

## Level of Knowledge and Extent of Use of Anabolic-Androgenic Steroids among Physical Education University Students: A Cross-Sectional Study from Palestine

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### ABSTRACT

**Background:** Androgenic-anabolic steroids (AAS) use has increased in the last years, especially among athletes, due to their effect on body shape and performance. These agents could have serious side effects among this highly susceptible population.

**Methods:** Cross-sectional study that included physical education students at An-Najah National University over the period of November 2020 to January 2021, using an electronic questionnaire. The main outcome was to measure the level of knowledge and use of AAS.

**Results:** A total of 380 students were included. The mean age of the students was 21 years (SD= 4.2), and study participants were distributed almost equally according to sex. About one fourth of the students were smokers. Eighty percent of the study participants are from West Bank while the remaining 20 % are from Jerusalem and 48 territories. Furthermore, most of the students live with their families, half of them live in cities, while about 40% live in villages and only 8% in camps. The average level of knowledge about AAS was 2.95 over 8 (37/100) with a median of three. Furthermore, only 36 (10%) participants had satisfactory knowledge, scoring 80% or more. Regarding the use of AAS, eleven participants (2.9%), all males, confirmed that they are currently using AAS. Additionally, about 28 (7%) had previously used them while 30 (8%) are planning to try them in the future. Overall, 221(58%) confirmed using vitamins and minerals.

**Conclusion:** Our study showed that the majority of participants have a substantial lack of information regarding the potential side-effects of AAS while the level of use is comparable with other populations.