Journal of Management, Economic, and Financial

Amethyst Disputation (Datura Stramonium) As A New Type of Psychotropics

Adi Purnomo Santoso[1], Boy Nurdin[2]
Borobudur University, Indonesia
Email: adipurnomosantoso80@gmail.com

Abstract The amethyst plant (Datura stramonium) contains various active compounds, amethyst is also often used as an alternative medicine. This plant is believed to cure bruises, wounds, toothache, fever, rheumatism, gout and asthma. However, amethyst also has toxic substances that can cause several dangerous symptoms if consumed. One of the most dangerous substances in amethyst is scopolamine which has more dangerous effects than marijuana, methamphetamine, ecstasy, heroin and cocaine. This plant can make humans look like zombies, causing hallucinations. Apart from that, it is often misused to create the effect of excessive pleasure or euphoria, this can cause addiction because users want to repeat the happy feeling as an addictive or psychotropic substance. The legal consequences for users of amethyst narcotics which are not registered in the law are currently unable to take legal action against users, because the narcotics law does not regulate the type of amethyst narcotics itself, therefore the police and the National Narcotics Agency are in charge cannot take legal action against amethyst users. Current community efforts are only in the form of (preventive) appeals and advocacy campaigns, outreach and stop drug campaigns for the community. So there needs to be encouragement from various parties to the legislative body so that there are changes to statutory regulations to determine amethyst as a new type of psychotropic.

Keywords: Amethyst, Zombies, Hallucinations, Addictive Substances, Legislation, Enforcement Authorities, New Types of Psychotropics

Introduction

The scientific name of the Amethyst plant is Datura stramonium, (Trancă et al., 2017). Also known as Jimson weed, locoweed, devil's weed, stinkweed, angel's trumpet, and thornapple. Morphologically, this plant grows to 1.5 m. The flowers are shaped like trumpets measuring 20-30 cm. (Krenzelok, 2010). This plant is found in many areas of Asia, also in the West Indies, Canada and the United States. (Amini et al., 2012 86–89).

In several countries, Datura is used as an alternative medicine to treat asthma, chronic bronchitis, flu symptoms and pain (Adegoke & Alo, 2013). The content of this plant is belladonna alkaloids, the majority of which are atropine and scopolamine. Almost all parts of this plant contain belladonna alkaloids, mostly in the flowers, stems and fruit (seeds). The concentration varies depending on species, climate, and weather (Gulecha et al., 2020).

The contents of this plant are often misused as addictive or psychotropic substances and the fruit part is most often used (Sawicka et al., 2020). One gram of fruit can contain 2.9 mg of atropine and 0.5 mg of scopolamine with a total alkaloid content of 3.4 mg. Atropine competes with acetylcholine in binding to muscarinic receptors, resulting in antimuscarinic effects or anticholinergic crisis. However, the range of toxicity levels of this plant is still uncertain (Shim et al., 2022).

In the United States, cases of amethyst poisoning reported by the America Poison Centers were 1,458 cases, 72% of which were cases of addictive substance abuse. (Beynon & Chaturvedi, 2018). Few reported deaths (0.1%); The Texas Poison Center Network (TCPN) reports incidents of hallucinations, agitation, or excitation. Symptoms can appear 30-60 minutes after exposure, so you need to be wary of using the amethyst plant as a psychotropic substance that can be abused.

In Indonesia, in several areas in Java, NTT and Kalimantan, amethyst poisoning occurred, one of the extraordinary incidents was in South Kalimantan. 47 children were taken to the emergency room at the Sambang Lihun General Hospital with a restless condition, babbling, chest tightness due to consuming amethyst. (Karadaş et al., 2011) Therefore, it is interesting to dissect the **"Disputation of Amethyst (Datura stramonium) as a New Type of Psychotropic."**

A total of 47 amethyst drunk children are undergoing treatment at RSJ Sambang Lihum. [Sheilla Farazela, Radar Banjarmasin 26 February 2024, 22.40.]

Methods

The research method used in this article is normative juridical research. The sources of legal materials used in this research are primary legal materials and secondary legal materials. The type of approach used in this research is the legal approach. The data processing method used is the analytical method which is then outlined in analytical descriptive writing.

Results and Discussion

In Article 1 number 1 of Law Number 35 of 2009 concerning Narcotics and Psychotropics, the definition of narcotics is a substance or drug derived from plants or non-plants, whether synthetic or semi-synthetic, which can cause a decrease or change in consciousness, relieve pain, and can lead to dependency. (Rumokoy & Maramis, 2014).

This law expressly requires several acts that can be categorized as criminal acts of drug abuse. Several articles in the law concerning criminal acts involving narcotics are special criminal acts that are spread nationally and internationally, because their abuse has a negative impact on the lives of society, the nation and the state.

Based on Article 6 paragraph (1) of the Narcotics Law and its explanation, narcotics are divided into 3 groups, namely:

Class I narcotics, namely narcotics which can only be used for the purpose of developing science and are not used in therapy, and have a very high potential to cause dependence;

Class II narcotics, namely narcotics with medicinal properties used as a last resort and can be used in therapy and/or for the purpose of developing science and have a high potential to cause dependence; And

Class III narcotics, namely narcotics that have medicinal properties and are widely used in therapy and/or for scientific development purposes and have a mild potential for causing dependence.

According to Minister of Health Regulation Number 41 of 2017 concerning Changes in the Classification of Narcotics, the kucubung type of narcotic itself is not regulated in the Law so there are restrictions in it, however in the Narcotics Law any use of narcotics is prohibited and contrary to the law.

The latest changes to the classification of narcotics are contained in Minister of Health Regulation Number 30 of 2023, where there are 217 types of class I narcotics, 90 types of class II narcotics, and 15 types of class III narcotics. For example, here are the types of narcotics based on their class:

Class I narcotics: crude cocaine, coca plants, marijuana plants, etorphine, thiofentanil and so on.

Class II narcotics: alphametadol, alfentanil, benzetidine, betametadol, betaprodina and so on.

Class III narcotics: propiram, polkodina, nicocdine, codeine, ethylmorphine and so on

Disputation of amethyst (Datura stramonium) as a new type of psychotropic. The amethyst plant is a bush plant belonging to the eggplant tribe that has flowers resembling white or purple trumpets and round and spiny fruit. It can be found in tropical areas, including Indonesia. Because of its distinctive and beautiful flower shape, amethyst is often used as an ornamental plant. Apart from that, this plant also contains various active compounds, and it is also often used as an alternative medicine.

This plant is believed to cure bruises, wounds, toothache, fever, rheumatism, gout, and asthma. Amethyst contains various important nutrients, such as carbohydrates, fats, proteins, fiber, tannins, and flavonoids, which have antioxidant properties. However, it also contains toxic substances that can cause several dangerous symptoms if consumed, especially if misused as an addictive or psychotropic substance.

The negative impact of amethyst fruit is that it can cause hallucinations and euphoria or a momentary feeling of happiness. This is because this fruit is included in the group of opioid plants, such as marijuana and cathinone. Not only hallucinations, people who consume it can also experience prolonged dizziness and vomiting.

One of the most dangerous substances in amethyst is scopolamine. In fact, according to the National Narcotics Agency (BNN), this plant has more dangerous effects than marijuana, methamphetamine, ecstasy, heroin and cocaine. This plant can make humans look like zombies. The dangers and health problems that can arise from consuming amethyst include:

Hallucinations

Consuming any part of the amethyst plant can make you hallucinate. This is caused by the tropane alkaloid content in amethyst which has an anticholinergic effect so it can poison the nervous system and cause symptoms in the form of hallucinations and seizures.

Addiction

Apart from hallucinations, amethyst is also often misused as an addictive or psychotropic substance because it can create the effect of excessive pleasure or euphoria. This happy effect can be addictive because users want to repeat the happy feeling. Amethyst seeds are the part most often misused as an addictive or psychotropic substance.

Delirium

Another effect of the anticholyrgenic effect in nervous system toxicity is confusion or delirium. This condition makes it difficult for sufferers to focus and think. Sufferers will also become restless and sometimes have difficulty recognizing people around them.

Dehydration

Nervous system poisoning due to the tropane alkaloid content in amethyst can also cause the body to lack fluids (dehydration). Several symptoms, such as thirst, dry mouth, dry skin, and dry eyes can characterize dehydration due to tropane alkaloid poisoning.

Tachycardia

The next danger of consuming amethyst is an increase in heart rate or tachycardia. A person is said to have tachycardia when their heart rate is more than 100 beats per minute. This condition, also known as heart palpitations, can increase a person's risk of having a heart attack, stroke and even death.

Additionally, consuming amethyst can also cause fever, headaches, stomach ache, diarrhea, vomiting, difficulty speaking and vision problems.

According to the Head of the Public Relations Sub-Division of the National Narcotics Agency (BNN), Jeffry R Tuapattimain, the amethyst plant with the Latin name Datura metel is not yet included in the narcotics category, because the Narcotics Law refers to world conventions through the United Nations Office on Drugs and Crime session. (CND UNODC) in Vienna, Austria.

Conclusion

Legally, amethyst has the potential to be misused as a psychotropic drug because it contains methyl crystalline which has a relaxing effect, but it is not yet classified as a narcotic, because there are no legal regulations governing it. Therefore, misuse of amethyst cannot be punished.

Medically, amethyst seeds and fruit contain belladonna alkaloids. Poisoning from this plant can cause parasympathetic symptoms. At a more severe level, it disrupts the central nervous system and contains the alkaloid compounds scopolamine, saponins, flavonoid glycosides, and polyphenols, which can cause hallucinations and temporary or permanent insanity. These compounds are most often misused as substances. addictive or psychotropic

References

Adegoke, S. A., & Alo, L. A. (2013). Datura stramonium poisoning in children. *Nigerian Journal of Clinical Practice*, *16*(1), 116–118. https://doi.org/10.4103/1119-3077.106783

Amini, M., Khosrojerdi, H., & Afshari, R. (2012). Acute Datura Stramonium poisoning in East of Iran-a case series. *Avicenna Journal of Phytomedicine*, *2*(2), 86.

Beynon, S. J., & Chaturvedi, S. (2018). Datura intoxication in an adolescent male: A challenge in the Internet era. *Journal of Paediatrics and Child Health*, *54*(1), 84–87. https://doi.org/10.1111/ jpc.13726

Gulecha, V. S., Mahajan, M. S., Upaganlawar, A., Sherikar, A., & Upasani, C. (2020). Cholinergic Antagonists. In *Advances in Neuropharmacology* (pp. 31–60). Apple Academic Press.

Karadaş, S., Selvi, Y., Şahin, M., Selvi, F., Öncü, R., & Özgökçe, F. (2011). Datura stramonium intoxication: report of a case with psychiatric symptoms. *Dusunen Adam Journal of Psychiatry and Neurological Sciences*, *24*(2), 152.

Krenzelok, E. P. (2010). Aspects of Datura poisoning and treatment. *Clinical Toxicology*, *48*(2), 104–110.

Rumokoy, D. A., & Maramis, F. (2014). Pengantar ilmu hukum. *Jakarta: PT Raja Grafindo*.

Sawicka, B., Otekunrin, O. A., Skiba, D., Bienia, B., & Ćwintal, M. (2020). Plant-derived stimulants and psychoactive substances–social and economic aspects. *Medical & Clinical Research*, *5*(10).

Shim, K. H., Kang, M. J., Sharma, N., & An, S. S. A. (2022). Beauty of the beast:

anticholinergic tropane alkaloids in therapeutics. *Natural Products and Bioprospecting*, *12*(1), 33.

Trancă, S. D., Szabo, R., & Cociş, M. (2017). Acute poisoning due to ingestion of Datura stramonium–a case report. *Romanian Journal of Anaesthesia and Intensive Care*, *24*(1), 65.

Donal Albert Rumikoy dan Frans Maramis, *Pengantar Ilmu Hukum*, Rajawali Pers, Edisi Pertama, Cetakan ketiga, Jakarta, 2016.

Badan Narkotika Nasioanal, *Penyalahgunaan Narkoba Bagi Masyarakat*, Jakarta, 2010.

Korkmaz MF, Bostancı M, Onur H, Çağan E. Datura stramonium poisoning: a case report and review of the literature. Eur Res J 2019; 5(1):186-188.

Bouziri A, Hamdi A, Borgi A, Hadj SB, Fitouri Z, Menif K, dkk. Datura stramonium L. poisoning in a geophagous child: a case report. Int J Emerg Med. 2011; 4(1):31. doi:10.1186/1865-1380-4-31.

Rakotomavo F, Andriamasy C, Rasamoelina N, dan Raveloson N. Datura stramonium intoxication in two children. Pediatr Int. 2014 Jun; 56(3):e14-6. doi: 10.1111/ ped.12363.

Vearrier D, Greenberg MI. Anticholinergic delirium following Datura stramonium ingestion: Implications for the Internet age. J Emerg Trauma Shock 2010; 3:303.

Kompas.com dengan judul "Kecubung Picu Halusinasi, Kenapa Tidak Masuk Golongan
Narkotika?": https://www.kompas.com/tren/read/2023/05/10/194000365/kecubung-picu-halusinasi-kenapa-tidak-masuk-golongan-narkotika-?page=all.

Monica Djaja Saputera dan Jessica Djaja Saputera. *Intoksikasi Kecubung: Sebuah Laporan Kasus pada Remaja Laki-Laki Usia 16 Tahun di Kabupaten Kuningan*. Jurnal Penyakit Dalam Indonesia, Vol. 9, No. 4, Article 25, 2022.

Undang-Undang Nomor 35 Tahun 2009 tentang Narkotika dan Psikotropika.

Peraturan Pemerintah Pengganti Undang-Undang Nomor 2 Tahun 2022 tentang Cipta Kerja yang telah ditetapkan sebagai undang-undang dengan Undang-Undang Nomor 6 Tahun 2023.

Peraturan Menteri Kesehatan Nomor 30 Tahun 2023 tentang Perubahan Penggolongan Narkotika.