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Body Dysmorphic-Induced Androgenic Anabolic Steroids Usage and Its Association with Mental Health Outcomes: A Systematic Review

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Health Outcomes: a Systematic Review

By Ahmed Gawash, Hasan Zia, David Lo (Rowan-Virtua School of Osteopathic Medicine)

Abstract

- This systematic review aims to examine the relationship between body dysmorphic disorder (BDD), anabolic-androgenic steroid (AAS) use, and mental health outcomes.
- Prior research suggests that individuals with BDD may be more likely to abuse AAS due to their preoccupation with appearance.
- However, AAS use may worsen mental health issues in this population and exacerbate the issue.
- The review will inform future researchers and health practitioners on effective interventions and treatments for individuals with BDD who may be considering AAS use.

Introduction

- Body dysmorphic disorder (BDD) is characterized by excessive and distorted preoccupation with perceived physical defects or flaws in appearance that cause distress in many areas of an individual's life.
- Individuals with BDD may engage in repetitive behaviors to alleviate their distress, such as mirror checking, skin picking, or seeking reassurance from others.
- BDD is a relatively common disorder that can occur in both males and females, tends to develop in adolescence or early adulthood, and is often accompanied by other mental health conditions such as anxiety and depression.
- Anabolic-androgenic steroids (AAS) are a class of synthetic hormones derived from testosterone that are frequently used by athletes and bodybuilders to enhance performance, but they have a high potential for abuse and can cause serious negative health effects.
- Individuals with BDD may use AAS to alter their appearance and alleviate psychological distress, but research has shown that AAS use may actually worsen mental health issues in individuals with BDD.
- Investigating the relationship between BDD, AAS use, and mental health outcomes is complicated and involves multiple factors, including physical and hormonal changes from AAS use and intensification of preoccupation with appearance.
- This systematic review aims to explore the relationship between BDD, AAS use, and mental health outcomes and inform potential interventions and future treatments to mitigate detrimental effects.

Results

- Body dysmorphic disorder (BDD) is characterized by an obsession with alleged physical flaws. Bodybuilders and fitness athletes (BoFA) experienced a marked decline in physical activity and mental health during the lockdown due to COVID-19. BoFA also experienced a high level of insomnia, depression, and anxiety. Individuals at risk for muscle dysmorphia performed worse and scored higher on tests of anxiety, insomnia, and depression compared to those without the disorder.
- Understanding the effect of gender socialization on men's health and behaviors is key to addressing men's health issues and decreasing the utilization of AAS as a coping mechanism. Lifestyle medicine is a crucial piece of men's health. COVID-19 pandemic added another layer of increased stress, anxiety, and isolation. People with BDD have been negatively impacted by pandemic-related stress, and may use substances or unhealthy behaviors to cope.
- Having more sexual partners, being older, having higher levels of eating concern and impulsivity are linked to higher levels of body dysmorphia and muscle dysmorphia in both men and women equally. Maintaining a youthful appearance is valued, and aging can have a negative impact on physical appearance. Impulsivity and eating issues have also been linked to muscle dysmorphia and disordered eating attitudes.
- AAS can also further mental health outcomes by emerging further mood disorders. The independent use of AAS, without a history of BDD, has been associated with a higher risk of depression, mania, and other bipolar disorders. Signs of steroid-induced depression include feeling down or hopeless.

Discussion

- Bodybuilders and fitness athletes may be more susceptible to developing muscle dysmorphia, disordered eating habits, and using performance-enhancing drugs like anabolic-androgenic steroids (AAS).
- The COVID-19 pandemic's increased reliance on social media and online interactions is associated with disordered eating patterns and negative body image.
- AAS can exacerbate muscle dysmorphia and have physically harmful effects on the body, including psychiatric disorders, liver damage, and cardiovascular issues.
- Cognitive-behavioral therapy is an effective treatment for muscle dysmorphia and should be utilized instead of turning to banned substances.
- Lifestyle medicine is essential to addressing men's health issues and societal changes are required to address the root causes of BDD and related conditions.



Conclusion

- Several factors may increase the risk of muscle dysmorphia, disordered eating patterns, and use of performance-enhancing drugs.
- Societal changes should address negative stigma related to sexual partners, getting older, and eating concerns/impulsivity.
- Cognitive-behavioral therapy, mindfulness-based interventions, and peer support programs should be developed and evaluated for those at risk of using AAS.
- People with BDD should seek appropriate care before turning to unhealthy outlets like AAS.
- Limitations to the systematic review include a small number of studies and potential bias in the included studies.
- Further systematic reviews should use less stringent search strings and a greater variety of databases to improve understanding of the relationship between BDD, AAS use, and mental health outcomes.

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