

## The Use of Steroids by Gym Athletes: an Attempt to Diagnose the Problem Scale and Possible Causes

*A Dittfeld (PL) [1], K Gwizdek (PL) [2], A Brz?k (PL) [3], M B?k-Sosnowska (PL) [4], A Knapik (PL) [5], D Zi?ja (PL) [6]*

### Context

Anabolic-androgenic steroids (AAS) are said to be frequently used by both professional and amateur athletes. The use of anabolic steroids particularly in sport is not consistent with the popular concept of fair play.

### Objective

Over the past four decades, the number of individuals using and addicted to AAS has been growing. Research shows that men working out in the gym more frequently decide to take stimulants when compared to women from the same group.

### Methods

A survey prepared by the authors was conducted in the study, and it consisted of 23 closed questions about AAS use, body confidence, and exercise dependence. In addition, a stadiometer and a body composition analyzer were utilized to take necessary measurements.

### Patients

The study involved 435 participants aged between 18-66 (mean age=  $x=27.49\pm7.48$ ). Out of them, 61.4% were male and 38.6% were female. The subjects were divided into two groups: Group A included 154 (35.4%) amateur and recreational athletes and group B included 281 (64.6%) professional athletes concerned with fitness, bodybuilding and powerlifting.

### Intervention

The aim of the study was to evaluate the scale of the problem related to using anabolic-androgenic steroids (AAS) by gym athletes and to analyze possible causes. Next one was the recognition of and presentation of the presumed causes of reach for illegal substances.

### Results

Between 1-23% of group A participants admitted to using AAS. For group B, it was between 7-30%. Males were reported to use AAS more frequently than females in both groups. With regard to group A, differences in body confidence and exercise dependence were found between males using and not using AAS. Exercise dependence was reported to be different between group A and group B participants. This was true for both males and females. Also, it was shown that group A and group B females differed in terms of metabolic age, body mass and body composition (fat mass, fat-free mass, muscle mass, and total body water).

### Conclusions

Most gym athletes do not use AAS. Amateur athletes tend to use AAS more frequently than professional

athletes. Factors that contribute to AAS use are: male gender, low body confidence, young age, and long training.

[1] Medical University of Silesia, [2] Medical University of Silesia in Katowice, [3] Medical University of Silesia in Katowice, [4] Medical University of Silesia in Katowice, [5] Medical University of Silesia in Katowice, [6] Medical University of Silesia in Katowice