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Assistant Professor Thanjira Jiranantakan received her M.P.H. (Environmental Science) from the University of California Berkeley, Diploma of American Board of Preventive Medicine (Occupational Medicine), Clinical Fellowship in Medical Toxicology from the University of California San Francisco, and Diploma of Thai Board of Internal Medicine from Mahidol University. She has broadened her experience through working with the World Health Organization (Headquarters and SEARO), Federal Occupational Safety and Health Administration (OSHA, USA) and many other government bodies and NGOs. Her interest focuses on antidote management system, mushroom poisoning, occupational toxicology and the applications of technologies including simulation in toxicology education and multidisciplinary training.

Psilocybin/Magic Mushroom: A potential Role in Medical Therapy

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Background: Psilocybin mushrooms, also known as magic mushrooms, are used as a recreational substance given their wide range of psychoactive effects. Psilocybin has been explored as an alternative medical remedy for patient to overcome depression and anxiety.

Methods: Epidemiologic data, pharmacological data and research concerning the medical benefits of psilocybin were reviewed.

Results: The recreational use of magic mushrooms (or shrooms) has been reported worldwide. The species of mushrooms used varies by region. Common routes of exposures include ingestion and smoking. Death from recreational purpose is rare. Psilocybin plays a major role within the human body, where it is converted to psilocin with greater psychoactive effects. The onset of effects is 5-30 minutes depending on the routes of exposures. The effects typically peak at 1-2 hours, last for 4-6 hours but less than 24 hours. Psilocybin has been studied for its benefits to improve depression, anxiety, obsessive-compulsive disorder, tobacco and alcohol dependence, substance abuse disorder and others. Adverse effects include nausea, vomiting, headache, increased heart rate and blood pressure.

Conclusions: Psilocybin appears to be effective in reducing symptoms from depression and anxiety, and according to some studies is well tolerated. Further evidence and legal considerations are required before real world implementation can be pursued.