's email: < j.ferris@uq.edu.au

Introduction and Aims: Recreational psychedelic use is growing in popularity amidst increasing research and global public interest on their therapeutic potential. The potent psychotropic effects of psychedelics can however result in adverse reactions. In two separate investigations, we examined the 12-month prevalence and nature of LSD and psilocybin mushroom-related adverse experiences resulting in emergency medical treatment (EMT) seeking in an international sample of people reporting use of these substances.

Design and Methods: We use data from the Global Drug Survey 2017, a large anonymous online survey on drug use patterns conducted between November 2016 and January 2017.

Results: 102 (1.0%) out of 10,293 respondents who used LSD in the past year, and 19 (0.2%) out of 9,233 who used magic mushrooms, reported past year EMT seeking. Younger age predicted higher risk of EMT seeking with both substances, besides comorbid mental health conditions and higher frequency of use with LSD. The most common EMT presentation symptoms were psychological, including anxiety/panic, paranoia/suspiciousness and confusion, with the most reported reasons being poor 'setting' and 'mindset'. Most respondents in both samples recovered within 24 hours, but eleven participants from the LSD sample experienced persistent issues after four weeks.

Discussions and Conclusions: The results suggest that LSD and magic mushrooms are relatively safe drugs in recreational settings. Adverse reactions are typically short-lived, self-limiting, and psychological in nature. Suboptimal mindset and setting were commonly reported suspected contributory factors. Psilocybin-containing mushrooms appear to pose lower risk to LSD regarding both the prevalence and duration of adverse reactions.

Implications for Practice or Policy: Our results can inform the public, policy makers and medical professionals of psychedelics' safety, and of prevention and management of adverse reactions. Although differential from clinical use, the favourable safety profile of recreational use also support calls for less restrictive regulations on experimental psychedelic research.

Disclosure of Interest Statement: A.W. is the founder and owner of the Global Drug Survey. J.F. is part of the Global Drug Survey Executive Committee but has no conflict of interest to declare. King's College London receives grant funding for phase 1 and 2 trials of psilocybin-assisted psychotherapy for depression, led by J.R. and A.Y., from COMPASS Pathways Ltd. J.R. has attended trial-related meetings paid for by COMPASS Pathways Ltd and has received consulting fees from Clerkenwell Health and Beckley PsyTech. A.Y. has received honoraria for attending advisory boards and presenting lectures for Allergan, Astra Zeneca, Bionomics, COMPASS, Eli Lilly, Janssen, LivaNova, Lundbeck, Servier, Sumitomo Dainippon Pharma and Sunovion; and has received consulting fees from Johnson & Johnson and LivaNova.