HALLUCINOGENIC SUBSTANCES AND THEIR COMPLEX EFFECTS ON HUMAN PHYSIOLOGY : A REVIEW

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ABSTRACT : This abstract provides an overview of various hallucinogenic substances and their various effects on human consciousness and physiology. It began with the psychotropic substance LSD (i.e. Allergic Acid Diethylamine). It was synthesized in 1938 and its psychoactive effects were discovered in 1943. LSD is a potent hallucinogenic substance that can profoundly alter mental health, including visual, emotional and cognitive aspects, primarily through its agonism at serotonin receptors. It touches upon LSD historical use in psychotherapy and its potential for understanding mental disorders. Mescaline is also discussed in this abstract; it is basically a naturally occurring hallucinogen found in certain cacti. It basically highlights the mescaline effect on perception, personality and neural activity, likening some aspects of its effects to schizophrenia. Psilocybine is a psychoactive compound in hallucinogenic mushrooms; it is also broadly mentioned on the basis of its impact on consciousness, including alteration in perception, mood and thought. Psilocybine may also have therapeutic potential, especially in cancer patients and in individuals with depression. Then cannabis is briefly covered, focusing on its both positive and negative effects as well as its potential risks and medical applications. It also involves numerous compounds found in cannabis, including cannabinoids, and their diverse effects on the central nervous system. Estarasy also known as MDMA, is discussed in the context of recreational use and its effects on mood, energy and physiology. Potential health risks associated with MDMA use, such as cardiovascular complications and liver injury, are also highlighted. The abstract also notes that ecstasy use is linked to risky behavior, including polydrug use and unprotected sex.

Key words : Potential risks, medical applications, central nervous system, human physiology.

INTRODUCTION

Hallucinogens are the class of psychoactive substances known for their profound impact on human perception, cognition, and consciousness and have been at the center of cultural, spiritual and scientific exploration from centuries. This review paper embark on a comprehensive journey through the world of hallucinogens, aiming to provide physiological and psychological effects and therapeutic applications of hallucinogens on the human body. From classical hallucinogens like LSD (Lysergic Acid Diethylamine), psilocybin and mescaline to contemporary agents like MDMA (3,4- methylenedioxyamphetamine).

In the modern era, hallucinogens have become the focus of scientific scrutiny, particularly during the mid-20th century. This period witnessed a surge in psychedelic research, exploring the potential of these substances for understanding the mind, treating psychiatric disorders and enhancing creativity and problem solving. However, the widespread recreational use of hallucinogens, coupled with social and political upheaval, led to their stigmatization and prohibition.

In the realm of contemporary research, a resurgence of interest in hallucinogens has led to groundbreaking discoveries about their primary interactions with serotonin receptors in the brain, disrupting typical patterns of neural activity and leading to altered perception, enhanced...
Conclusion

The above review paper provides a detailed explanation of hallucinogens, including physical and physiological effects, psychological effects, therapeutic effects and contemporary research findings.

Each hallucinogen discussed in the paper has its own set of effects on the human body and mind. Like “LSD” causes visual alteration, emotional and cognitive alteration, on the other hands “Mescaline” cause hypertension, high blood pressure and also increases the heart rate. Sometime loss of emotion also occurs due to mescaline. “Psilocybine” alters the consciousness, and “Cannabis” is the most widely used illicit drug in the whole world. It elaborates on how its use is associated with an increased risk of cancer, particularly in the oral cavity, pharynx, and esophagus. It also acts as a CNS depressant at high doses. Then “Ecstasy” elevated plasma catecholamine level may be due to nor adrenergic hyperactivity also may lead to cardiovascular complications.

Also, hallucinogens also have some chemically important uses that are beneficial to humans, like Psilocybin, which is used for the treatment of cancer and depression, and cannabis, which is used for relaxation and happiness, including sensor perception, deep thoughts, and laughter.

So overuse of hallucinogens can also cause severe diseases like cancer or cardiovascular disease, brain damage or even death, but if we use them properly, they can also be beneficial to the human body. So it is always important to know about the different types of hallucinogens, their effects and also the laws that are related to them, and however, to use them responsibly and within an appropriate context. This is how this large and divine class of hallucinogens affect the body.

REFERENCES


