

**INDEPENDENT ANALYSIS ON ANABOLIC STEROID ABUSE
AMONG MALE ADOLESCENTS AND ITS POTENTIAL RISE IN
INDONESIA**



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Darren Hugo Romamti

hugodarren007@gmail.com

+62 899-8585-758

Jl.Petemon II No.139

INTRODUCTION

According to the Oxford dictionary, anabolic steroid is an artificial hormone that increases the size of the muscles. The misuse of anabolic-androgenic steroids (AAS) among adolescents is a growing global issue, data ranging from 4% to 12% among male adolescents in countries such as the United States and Iceland. This alarming problem is mostly caused by the pursuit of physical perfection and athletic prowess, often influenced by social media, toxic gym culture, and body dysmorphia. In the United States, over 375,000 male high school students have reportedly used anabolic steroids at least once in their lives. Similarly, studies in Europe show that 1.6% of young individuals aged 17 years have used steroids, with users experiencing higher rates of depression, anxiety, and substance abuse compared to non-users.

Indonesia, while not yet reporting steroid abuse rates as high as seen in Western countries, is still heavily exposed to these trends around fitness. The rapid growth of fitness culture and social media influencers promoting muscular physiques may create an incentive for this problem to grow domestically. By analyzing world data, this essay aims to emphasize how steroid abuse could become an issue in Indonesia if preventive measures are not implemented.

COMPLICATION

Anabolic steroids, particularly testosterone and its synthetic derivatives are incredibly powerful substances that allow users to build muscle mass and strength far beyond natural limits. In controlled studies, individuals who received 600 mg of testosterone enanthate weekly gained over 6 kg of lean muscle mass in just 10 weeks without performing any kind of resistance training. However, when combined with resistance training, the results were even more staggering, with bench press strength increasing by 22 kg and squat strength by 38 kg. This is a level of progress that natural athletes take years to achieve, if ever. This absurd physical potential is precisely what draws adolescents into using anabolic steroids, chasing rapid transformations. However, these muscle gains come at a steep price of health both physically and mentally. It is severe, long-lasting, and often irreversible. The consequences of anabolic steroids are the following:

A. Cardiovascular Damage

One of the most dangerous effects of steroid abuse is the damage to the cardiovascular system. Steroids can significantly increase LDL (bad cholesterol) while decreasing HDL (good cholesterol), creating a severe imbalance that accelerates the development of atherosclerosis (plaque buildup in arteries.). This highly increases the risk of heart attacks, strokes, and sudden cardiac arrest. The consequences are even more severe among adolescents whose bodies are still developing. Chronic high blood pressure (hypertension) is likewise common in steroid users, which goes to show how dangerous are towards cardiovascular health.

B. Liver Toxicity

Anabolic steroids consumed orally are particularly damaging to the liver because they are chemically composed to outlast digestion. Long-term use elevates liver enzymes such as ALAT and ASAT, which are medical indicators of liver stress or damage. In extreme cases, long-term use has been linked to hepatic tumors and peliosis hepatis, a rare but potentially fatal condition where blood-filled cysts form in the liver.

C. Hormonal Imbalances

Steroid abuse disrupts the body's hormonal system. When external testosterone overflows the system, the body reduces or even shuts down its own production of the hormone. This leads to testicular atrophy (shrinking of the testicles), infertility, and gynecomastia (male breast tissue growth) due to the body's conversion of excess testosterone into estrogen. In adolescents, steroid use can also stunt growth by causing premature closure of the epiphyseal growth plates in bones, permanently halting height development.

D. Psychiatric and Emotional Effects

The psychological damage of steroids is likewise concerning. Many users have been reported to experience "roid rage", extreme aggression, and irritability which can lead to violent behavior. Steroids have also been linked to depression, anxiety, paranoia, and others, especially at withdrawal periods when hormone levels take a steep drop. A study conducted in Iceland revealed that 30% of adolescent steroid users have attempted suicide. The emotional instability caused by steroids can destroy relationships, academic performance, and overall mental health.

E. Addiction and Dependence

Despite being non-narcotic, anabolic steroids can be highly addictive. Users often develop a psychological dependence, relying on steroids to maintain their physique, confidence, and self-worth. Over time, the cycles of use, withdrawal, and relapse become perpetual. The fear of losing muscle can trap users in a cycle of continuous steroid abuse, making them more vulnerable to all the aforementioned health risks.

ANALYSIS

Steroid abuse among adolescents is driven by psychological, social, and systemic factors that are slowly showing relevance within Indonesia's youth. In this passage we will explore the issue.

A. Psychological Drivers

Across the world, body dysmorphia and low self-esteem are major contributors to steroid abuse. A study in Iceland revealed that steroid users were more likely to experience anger issues, anxiety, depression, and suicidal tendencies compared to non-users. These psychological struggles are further catalyzed by unrealistic fitness standards pushed by social media platforms like Instagram and TikTok.

B. Social Influence

Toxic gym culture and the normalization of steroids play a significant role in the steroid epidemic. In the United States, many adolescents take steroids as a shortcut to achieving muscular physiques admired in fitness communities like: Togi, Alex Eubanks, Tren Twins, and countless others. Indonesia's growing fitness industry also shows similar patterns, with fitness centers becoming increasingly popular among the youth.

C. Accessibility

As of right now, anabolic steroids are accessible through black markets and online platforms despite being classified as controlled substances in many countries. Indonesia faces similar challenges, unregulated sales make it easy for adolescents to obtain these substances without prescriptions.

PROPOSED SOLUTIONS

To combat the rising threat of steroid abuse among adolescents, especially in Indonesia, a strategy that is clear and practical is essential. The following passage will encompass realistic solutions to tackle the steroid epidemic:

A. Role-Models

A way to tackle the steroid epidemic is by promoting healthy and natural role models. Indonesian youth tend to be gullible and are heavily influenced by what they consume on social media, so promoting athletes, fitness influencers, and public figures who reject steroids and embrace a natural fitness lifestyle is essential. When teens see real people achieving real results through hard work and consistency without shortcuts, their definition of strength and success is reshaped positively and realistically.

B. Awareness

Schools and governmental sectors related to health should implement transparent science-based lessons about steroid use into health and physical education. These lessons must go beyond fear-mongering, but also explaining how steroids affect the body and mind while addressing relevant issues like body image and unrealistic fitness standards. When students understand the full picture, they're empowered to make better choices.

C. Regulations

Lastly, stricter regulations and enforcement around steroid distribution must be implemented. Authorities like BPOM should crack down on the illegal sale of anabolic steroids, especially through online platforms and black markets. Gyms must be monitored more strictly, with mandatory ethics training for coaches to prevent them from promoting or supplying these substances. With better regulation and more accountability, the steroid epidemic can not only be minimized, but also eradicated.

CONCLUSION

Anabolic steroid abuse among male adolescents is a crucial global concern that if left untouched, could become a threat to the health of young people around the world including Indonesia's. The temptation of rapid physical transformation, influenced by social media, toxic gym culture, and body dysmorphia is leading more and more young people to resort to dangerous, more often than not unregulated substances to achieve the muscular physiques they desire. The health risks associated with steroid abuse from cardiovascular damage to psychiatric disorders, are severe and long-lasting, especially for adolescents whose bodies are fragile and still developing.

To prevent this issue from escalating domestically, it is crucial for Indonesia to take proactive and reactive steps, such as promoting healthy natural role models, raising awareness through education, and enforcing stricter regulations on steroid distribution are key solutions to tackling the steroid epidemic. By empowering young people with knowledge and providing positive examples, we can help them make healthier long-term choices and reject harmful shortcuts to achieve an unrealistic physique.

The youth are the future of Indonesia, and their well-being must be protected both physically and mentally. It is up to the society, government, and people to create an environment that values long-term health over instant results. Only through joint efforts can we ensure that the pursuit of strength and confidence doesn't come at the cost of mental and physical health. The steroid epidemic is our problem, therefore we should all be a part of the solution.

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Asal Sekolah : *SMA Katolik St. Louis 1 Surabaya*
No. HP Aktif : *08590505750*
Alamat Email : *hugoderromanti@gmail.com*

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