

Denmark & Steroids: Fighting an Overlooked Drug Pandemic

As a country known for its trademark concept of contentment: “hygge”, delicious pastries, and universally enjoyed LEGOs, one would have little reason to suspect that Denmark is in fact a leader in combatting an overlooked drug pandemic. The rise of technology has exacerbated steroid abuse especially among Western countries. As social media intertwines masculinity and muscularity, young men are increasingly turning to steroids to overcome their physical insecurities. However, as with many drugs, steroids come at a cost; not only are they illegal in many countries, but they also cause bodily harm. Despite research showing the damage caused by the drug, many countries lack the will to address the steroid pandemic, making Denmark a pioneer in the field.

Anabolic-androgenic steroids (AAS) are synthetically replicated sex hormones (androgens). Steroids were first discovered in the 1930s when scientists isolated testosterone, the primary, male sex hormone. Since their introduction, steroids have been subject to frequent abuse for non-medical purposes. Many of them were invented to treat medical conditions such as “male hypogonadism, ... immunodeficiency virus, cancer, burns, renal and hepatic failure, and anemia associated with leukemia or kidney failure.” Although steroids are used medically, the properties that make them useful are also advantageous to gym goers and athletes alike. Take testosterone for example: the compound naturally occurs in the body and is essential for male development in reproductive health and muscle growth. In a study conducted by Bhasin and colleagues, men who took 600 mg of testosterone and performed routine exercise developed 6.1 kg in overall muscle mass and increased their bench-press and squat capacities during a 10-week period. It comes as no surprise that steroids are abused for athletic and aesthetic purposes. In another study, obese subjects prescribed testosterone only experienced fat loss as compared to the placebo group that lost fat and lean muscle mass through dieting. Evidently, the strength, muscle mass, and fat loss properties of steroids make them attractive for physical enhancement.

However, the side effects can have drastic, life-threatening consequences. Each individual’s experience differs by drug type, dosage, concentration, and duration, but generally steroids have been found to cause bodily damage. Examples include behavioral changes, especially a tendency of aggression and mood swings (commonly known as “roid rage”), acne breakouts, male-pattern balding, testicular atrophy, breast development, infertility, high cholesterol, and organ damage or failure. Steroids come in different forms, but for injection-based users, sharing needles increases the risk of HIV/AIDS and hepatitis. Even after abstaining from steroids, some impacts remain irreversible.

Anabolic steroids were once thought of as obscure substances only used by bodybuilders. Prior to research into their consequences, steroids were used by famed contestants such as Arnold Schwarzenegger and Ronnie Coleman. During their time, steroids were still legal and could be obtained without consequence. Athletes were just as eager to use steroids for performance enhancements as evinced by past doping scandals. It was not until 1990 that the United States Congress added steroids to the Controlled Substances Act (CSA) as a Class III scheduled drug. This meant users could only obtain the drug through medical prescriptions. Additionally, new legislatures were implemented to deter steroid abuse. Various programs were put in place to educate younger generations. The Ad Council ran the Don’t Be An Asterisk

campaign in 2008 to discourage budding athletes from taking steroids. Posters included the captions, “When you take steroids, there's no hiding it. Eventually everyone will see you for what you really are. A fake. A fraud. An asterisk”. The NFL’s ATLAS and ATHENA programs designed their anti-doping programs specifically for male high school football players. But the rises of the internet and social media have allowed steroids to outpace anti-doping messages.

Certain countries such as the United Kingdom take a laxer stance on steroids. In the UK specifically, it is legal to possess them for personal or medical use. Thus, the atmosphere around anabolic steroids is much more relaxed and allows for higher accuracy in surveys analyzing steroid usage (given that surveys are largely self-reported, underreporting in countries that ban steroids is a legitimate concern for researchers). In 2016, the National IPED Info Survey put forth a questionnaire and received responses from 684 citizens in the United Kingdom. Findings reported that 94% of steroid users were male, the majority of users fell in the twenty to twenty-nine year age range for their first usage, and 56% of participants used steroids for body enhancement. Academic Josh Torrance, who studies the UK’s illicit drug markets, attributes high steroid usage to social media. As social media reinforces traditional views of masculinity being tied with muscularity, male individuals may develop insecurities about their bodies, also known as body dysmorphia, and seek out ways of enhancement. “We need to be seriously addressing [body dysmorphia] if we have a hope of persuading young men not to start taking steroids in the first place”. In 2018, the Guardian reported, “Police forces and border officials are seeing an increase in the number of underground laboratories “cooking” steroids in the UK and consignments of drugs being imported to the UK from [other] countries... The rise of social media has made it easier to swap both information and products.” Simply searching “How to Make Steroids” on YouTube will produce results to homebrew testosterone as well as the ‘proper’ way to schedule drug dosages. On Apple Music, a simple word search on “steroids” or “legalize steroids” will yield dozens of songs. Steroids have strengthened their presence in modern culture leading to a new wave of anti-doping efforts. In 2023, The World Anti-Doping Agency (WADA) established the “Natural is Enough” social media campaign. They sought to spread anti-substance abuse messages through fitness influencers online. All seven influencers hailed from Europe (UK, Germany, France, and Spain), but the campaign has made little progress in addressing this growing pandemic.

Although the international cooperation needed in solving steroid abuse is currently nonexistent, Denmark has made significant efforts to reign in usage within its borders. Prior to analyzing the country’s attitudes towards steroids, it should be noted that Denmark does not have the lowest steroid usage in the world. A meta-analysis found that the continents of Africa and Asia exhibited the lowest prevalence rates at roughly 2.4% and 0.2% respectively. Researchers associated such low rates with cultures that do not emphasize muscularity as a condition for masculinity. However, simply having low prevalence rates does not indicate that a country has actively combatted steroid usage. Thus, for the purpose of this article, Denmark will remain the top contender as the world’s leading country battling the steroid pandemic via its state-sponsored legal frameworks and educational campaigns.

Similarly to the United States, Denmark bans the use of steroids with the sole exception of prescriptions by doctors. However, unlike many other countries’ focus on anti-doping in elite athletes, Denmark’s steroid policy is heavily enforced across all institutions including fitness

centers accessible by ordinary citizens. Sport culture is significant in Denmark; Danes routinely partake in a wide variety of sports including soccer, cycling, handball, and sailing, and the addition of gyms to fitness centers are only making physical activity more appealing. It comes as no surprise that individuals will also seek ways to gain an advantage in their sports. Steroid abuse was first made aware following national surveys conducted in 1999 to assess usage among fitness club members and cyclists associated with the Danish Cycling Federation. Despite the low percentage of reported steroid users (3% of participants), the government passed legislation mandating that both professional and non-professional sport organizations abide by WADA's anti-doping guidelines even though WADA geared their policies towards competitive athletes. Due to this law's enactment in 2005, Anti-Doping Denmark (ADD), the country's primary anti-steroid enforcement body, has been able to conduct randomized drug testing in associated gyms and sport centers. As of 2025, 633 fitness centers (making up 60% of the country's sports facilities) are affiliated with the ADD, up from 369 in 2024. In addition to governmental efforts, gym managers are also encouraged to report suspicious members for testing based on the ADD's 2009 steroid user identification handbook. In the event that a member tests positive, tries to manipulate the result, or refuses to take a test, said member is barred from accessing ADD associated sports centers for the next two years. If repeated offense does occur, the member is permanently banned from all ADD sports institutions. A survey conducted in 2012 found that among 299 fitness club members, 92% percent supported doping tests, 83% disapproved of steroid use in connection to physical enhancement, and 73% favored the previously established system of testing and subsequent consequences.

In addition to active testing of individuals for steroid abuse, ADD also utilizes a harm reduction strategy. Their website offers anonymous counseling services teaching users, typically young men with a variety of background knowledge on steroids, the consequences of using the drug. This educational approach to steroid abuse is especially important for two reasons. Firstly, 40% of Denmark's gyms are not under the jurisdiction of ADD making it unlawful for agents to conduct randomized testing in said fitness centers. Secondly, recent surveys have found that a portion of gym goers disagree with the current enforcement of the zero-tolerance policy which they view as a violation of privacy. Thus, maintaining an open, accessible dialogue is critical for educating Danish citizens. A 2021 study reviewed data from 2005-2018 concerning the questions submitted to the counseling services. Of the 7,100 inquiries, 60% originated from steroid abusers and 17% stemmed from individuals close to the abusers. Although it is challenging to measure the actual efficacy of the counseling service, it remains as a viable tool for ADD to mitigate steroid abuse.

It is impossible to completely eliminate steroid use from the entirety of the country as abusers will continuously find new sources of the substance. Developments in social media aggravate current and potential users' hunger for steroids, and while the internet grants them faster connection to suppliers which further exacerbates its proliferation. However, it remains a government's responsibility to safeguard its people from dangers in the face of all odds. This is the exact example the Danish government is setting: strict legislatures, steroid testing, legal enforcement, and educational resources allow the Danish government to protect the health of its people even when other countries maintain lax stances on the matter. It is only a matter of time until other Western countries look to Denmark as a paradigm in confronting steroid usage.

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