

CASE REPORT**A Case Series Describing the Tale of ‘The Magic Mushroom’;
An Increasing Trend of Psychedelic Misuse Among
Substance Abusers in Terengganu**

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Abstract

Hallucinogens comprise of a vast amount of substances such as Lysergic Acid Diethylamide, Phenylcyclidine PCP, naturally occurring alkaloid like Belladonna and even mushrooms such as psilocybins. Usage of these substances can be traced back to antiquity, serving various purpose such as spiritual rites or even recreational purposes. However, in the modern era, teenagers appear to be in favor of designer drugs such as amphetamine type stimulants and more addictive substances such as opiates. Recently, there has been a resurgence of such cases in Terengganu where several patients had been reported to be using psychedelic compounds in the form of hallucinogenic mushrooms.

Keywords: Mushroom, Psychedelic, Hallucinogen, Substance

Introduction

Hallucinogen use in Malaysia is relatively rare compared to other forms of substances. International data gives varying information ranging from 0.6% in regional Asian countries to 9% in the United States [1]. Those in urban areas favor synthetic classes of hallucinogens such as LSD and PCP which are readily available from shady dealers hidden around the country. Hallucinogen is classified under the Dangerous Drugs Act 1952 [2] which prohibits production, use and distribution. It is known to cause vivid hallucinations and

other psychological consequences which may be potentially detrimental to its user. This case series aims to describe several similar cases of patients who have been admitted into our psychiatric facility within the first half of year 2021 for the misuse of hallucinogenic mushrooms as well as their treatment and outcomes.

Case Report 1

Mr A is a patient suffering from Bipolar Mood Disorder Type I who was admitted several times to our ward . His readmission rate was almost four instances last year.

Each presentation was similar; He would be brought by his family for aggressive behavior. Despite being treated with various medications, including long acting depot injections, Mr A had a difficulty in controlling his anger outbursts leading to irritability, brawls with his father and subsequent presentation to the hospital. The treating team was puzzled as he was compliant to his medications which comprise of high dosage of mood stabilizers and antipsychotics. He admitted to abusing substance but was very guarded regarding its intake. He also frequently tested negative for substance although he did admit to the occasional use of amphetamines on isolated instances. After much effort of rapport building via a combination of constant cordiality, slight humor and indirect questioning, he finally revealed that he was taking hallucinogenic mushrooms on a regular basis. He eventually opened up and gave details on how he acquired mushroom from an acquaintance that he declined to identify. According to him, the mushroom was purchased in a dried form. Desiccation made it easy to slice the mushroom into tiny pieces in which he would fit them into a huge rounded glass container with a thin tube attached to a funnel. The apparatus is called a 'bong.' The mushroom would then be burned within the glass chamber which serves a dual purpose of facilitating combustion and concentrating the vapors generated. He would then inhale the fumes via a small funnel which was directly attached to the main hub. Mr A added that he would feel a surge of euphoria after imbibing the fumes of the burnt mushroom but did not report any forms of perceptual disturbance. He refuses to quantify the amount and frequency of his intake, dismissing our questions by saying 'whenever he felt bored.' There appears to be no form of physical or psychological

dependence or withdrawal seen during his multiple admissions.

Case Report 2

This is a report of Mr B who is a young 20 year old Malay male. He was still attending the local college in Kuala Terengganu when the pandemic struck. He had no psychiatric comorbidities but started venturing into vape as a method to ameliorate his boredom during the lockdown period. He used to imbibe nicotine flavored vape but several days prior to his first psychiatric contact decided to test a new concoction. According to him, it was offered by an acquaintance who claimed that this form of vape contained a special mushroom which offered more pleasure and gratification than his regular mix. Shortly after imbibing the new mixture in which he described as being dark in color emanating a fishy odor, he started becoming unwell. He was rambling incessantly when he was brought to the district hospital of Kemaman. Onset of psychosis was very acute on a seemingly healthy young man. He was very aggressive and the treating doctor had to resort to a strong dosage of sedatives in order to keep him at bay prior to transport to our center. He quickly regained consciousness and had to be given physical and chemical restraint on a regular basis as he was confused and agitated, spitting on the staffs who attended to him. He was very paranoid and was convinced that people were indeed trying to capture him. ECG revealed premature ventricular contraction (PVC) and his thyroid profiles were slightly raised. Urine for drugs however was negative. Owing to his poor oral intake, aggression and poor response to antipsychotics, the team was considering electroconvulsive therapy. However the next morning his psychosis had subsided. He was orientated to his bearings and could not provide an account on what

had transpired. He vaguely remembered events that occurred prior to the event such as indulging in the new mysterious vape. He could also briefly remember being surrounded by the concerned faces of attending doctors and jested that he transiently believed himself to be of royal blood. Miraculously, even the PVC on electrocardiogram recordings spontaneously normalized and he was discharged well.

Case Report 3

This is a report of Mr C who is a Malay male in his 30s who had multiple episodes of admission to our hospital. He was suffering from mild to moderate intellectual disability and was only able to perform menial chores to earn a living. Although he lives with his family, he used to wander around the village where he got into bad company. Each time, Mr C would be brought to us with sudden outbursts of anger. He would scream and smash things around his home. His family admits that he had an odd personality of being aloof most of the time but rarely encountered such destructive behavior. Mr C admits that he was experiencing vivid visual hallucinations which would make him confused. At times he finds it difficult to orientate himself to his surroundings as his perceptions was distorted. His urine for drugs tested negative and other vital parameters were unremarkable. However, after several days of being treated with antipsychotics, he recovered and admitted to the act of smoking mushroom. He gave details of how he prepared mushroom slices in which he acquired from his friend. He would heat the ingredients in a bong, similar to the technique described by Mr A. Unlike Mr A, his hallucinations were more pronounced. He described being able to see disturbing images of devils and vicious looking animals that caused him great distress.

Discussion

The use of hallucinogens amongst the local populace of Terengganu is on the rise and is a cause of worry. A common challenge faced by psychiatrists treating these cases is the fact that most hallucinogen users rarely admit to their behavior let alone realize consequences of their actions.

In addition, hallucinogens are not readily detectable by rapid test kits, giving it an evasive nature both to the effort making a diagnosis and to the law [3]. It is only detectable via more sophisticated measures such as chromatography and detailed biochemical analysis; which is cumbersome and not carried out in the event of a psychiatric emergency [4].

Physicians and psychiatrists alike would be perplexed as these patients would present with rapid onset of vivid hallucinations and unexplained hostility, subsiding as quickly as it began [5]. Multidisciplinary team would then embark on a laborious endeavor of elucidating the cause, ranging from a barrage of blood investigations, urine for drug tests to computerized imaging to rule out more sinister differentials such as the possibility of an epilepsy or meningitis. This indirectly takes a toll on valuable resources in the long run; resources better diverted to more important causes like rescuing a genuinely ill patient.

If its elusive nature was the first challenge, then the next would be the fact that several hallucinogen abusers also carry a dual diagnosis as with the case of Mr A who suffers from bipolar mood disorder, and Mr C who suffers from intellectual disability. Hallucinogens are known to aggravate psychosis from individuals who are already susceptible to them and aggravate mood symptoms. 'Bad trips' is a terminology

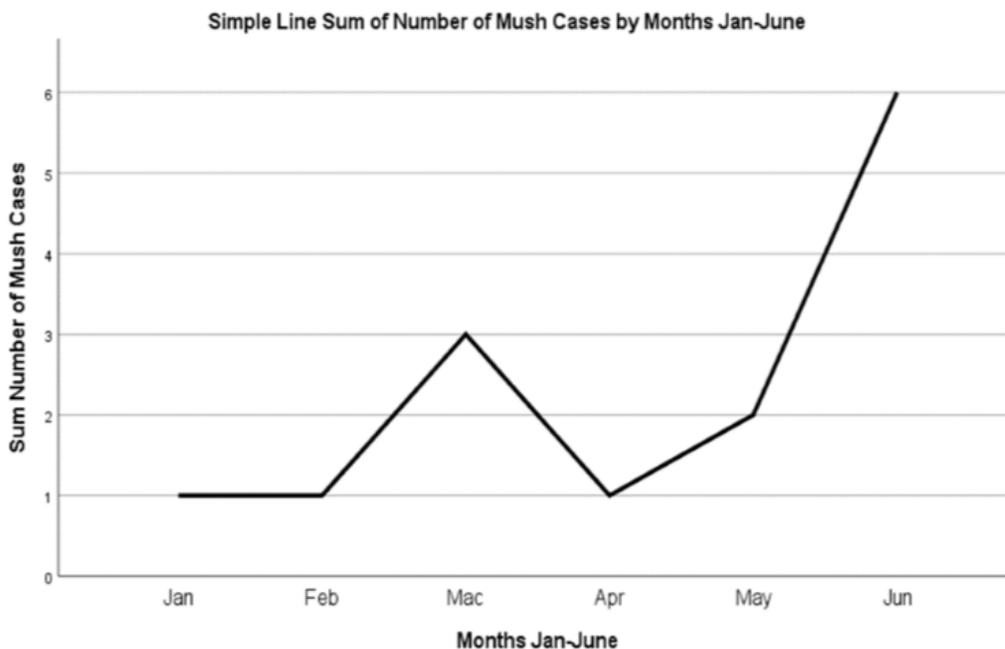
coined for the paradoxical reaction to hallucinogens where the user feels an unpleasant rush instead of their regular euphoric state which may explain irritability in most mushroom users [6]. The current mainstay of treatment is a combination of supportive treatment, antipsychotics and tranquilizers to reduce the levels of aggression and agitations besides facilitating the recovery from intoxication and withdrawal periods [7].

The authorities may have difficulty in curbing the distribution of hallucinogens as well. Dried mushroom may resemble domestic herbs of trade and may be dismissed by authorities during raids. Some are even powdered for ease of storage and can be cut into paper thin slices which are readily concealable yet conveniently smoked when the urge arises [8].

From a logistic point of view, Terengganu encroaches upon the southern border of Thailand. There is a possibility of active substance trade ongoing within the vicinity [9] owing to its close proximity and the dense jungle surrounding the region further serves to conceal this ongoing sinister trade [10]. Other identified entry points are neighboring states such as Kelantan and Gerik at Perak [11].

The psychiatric team of Hospital Sultanah Nur Zahirah is currently working with the National Anti Drug Agency (AADK) to help curb the usage of psychedelic compounds amongst the local populace. To examine the increase in trend of psychedelic mushroom usage over the past 6 months ranging from January to June, refer appendix below.

Table 1. Increase in total number admission per month due to psychedelic mushroom intoxication from January to June in year 2021



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