# Performance and Image Enhancing Drugs – What are the Risks? Killian Donnellan

# Introduction

When it comes to performance enhancing drugs the first thing that comes to mind is how it is used by professional athletes in sport. Infamously athletes such as Lance Armstrong and Justin Gatlin have used performance enhancing drugs to gain that extra advantage and has given such drugs a bad reputation. However, this is now filtering down from sporting athletes to the wider public who are not only using them for performance enhancing purposes, but for image enhancing purposes. Image enhancing drugs were once only associated with the rich and famous, but are now common among regular people. People take these drugs to feel more confident in their bodies and hide their imperfections. This article will aim to give a broad understanding of PIEDs and outline the dangers of taking these substances.

#### What Are PIEDs?

Performance and image enhancing drugs also known as PIEDs are substances used for upgrading a person's looks and abilities. They can be taken to boost athletic performance to changing a person's skin tone. People that use PIEDs self-administer these types of drugs without medical oversight. These kinds of drugs are made and marketed to the public without regulations which puts at risk the health and safety of people using these drugs (Richards 2016).

#### Who Are Taking These Drugs?

According to an international wide survey conducted by Merchants Quay Ireland those taking performance and image enhancing drugs fall into few demographics. For example, the average age of a person using these drugs was 27 years old with all participants in the survey falling in the 18 to 40 age category. Most surprisingly of all is that it was only males that were surveyed taking these drugs (Jennings, Patten, Kennedy and Kelly, 2014). This perhaps suggests that males amongst each other are more fiercely competitive than compared to females and are more body conscious compared to previous generations. Consumers of performance enhancing drugs in order get fit and healthy in a much shorter period. Performance enhancing drugs are also used by students during the academic year to help maintain concentration. However, only a small number of students use performance enhancing drugs with those in high pressure jobs or those working long hours also consumers of such drugs. For image enhancing drugs they are mostly used by females to create the perfect image of themselves, but also to look young and stay young (Richards, 2016).

#### What Drugs Are People Using?

For performance enhancing drugs, steroids are the most sought after drug for this purpose. The most widely used are anabolic steroids. These are regularly taken by those active in sports and who go to the gym to grow muscle mass and size (Richards, 2016). Performance enhancing drugs are not only taken to enhance people physically, but they can also be used to enhance the mind. Nootropics also known as study drugs are used by students to increase mental performance, concentration or alertness (Richards, 2016). Image enhancing drugs involve the use of botox and tanning drugs. These types of drugs are mostly used by females and are used by the old and young. Botox also known as botulinum toxin is the most common cosmetic used by people. It helps to make people's faces look younger and decrease the number of wrinkles on the skin (Department of Health, 2013). Melanotan is another drug used which is injected into the skin to help darken skin tone to make it easier for someone to develop a tan (Evans Brown, 2009). Some people prefer a lighter skin tone who use skin bleaching to get a lighter skin tone. Hydroquinone is the most common substance used for skin bleaching creams (Evans Brown, 2012, The Parliamentary Office of Science and Technology, 2013). Image enhancing drugs are mostly used by females and by both old and young people. People that wish to look younger or are looking for that perfect look are regular users of these type of drugs (Richards, 2016).

# What Are The Risks?

When taking PIEDs there can be side effects and risks to taking these drugs. The side effects can be mild to seriously harmful to a person's physical and mental health. If anabolic steroids are taken long term it can lead to gender specific features being altered in male and female bodies for example shrinking testicles, hair loss and shrinking breasts (Richards, 2016). There is also long term physical harm due to the use of anabolic steroids such as liver damage, kidney issues and cardiovascular problems for example high blood pressure (Evans Brown, 2009). A person's mental health can be changed by taking anabolic steroids with examples of

people developing increased, anger and mood swings (Richards, 2016). For people taking nootropic drugs there are many risks involved when consuming those drugs. Supplements and non-psychoactive substances such as magnesium pills can cause acute toxicity if taken long term (Koskiniemi, 1998). Mildly psychoactive substances such as modafinil can lead to many side effects such as anger, disturbed sleep and increased heart rate however, these side effects have no serious long-term health risks (Evans Brown, 2012). Stronger stimulants such as Ritalin have some side effects for example uneven heartbeat and mood changes however, if taken long term there is a risk of dependency on this drug (HPRA.ie, 2014). For image enhancing drugs there are some risks to a person's health if taking botox injections. The risks involved are from unsafe injections which can lead to harm to injections sites, toxicity and infection (Evans Brown, 2009). For people using skin bleaching creams these can cause kidney damage if used long term, but can also have common side effects such as inflammation and scarring of the skin where cream is applied (Evans Brown, 2012).

# Conclusion

This article gives an insight into what PIEDs are, who are taking these drugs, what drugs are being taken and the risks to taking these substances both physically and mentally. This category of drug is capable of changing people's bodies physically, damaging people mentally and causing minor to serious harm to a person's health. Performance and image enhancing drugs can also lead to addiction just like drugs such as heroin and cocaine. There needs to be more information provided regarding these types of drugs with the dangers these substances can cause to a person's body and mind.

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