

# Use of Anabolic Androgenic Steroids in Jordan: Mini- Review

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## Abstract

Until recently, there has been a complete lack of prevalence data regarding anabolic androgenic steroid (AAS) abuse locally in Jordan and the Arab world at large. Encouraged by their trainers, many Jordanian athletes are abusing AAS. The sale of anabolic steroids in Jordan is still unregulated; selling AAS without a prescription is not banned. The Jordanian Anti-Doping Organization (JADO) was founded in 2007, and as a response to the increasing concern about steroid abuse among Jordanian youth JADO accepted the World Anti-Doping Code late 2009, committing Jordan to fighting all types of doping including AAS abuse. However, most Jordanians are not aware of the adverse side effects of AAS abuse. Promoting public awareness about the harmful consequences of AAS abuse, in addition to the role of the law enforcement authorities will hopefully curb the abuse of AAS in Jordan.

**Keywords:** Doping, the Code, Bodybuilder.

## 1. Introduction

Research about the use of anabolic androgenic steroids (AAS) in Jordan and in the Arab world at large is scarce. In addition to two prevalence studies (Al-Falasi *et al.*, 2008; Tahtamouni *et al.*, 2009), few reports from the Arab world came out after the year 2000 where only case reports of AAS abuse were discussed (Alaraj *et al.*, 2005; Samaha *et al.*, 2008). However, more attention has been drawn to this issue as a result to the growing concern of steroid abuse among Jordanian youth and athletes (Tahtamouni *et al.*, 2009).

As a political response to this concern, the Jordanian Anti-Doping Organization (JADO) was founded in 2007 ([www.jado.jo](http://www.jado.jo)). Late that year, government and national Olympic committee officials from Jordan and four other Arab countries met under the supervision of the West Asia Regional Anti-Doping Organization (West Asia RADO), which is a part of the World Anti-Doping Agency (WADA), and established the West Asia Anti-Doping Organization (WAADO). The members of WAADO (located in Amman, the capital of Jordan) have agreed to pull resources together to fight doping throughout the region ([www.wada-ama.org](http://www.wada-ama.org)).

JADO acts as an independent anti-doping organization for Jordan. It has the necessary authority and responsibility for implementing and advocating improvements in the doping control such as testing for AAS abuse among athletes, promoting anti-doping research and planning and monitoring information and education programs

([www.jado.jo](http://www.jado.jo)). Late 2009, JADO accepted the revised 2009 World Anti-Doping Code (Jordan Olympic Committee Anti-Doping Rules, 2009) (the "Code") (World Anti-Doping Code, 2012). Simultaneously, co-operation between various public authorities have led to new strategies which aim at reducing the supply of steroids and as such limiting their use within the general population.

### 1.1. The Anabolic Steroid Users

Despite signs of public concern and disapproval of anabolic steroid use, some athletes – competing as well as recreational – are using these drugs. In fact, competing bodybuilders, weightlifting athletes and students at Jordanian colleges have been identified as specific AAS-using groups (Tahtamouni *et al.*, 2009). Extractions from interviews with trainers/trainees in various gyms across this region - taken from newspapers - indicate that the motives behind the use of steroids are:

A salesman: "People want to build strength, lose fat and have the perfect bodies they see on TV" (Luck, 2009).

Iraqi gym owner: "So many people now want to work out. They want to look good" (Luck, 2009).

A-17-year old Jordanian weightlifting-trainee admitted using "supplements." He said: "I used to be 60 kilos and weak. Now, with the new products and a good coach, I'm going to be better than Rambo" (Luck, 2009).

A Kuwaiti male in his 30's said: "I wanted to bulk up, everyone at my gym had a lot of muscle, and I wanted to be like them. My friends started telling me about the courses [of steroids] they take, injections they use to get

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bigger. So I tried it, they showed me how” (Kolarov, 2009).

Competing bodybuilders and weightlifters that were surveyed by the author (Tahtamouni *et al.*, 2009) described how trainers were advocating “the wonderful properties” of anabolic steroids. As one trainer explained: “One month of hormonal injections and you will be a clone of Sylvester Stallone” and: “Injections work much quicker than pills in blowing the muscles” (Personal Communication). Despite the general disapproval of the use of performance enhancing drugs (AAS), still some seem quite willing to use them in order to obtain the desired body look they want to have.

## 2. The Public Health Concern

Some examples of the users’ behavior when training and while using steroids indicate that there is a real cause for a public health concern. In a correspondence with an MD who is an expert in substance abuse and who is employed at a major hospital in Jordan, he explained how almost every week he was called upon for a consultation with a patient who was admitted to the hospital due to complications resulting from anabolic steroid overdosing. Even autopsies where the cause of death (apparently) was found to be excessive use of steroids are not uncommon (Personal Communication). However, exact numbers of such patients, numbers of autopsies conducted on steroids users and case reports demonstrating a direct relationship between use of steroids and cause of death are unavailable. The information provided in the correspondence should be viewed as an indication that some users are using steroids to an extent where they can be fatal or can cause serious health complications.

In general, very little information about the side effects associated with steroid use has been available in Jordan. It seems that many coaches and gym owners dealing anabolic steroids in gyms are in fact unaware of the potential harmful side effects of these drugs (Büttner and Thieme, 2010); and if they are, these effects are rarely discussed with the users (e.g. competing bodybuilders and weightlifters) (Tahtamouni *et al.*, 2009; Personal Communication). The quality of advice may therefore vary greatly. Some may even disregard the potential risks of using AAS, as expressed by one weightlifting trainer: “If I can bench press hundreds of pounds and have low fat, then in my opinion I’m healthy” (Luck, 2008). These available examples do point to the conclusion that something needs to be done.

Some abusers do not have the nerve to administer the injectable AAS for themselves, so they ask a friend to do it for them who in turn might be inexperienced (Personal Communication). Also, Jordan currently does not have a syringe exchange program (Syringe Exchange Programs Around the World, 2012), and therefore it is possible that the same syringe is used again and again, or is circulated among users, in which case, a high risk of infection will arise. It is worth mentioning that injection equipments, syringes and needles, are readily available over-the-counter in most Jordanian pharmacies; a pack of 100-1ml syringes cost less than 5\$ (www.jomid.net).

## 3. The Drug Supply

The official sale of anabolic steroids in Jordan is still unregulated. Selling anabolic steroids at pharmacies - without a prescription - is not banned in Jordan and these drugs are so far unmentioned in any Jordanian law or any medicine regulation act (www.moh.gov.jo). Many pharmacists provide AAS as an over-the-counter drug (www.moh.gov.jo). Many AAS drugs are not registered in the Jordanian Pharmacist Association (www.jpa.org.jo). There are only three AAS that are prescribed in Jordan, namely Deca-durabolin, Andriol and Sustanon. Besides their use by athletes, these drugs are prescribed in Jordan as a treatment for reproductive dysfunction and breast cancer (Smith, 2009).

However, most of the steroids used in the gyms surveyed by the author (Tahtamouni *et al.*, 2009) are smuggled into the country, mainly from Pakistan, Egypt and India, which is against the customs law and regulations. The customs law regulates all types of smuggling into Jordan. Customs and police authorities prosecute violators and the Ministry of Health and the Food and Drug Administration handles any drugs being confiscated (www.customs.gov.jo). The drugs that are being smuggled into Jordan are supposedly of low quality (e.g. contaminated or less active compound than stated) (Evans-Brown and McVeigh, 2009). Still, to our knowledge no analysis of drugs confiscated at the borders has been published. Despite the supposedly low quality, these products are being used, presumably because they are sold at a cheaper price than steroids available from pharmacies.

### 3.1. The health policy answer

In a rather conservative society, such as that of Jordan, drug use is negatively conceived of, especially when it comes to drugs such as cocaine and cannabis. With anabolic steroids, however, there seems to be public confusion and some people are unaware of the adverse side effects of these drugs (e.g. think anabolic steroids are vitamins) (based on field work by Tahtamouni, 2009-2011). It is a priority for health authorities to inform the public since “people are using all these products (steroids) without knowing the side effects and this is very dangerous” as Jordan’s WHO representative explained (Luck, 2008). Can the formation of JADO increase the amount of available information about use of anabolic steroids?

With the establishment of JADO, competing athletes will be tested for use of performance enhancing drugs. However, in every gym which is licensed under the Higher Council of Youth – in all likelihood some non-competing athletes are found among the gym members – testing may be carried out. Does this mean that recreational athletes with no intention of competing may be subjected to testing regardless of whether or not they intend to compete as bodybuilders or weightlifters at competitions? Is this an unintended consequence of the testing system or does JADO deliberately seek to test recreational athletes?

Will doping tests have a deterrent effect on recreational athletes in these gyms?

There are gyms in Jordan which are not member of any kind of sports federation thus precluded from the testing system set up by JADO. The effects of this testing scheme remain to be seen and evaluated.

Alliances between public authorities - which could enforce and further implement new anti drug strategies – have been formed and institutions such as the Ministry of Health, Ministry of Education, Ministry of Higher Education, Higher Council of Youth, Department of Customs and Jordan Anti-Narcotics Police Department have been working together under the supervision and coordination of JADO. Between these co-operating alliances new legislation which will prohibit pharmacy sale of anabolic steroids without a prescription and introduce severe punishment for smuggling of steroids are currently in the process of being formulated. The upcoming law is still in working progress and sanctions for illegal sale or smuggling into the country remains undecided upon.

#### 4. Conclusion

Possession of anabolic steroids without prescription in Jordan is currently legal, and new legislation attempts to limit supply rather than criminalize the individual user. However, so far use of anabolic steroids in Jordan has to a great extent been unregulated.

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#### Conflicts of interest

None declared.

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