Student and Athlete Views on Stimulant Use

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Abstract

The objective of this paper is to highlight the perception of college students and athletes about the usage of stimulants either to boost athletic performance or to enhance academic activities. It begins with an introduction to stimulants: how are they prescribed, and to whom are they prescribed? Medical doctors prescribe stimulants to treat Attention Deficit Hyperactivity Disorder (ADHD) and Attention Deficit Disorder (ADD). Further, the discussion will revolve around the response of the body and mind after stimulant use, particularly in students and athletes.

Introduction

Stimulants are types of medicine that are used in the medical discipline. Doctors can prescribe stimulants after a thorough physical and psychological examination of the patient. However, one can get stimulants from the open market. Such stimulants come from illegal sources or probably prescribed drugs that are sold without the government's authorization (Hartung et al.). In this regard, the role of the Drug Enforcement Administration (DEA) is vital because it is authorised to control illegal drugs in the United States in collaboration with the Food and Drug Administration (FDA), whose role is to protect public health and safety by implementing effective policies and rules. Both of these agencies ensure a smooth process with a systematic approach to control public health.

This particular research focuses on stimulants that are prescribed by doctors, not the illegal ones. The primary objective of prescribing stimulants is to treat Attention Deficit Hyperactivity Disorder (ADHD), Attention Deficit Disorder (ADD), narcolepsy (a disorder regarding control of sleep and wakefulness), and depression of a minor nature. Researchers have demonstrated the usefulness of stimulants in people suffering from ADHD and ADD. The stimulants have enhanced their mental capacity, which made them much more alert and focused compared to before. For those who suffer from narcolepsy, stimulants have served as a healing agent, and they have been able to maintain alertness as stimulants directly make the Central Nervous System (CNS) more functional. Also, stimulants are helpful for those who are not suffering from ADHD as they raise the levels of norepinephrine and dopamine inside the brain. The primary function of dopamine is to improve pleasure reactions in the brain, whereas "norepinephrine" works as a neurotransmitter with some hormonal activity that responds to the feeling of stress. It also affects behavior and moods overall. Hence, prescription stimulants work as tools to improve a person's individual and mental capacity.

Discussion

Today's world is very demanding, and this is why students and athletes are under constant pressure to achieve success through their performance. It prompts them to use performance-enhancing drugs. In fact, stimulants help to improve some aspects of a person's physical or mental performance. Apart from stimulants, performance enhancers include steroids, hormones, sedatives and other doping agents. According to Patrick Kilcarr (Director of Health Education Services), not all types of drugs that are considered performance enhancers enhance performance unless they are misused. He further elaborated that when an athlete with low testosterone uses a performance-enhancing drug to attain an average level of testosterone, this is not a performance enhancer; instead, it's a medication. The same medicines that someone gets without particular need become performance enhancers for that person (Arria et al.). Further, this concept applies to mental stimulants as well. For those who use them without any specific requirement, they become performance-enhancing tools. Dr. Vince WinklerPrins (Assistant Vice President of Student Health) mentioned that the most widely used performance-enhancing drug on the Georgetown University campus is "caffeine".

Stimulants used by athletes for better performance are risky on many occasions, especially when they are involved in hardcore physical sports. The side effects that can occur as a result of using stimulants prove to be damaging in the long run. Also, the harmful effects depend on the nature of the stimulants. Some officials from the sports industry expressed their concerns concerning stimulants used for enhancing performance, and they are of the view that ingredients that are used in stimulants for improving performance may give short-term benefits, whereas their disadvantages can be worse in the long term. If a sportsman is taking stimulants, he must be very clear as to what he is taking and what their impacts could be in the future. Many athletes around the world take such stimulants with the belief that they are safe. The constant use of stimulants that causes abnormal growth makes athletes believe that it is the only source to perform better, which is why they start using stimulants excessively, which can be very destructive for the body and overall health (Kilcarr). It is imperative for all of us to realize that we are human beings; we can't push ourselves too much in pursuit of success. If we do so, it would mean that we are putting our health at risk. Some professionals who run sports affairs are of the view that there should be more ethical debates about prescription stimulants for awareness purposes. Also, developing a belief that high performance can be achieved only through stimulants is a negative element as it affects a person's efforts and hard work to obtain good results. Whether it is sports or academics, pressure is the factor that forces students or athletes to use stimulants (prescription or otherwise) (Reynolds). These pressures include the pressure of winning games and getting a scholarship in college. Also, students and athletes get inspiration from their fellows; when they hear that someone is using stimulants and has performed well, it gives them the motivation to use stimulants themselves. When using them, they must be aware of the harmful side effects that cannot be overruled.

Literature Review

Non-medical use of prescription stimulants is more common among college students as compared with school students (Parks et al.). A particular study has revealed that from 4.1% to 10.8% of college students use prescription stimulants non-medically (Taylor et al.). Another study shows that non-medical use of stimulants rose significantly from 2003 to 2016. There is an interesting question: from where did the students get non-medical stimulants? The answer to this question is not very complicated, as students who are engaged in non-medical stimulant usage often obtain them from their friends or people they know. According to one study, 5.3% of college students are using stimulants because of ADHD conditions (Dietz et al.).

There is a serious problem of illegal sharing, selling and purchasing of stimulants; a culture of these illicit activities is prevalent, and students are getting influenced by their fellows. There has even been a significant rise in the usage of prescription stimulants among those students who were diagnosed with mental health problems (Weyandt et al.). The students who use non-medical stimulants are those who have drinking habits, obtain low grades in college, are experiencing depression of some kind, and are under some type of psychological fear. Experimental research has found mixed results regarding the performance of students who are involved in prescription stimulant use. In fact, there is no evidence that suggests that taking prescription stimulants gives good grades to students or enhances mental capabilities to excel in class.

It is the equal responsibility of parents, teachers and administrators to stop students from non-medical use of stimulants. For that purpose, they should engage students in friendly conversation, and if they feel at any point that a student is misled and is looking to use stimulants non-medically, then parents and other concerned people should discourage this behavior. Teens are susceptible; anyone can persuade them.

The Disadvantages Of Prescription Stimulants

Amphetamine

The amphetamine substance has harmful effects on the body, which include insomnia, reduced appetite, and an increase in heart rate. An overdose of this particular stimulant can be even riskier and can be much more harmful to the body. The increased stress on the heart or palpitation can be lethal. Also, the long-term use of “Ritalin” caused the death of a teenager due to a sudden heart attack. Similarly, a “Ritalin” injection has further disadvantages for the body. “Methylphenidate” is a chemical compound that completely dissolves in water; it also contains tiny particles of insoluble filters. The materials may choke the small blood vessels, and when they are used as an injection in the bloodstream, they can be damaging to the lungs and may cause serious harm to the eyes. Besides harmful physical effects, it can cause severe emotional problems even with the short-term

usage of this particular stimulant. Intoxication and abnormal thinking patterns can also occur as a result of its usage. A specific study has found that the use of Ritalin elevates the danger of cancer. According to this study, every one out of twelve children who received treatment with methylphenidate suffered genetic disorders that were linked with a high risk of cancer. In this regard, even small effects cannot be overlooked, which include lack of appetite, hypertension, increased body temperatures, pupil dilation, change in sleeping routine and patterns, nausea, fatigue, panic, fear, the risk of seizures, allergies, and swelling on the skin. It can even cause death.

Long-term effects can be much more severe, as they can cause damage to blood vessels of the heart and brain on a permanent basis, heart attacks and strokes, severe liver, kidney and lung damage, destruction of tissues in the nose, breathing/respiratory problems, other infectious diseases and disorders, constant weight loss, epilepsy, lack of interest, and fatigue (Ilieva et al.). Most of all, there are risks of sudden death which cannot be ignored. Another question arises: Does the use of prescription stimulants cause addiction in humans? The answer to this question is yes. Even if prescribed by a doctor, long-term usage can cause addiction. Also, a person develops tolerance by using stimulants for a longer period, which implies that the person needs a higher dose and may also need it more frequently. If a person has developed substance use disorder (SUD) and has decided to give up stimulants, the person may experience withdrawal. Withdrawal symptoms include fatigue, depression and lack of sleep.

Another common question that is asked in this regard is how people can be treated if they are suffering from addiction. The effective methods of treating addiction include behavioral therapy and mental behavioral treatment. Other methods include rewards that are offered for behaving positively, such as staying away from stimulants. Addiction falls into the category of a chronic condition, which is why patients cannot be recommended to stop using stimulants for a few days for recovery reasons. Recovery is a complete process that takes time and full focus on patients so that they can give up stimulants and recover completely. Engaging patients in social activities is also a part of therapy; keen involvement with family and friends helps students, athletes and general patients to heal swiftly.

Behavioral therapies are vital for patients to modify their behaviors. They also bring a positive attitude to patients; if patients have any prior psychological disorders, these can be controlled through active behavioral therapy. It also puts patients on the right track in life. Various approaches and methodologies are included in behavioral treatment depending on the stage of the patient (Munro et al.). Engaging patients in conversation is also instrumental in their recovery as it gives them the feeling of being cared for. Active treatment can take place in different sessions. These sessions can be held weekly with the patients. The purpose of behavioral therapy is to give attention to patients.

Effective treatment is based on the following principles:

- No single pattern or particular method should apply to every patient
- Patients need immediate treatment
- It caters to all the physical and mental disorders of the patient

- Develop a complete strategy for the patient's cure
- Counseling and other related behavioral therapies
- Medications along with other behavioral treatments depending on patients' conditions

The treatment plan should test patients for HIV alongside other physical and mental disorders.

So, patients who are taking prescription stimulants should make sure they are taking the dose that was prescribed by the doctor; they shouldn't exceed the quantity based on their perception. An individual should take into account all these severe effects while taking prescription stimulants. Considering the harmful effects of prescription stimulants, if anyone by mistake or deliberately takes an overdose, he/she should immediately contact a physician to avoid adverse effects.

Conclusion

Human psychology is such that people want to have the upper hand over their competitors and opponents. For this purpose, people seek different approaches and adopt various methodologies to improve performance. Many college students and athletes have developed the belief that using stimulants will serve as a performance enhancer for them, and it will help them achieve good grades and also give them success on sporting grounds. This belief prompts them to use stimulants. They get stimulants from their friends and the black market. No medical evidence says that stimulants enhance and improve performance. However, a short-term benefit may be obtained as a result of their usage, but, on the other hand, they carry incredibly harmful effects. The primary purpose of prescription stimulants is to treat ADHD (Attention Deficit Hyperactivity Disorder) and ADD (Attention Deficit Disorder). Adverse impacts of "amphetamines" include lack of appetite, sleep disorder, fatigue, nausea, and increased risk of heart attack. Also, they cause hallucinations in cases of overuse. Even patients with ADHD and ADD should take the prescribed level of stimulants. If the dose exceeds the specified level, a doctor should be consulted without any delay. If someone keeps taking stimulants slightly above the required level, the body gets used to it quickly, and it would then need that certain level; in the long run, this quantity affects nerves and causes extreme conditions in the body. When the body becomes dependent on stimulants, immediately giving them up does not serve the purpose. Instead, behavioral therapy is the right option for such patients. Behavioral therapy is a complete process in which counseling is also involved. This process further enables patients to reform their behavior. Depending upon the case, a patient can be put on medication alongside behavioral therapy. In this regard, the responsibility lies on the shoulders of the doctor, counselor, friends and family of the person, as all these people give the patient a sense of care, as loneliness is exceptionally harmful under such conditions. Being alone causes depression, which can hurt the recovery of patients. Finally, health is life; everyone should realize this fundamental principle. The students must be able to handle the pressure of getting good grades; they should focus on their studies by utilizing their intellectual capabilities without relying on prescription stimulants. Similarly, sportsmen and athletes must be aware of the harmful effects of prescription stimulants, as they are not proven performance enhancers; instead, they are injurious to both mental and physical health. Finally, in light of the

discussion, it is concluded that students and athletes must not take prescription stimulants for performance-enhancing purposes. Prescription stimulants are used for patients with ADHD (Attention Deficit Hyperactivity Disorder) or ADD (Attention Deficit Disorder).

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