



Snake Venom as a Drug of Abuse: A Complex Web of History, Current Trends, Global Aspects, and Legal Provisions

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Abstract

The use of snake venom as a drug of abuse is a surprise trend of substance abuse that has intrigued scientists, law enforcement agencies, and public health officials alike. While most people associate snake venom with the deadly consequences of snakebites, a small but alarming subgroup has been exploiting the potent toxins found in snake venom for recreational and illicit purposes. In India, snake venom abuse is gradually increasing which required prompt actions now to prevent future increasing trend. Various route of exposure like injection, eye drops, oral consumption, etc. are gaining popularity among youth. This article delves into the intriguing history, current trends, global aspects, and legal provisions surrounding the use of snake venom as a drug of abuse, shedding light on a topic that often remains hidden in the shadows.

Keywords: Snake Venom; Drug of Abuse; History; Current Trends; Global Aspects; Legal Provisions

Introduction

Substance dependence is a common problem across the globe and people are using different products for addiction as per availability and current trend in that area. Snake bite cases are common in India but use of snake venom for addiction purpose is not common. The use of snake venom as a drug of abuse is a dark and enigmatic facet of substance abuse that has intrigued scientists, law enforcement agencies, and public health officials alike. Snake venom is not much popular substance in category of abuse across the globe as it is difficult to obtain [1]. While most people associate snake venom with the deadly consequences of snakebites, a small but alarming subgroup has been exploiting the potent toxins found in snake venom for recreational and illicit purposes [2-4]. In India, snake venom abuse is gradually increasing and it may create alarming notice any time. This article delves

into the intriguing history, current trends, global aspects, and legal provisions surrounding the use of snake venom as a drug of abuse, shedding light on a topic that often remains hidden in the shadows [5-7].

Historical Perspective

To understand the contemporary use of snake venom as a drug of abuse, one must first explore its historical roots. The practice of using snake venom for recreational purposes is ancient and multifaceted, with its origins intertwined with various cultures and traditions.

Ancient Rituals and Medicinal Use

The use of snake venom can be traced back to ancient civilizations where it held a significant place in religious

and medicinal practices. In some cultures, snake venom was believed to possess spiritual or mystical properties. For example, in certain indigenous communities in South America, snake venom was used as an integral part of shamanic rituals and rites of passage [8,9].

Additionally, snake venom was sometimes used medicinally, albeit cautiously, due to its potent and potentially lethal effects [10]. Ancient texts from India and China mention the therapeutic use of snake venom to treat various ailments, such as arthritis, joint pain, and even leprosy. The wisdom of snake charmers and traditional healers often played a crucial role in harnessing the venom's potential for medicinal purposes.

The Transition to Recreational Use

While snake venom had a place in ancient traditions and early medicine, its transition to recreational use was gradual and complex [11,12]. It became apparent that the toxins found in snake venom could produce euphoria, hallucinations, and other altered states of consciousness when consumed or injected. As a result, it began to attract individuals seeking novel experiences.

The 20th century saw a rise in the recreational use of snake venom in various parts of the world. Particularly, the psychedelic counterculture of the 1960s and 1970s, driven by curiosity and a desire to explore altered states of consciousness, led some individuals to experiment with snake venom. The fearlessness, or perhaps recklessness, of these users often resulted in dangerous and even fatal outcomes, as snake venom's effects could be highly unpredictable [12].

Current Trends and Methods

The use of snake venom as a drug of abuse remains a relatively rare and clandestine phenomenon, but it persists in certain pockets of the world [13-17]. It is essential to recognize that the current trends in snake venom abuse are not uniform, and they may vary across regions and communities. Despite its rarity, snake venom abuse presents several notable characteristics and methods of use.

Types of Venom Abused

Various types of venomous snakes have been targeted for their venom, but the most commonly used snake species include the cobra (*Naja* spp.), the rattlesnake (*Crotalus* spp.), and the black mamba (*Dendroaspis* spp.). These species are chosen for their potent and potentially psychoactive venoms.

Methods of Use

The methods of using snake venom as a drug of abuse are diverse, reflecting the resourcefulness and adaptability of individuals involved in these practices [18]. Common methods include:

Injection: Some individuals inject snake venom directly into their bloodstream, either intravenously or intramuscularly. This method is extremely risky due to the potential for severe allergic reactions, anaphylaxis, and tissue damage.

Smoking: Snake venom can be dried and smoked as a powder or mixed with other substances. This method is less common but has been reported in some cases.

Ingestion: Ingesting snake venom is relatively safer than other methods, as it minimizes the risk of immediate adverse reactions. However, the effects are generally less intense compared to injection.

Eye Dropping: A highly dangerous method, some individuals have reported using snake venom as eye drops in an attempt to experience hallucinations or altered states of consciousness.

Reported Effects

The effects of snake venom consumption can vary widely, depending on factors such as the snake species, dosage, and method of administration [19-21]. Users have reported experiencing a range of effects, including euphoria, hallucinations, heightened senses, and a sense of invincibility. However, the unpredictability of snake venom means that adverse reactions are also common, including nausea, vomiting, severe pain, and in some cases, death.

The Global Aspect

While the use of snake venom as a drug of abuse remains a relatively obscure phenomenon, it has manifested in various parts of the world, often in conjunction with local customs, rituals, and subcultures. Understanding the global aspect of snake venom abuse involves examining its presence in different regions [22].

South Asia

South Asia, particularly India, has seen instances of snake venom abuse for both recreational and cultural reasons. Snake charming, an age-old tradition in the region, often involved handling venomous snakes and occasionally consuming small quantities of venom to showcase the snake charmer's mastery. In recent years, this practice has come under scrutiny due to concerns about animal cruelty and the health risks associated with snake venom consumption.

Sub-Saharan Africa

Sub-Saharan Africa is another region where snake venom abuse has been documented. The black mamba, a highly venomous snake, is sometimes used for its purported psychoactive effects. However, the risks associated with this practice are significant, as black mamba bites can be lethal, and consuming its venom poses severe health hazards.

The Americas

In the Americas, particularly in some parts of the United States and Central America, snake venom abuse has also been reported. Rattlesnake venom, known for its potent neurotoxic properties, has been used recreationally by individuals seeking intense experiences. Like in other regions, this practice poses grave risks due to the potential for life-threatening reactions.

Southeast Asia

In Southeast Asia, snake venom abuse has been observed, often intertwined with indigenous traditions and rituals. Cobras, known for their potent venom, have been used for their psychoactive properties. This practice raises concerns about both human health and the conservation of these snake species [23-26].

It is important to note that these instances of snake venom abuse remain relatively localized and are not representative of the entire regions in which they occur. Nevertheless, they highlight the cultural, social, and legal complexities surrounding this phenomenon.

Legal Provisions and Challenges

The use of snake venom as a drug of abuse presents significant legal and regulatory challenges for governments and law enforcement agencies worldwide. These challenges revolve around the classification of snake venom and the enforcement of existing drug laws.

Classification of Snake Venom

Snake venom is typically classified as a controlled substance or a regulated item under drug control laws in various countries. However, its categorization can be ambiguous, as it is not a traditional narcotic or synthetic drug [27-30]. Many jurisdictions classify snake venom as a Schedule I controlled substance, putting it on par with illicit drugs like heroin or LSD. This classification is largely due to the potential risks and harms associated with snake venom use, rather than its psychoactive properties.

Enforcement and Detection

Enforcing laws related to snake venom abuse presents unique challenges. Unlike traditional illicit drugs, snake venom is not a substance that is easily identified or detected in routine drug tests. The clandestine nature of this practice makes it difficult for law enforcement agencies to track and apprehend those involved.

Additionally, the collection and illegal trade of snake venom can have detrimental effects on local ecosystems and wildlife populations [31,32]. The poaching of venomous snakes can pose a significant threat to species conservation efforts, making it a multifaceted issue that involves not only public health but also ecological concerns.

Public Health and Education

Addressing snake venom abuse requires a combination of legal measures and public health initiatives. Raising awareness about the dangers and unpredictability of snake venom consumption is crucial in preventing individuals from experimenting with this hazardous practice [33,34]. Educational campaigns can help reduce the demand for snake venom, especially among impressionable individuals who might be enticed by the allure of a unique and mind-altering experience.

Treatment and Support

For those individuals who have already fallen prey to snake venom abuse, it is essential to provide access to appropriate treatment and support services [35,36]. This may include medical intervention to address adverse reactions or injuries resulting from snake venom use, as well as counseling and rehabilitation programs to help users overcome their addiction.

Conclusion

The use of snake venom as a drug of abuse is a complex and enigmatic phenomenon with roots in ancient traditions and a contemporary presence in various regions around the world. Its history, current trends, and global aspects highlight the intricate tapestry of cultural, social, and legal factors that shape this practice.

To combat snake venom abuse, a multi-pronged approach is required that encompasses strict legal provisions, strong law enforcement, public health education, and support for those affected by proper treatment and care. Recreational use of snake venom is a dangerous and unpredictable though not much popular compare to other substances present in the market, with potentially devastating consequences

for those who engage in it. Raising awareness, promoting responsible behavior, providing physical and mental care, and implementing effective legal measures are essential steps in mitigating the risks associated with this unusual form of substance abuse. Prompt actions now can prevent future enhancing trend of snake venom abuse in India.

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