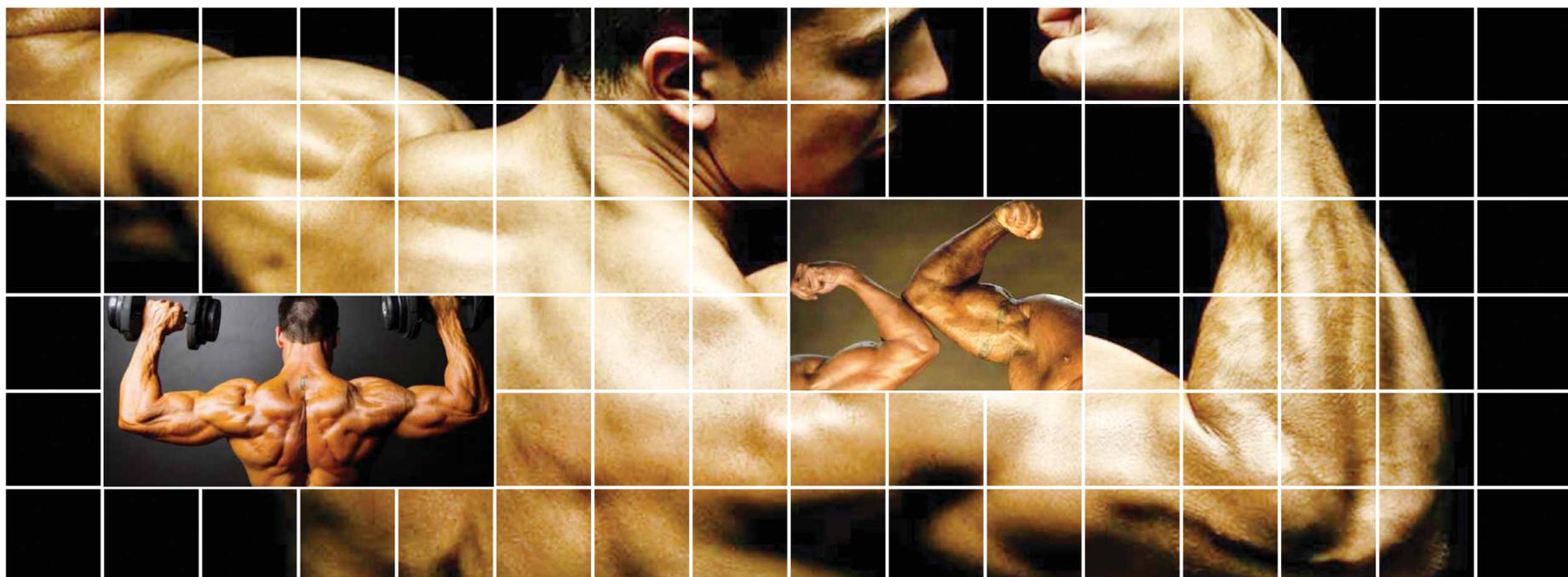


SPECIAL REPORT



Photos show bodybuilders flexing their muscles.

Source: social media

Anabolic-androgenic steroids health concern

World of hurt in hormones for hulk

By Cintra Fernandes
Arab Times Staff

A RECENTLY published article in the International Journal of Men's Health looks at the prevalence and predictors of anabolic-androgenic steroid (AAS) use among gym users in Kuwait. Funded by the Kuwait Foundation for the Advancement of Sciences (KFAS), the article is authored by Neha Khullar - MSc, Nicholas C. Scull - PhD, Maureen C. Deeny - BSc, Pt and Elham Hamdan - MD, all from Fawzia Sultan Rehabilitation Institute (FSRI). In this exclusive interview, Elham Hamdan MD, CMA, President and Medical Director of FSRI reveals the findings of the preliminary study, while elaborating on the factors contributing to its rise and the negative consequences of usage.

Question: Can you explain to our readers what anabolic-androgenic steroids are? Why are they a worldwide health concern?

Answer: Anabolic-androgenic steroids (AAS) are performance enhancing drugs that mimic the effects of the natural male hormone testosterone. The terms anabolic and androgenic refer to their ability to rapidly build muscle and increase masculine characteristics, respectively. Most steroids are taken orally; however, some individuals prefer to inject them prior to exercising because of their immediate effects. Due to their ability to enhance performance, stamina, and recovery, not only do AAS allow users to lift significantly more weight for prolonged periods of time, they also allow them to exercise more frequently without experiencing the same levels of fatigue as non-users. The global estimated lifetime prevalence of AAS use among men is more than 6% - which is almost as high as that of type 2 diabetes. Therefore, along with its torrent of negative side effects (which are explained below), AAS use is becoming a worldwide public health concern.

Q: What were your motivations in conducting this study? Is there any existing data on the topic? How was the study funded and conducted and what were the limitations?

A: The research that exists so far is primarily from Western countries and other Middle Eastern countries such as Jordan, Iraq and UAE. Given that no research, to our knowledge, has been published on the prevalence and predictors of AAS use in Kuwait, we felt that it was important to gauge these numbers as a first step in addressing the economic, political and social factors associated with AAS use and increasing awareness about its negative long-term effects. We are very thankful to the Kuwait Foundation for the Advancement of Sciences (KFAS) who generously funded this study, which allowed us the time to explore all these factors and begin to devise a comprehensive plan to promote public discourse about men's health in Kuwait. This falls in line with the Fawzia Sultan Rehabilitation Institute's commitment to the health and empowerment of the Kuwaiti community.

The study had two parts: the first part (Phase 1) was quantitative in nature. In other words, we wanted to obtain some statistical information about steroid use in Kuwait, such as the percentage of people who use them, what methods of delivery (i.e., injection, oral, or both) are more common, the nationalities of individuals who typically use them (e.g., Kuwaitis or non-Kuwaitis), and what age group is more susceptible to steroid use (i.e., is it younger males, or older males?) This demographic information allows public health researchers and administrators to decide what groups to target for awareness cam-

paigns and where, or to whom, medical and educational resources need to be allocated. All questionnaires were distributed to six local gyms in Kuwait, with permission from the gym managers.

The main limitation of Phase 1 was that all the information obtained was quantitative (i.e., numerical) in nature. No research on this topic can possibly be complete without obtaining qualitative data - i.e., interviewing AAS users and body builders to gain a richer understanding on the motivations behind AAS use. Users are the experts of their personal experiences; therefore we should turn to them to understand the mechanisms that elicit, maintain, and help cease AAS use. That is why we conducted a second part of the study, Phase 2, where we interviewed local, Kuwaiti body builders who use



Elham Hamdan, MD, CMA

steroids. We are currently working on the analyses for this study and will send our manuscript for publication in the near future.

Q: Is this predominantly a male concern? Are there cases of steroid use in women in Kuwait?

A: AAS use is definitely a predominantly male concern, although one female did report using AAS in Kuwait.

Q: According to your findings, what is the prevalence of AAS use in Kuwait? How does Kuwait compare with global and regional usage?

A: The reported lifetime prevalence of AAS use in this sample was 35%, out of which 43% identified as being 'past users', 30% experimented with AAS at least once in their lives, and 27.2% were regular (weekly or daily) users at the time of data collection. The majority of AAS users were male (98.6%), Kuwaiti (71.4%), smokers (68.6%), and (among the 54 users who disclosed their marital status) were also single (68.5%). Users' ages ranged from 18 to 49. Among all 173 males in the sample, the lifetime prevalence of AAS use was 40%; however, when limited to Kuwaiti males between the ages of 18 and 30, the lifetime prevalence of AAS use increased to 58.6%. The prevalence of AAS use in Kuwait is higher than average global rates, and is also higher than those in other Middle Eastern countries, with the exception of Iraq.

Q: What are the factors driving people to steroid usage? Are there any factors unique to Kuwait?

A: When looking at the drivers for any health-related issue, it is important to address economic, political, and psychosocial determinants together. Based on our research, there are several reasons why men start using steroids. First, body image (i.e., how they evaluate their bodies, physically) plays a significant role, in that those who place excessively high emphasis on their muscle tone and definition are significantly more likely to use steroids. In Kuwait,

males between the ages of 18 and 30, who are also single, and use other substances (e.g., cigarettes) are also significantly more likely to use steroids. Based on the findings, Kuwaitis are significantly more likely to use steroids than non-Kuwaitis in Kuwait. We also suspect that younger teenage boys, still in high-school, are susceptible to experimenting with steroids.

Based on our preliminary qualitative results and anecdotal evidence, Kuwait is also known world-wide for being a hub for AAS use, black-market AAS sales, as well as hosting several events for body-builders, which are attended by people world-wide. In other words, Kuwait has a very active body-building culture and community. A major reason for this is that there are currently no 'anti-doping' bylaws in Kuwait, and a lot of what goes on in these events, and how steroids are accessed in Kuwait, are illegal in most other countries. For example, it is illegal for a non-medical professional to distribute anabolic-androgenic steroids to clients in almost every country, and professional athletes for world-wide events (e.g., the Olympics), or popular sports teams are immediately disqualified if they're found using steroids. None of these policies appear to apply in Kuwait - or at the very least, they are not taken seriously.

Most individuals who use steroids are not even professional body-builders, but young men who attend gymnasiums, and feel pressured to live up to extremely high and unrealistic expectations of fitness and physical appearance. These expectations are usually set by their personal trainers, professional body-builders, and also merely by watching extremely 'bulk' men (who achieved their goals by taking steroids) exercising at the gym and lifting significantly higher weights than they can. Therefore, the bar for 'perfection' keeps getting higher and higher, resulting in men becoming harder on themselves, and engaging in more steroid use. It's a vicious cycle.

Although women are known world-wide to have body-image issues owing to media images, it appears that men are equally susceptible to this. While developing an eating disorder such as bulimia or anorexia to achieve the 'thinness' ideal is more common in women, using steroids to 'bulk up' and become more 'cut' (i.e., defined) is more common in men. Some men also become extremely vigilant about the number of calories, grams and portion sizes of carbohydrates, proteins and fibre in of all their meals while taking steroids, to the extent that they will buy special scales to weigh out these portions.

Women's health programs have become so integral to an effective and respectable healthcare system world-wide, and so many resources are being allocated to support women, however it is equally important to address men's health as well. The findings of our study should serve as a gentle reminder of the importance of men's health in Kuwait.

Q: Why are the young particularly susceptible to this?

A: Younger men are typically more susceptible to using AAS because they are less likely to be married, and more willing to take health and safety related risks. Research in the social sciences suggests that men in relationships - at least positive ones - are generally less prone to 'risky behaviour' than men who are single. Additionally, younger men are more open to suggestion by their peers than older men who are more likely to be mindful of their health and are better able to create social boundaries. Older men are generally also less likely to be manipulated by a personal trainer who wants to make

extra money by selling them steroids.

Another reason is disposable income. If young men are unemployed - or the nature of their work is very limited - yet they have high monetary allowances, they generally have a lot of time on their hands. This combined with the desire to bulk up is a recipe for using steroids.

Q: What are the negative effects of steroid use? Do they outweigh the benefits?

A: The main reason prolonged AAS use is so dangerous is because of their negative side effects, such as testicular atrophy (i.e., when the testicles shrink and eventually lose their functionality), sexual dysfunction (e.g., impotency), insomnia, injection site pain, mood fluctuations, and gynecomastia (development of breast tissue). Other side effects can be cardiovascular (e.g., high blood pressure and thrombosis), musculoskeletal (e.g. tendon tears, muscle ruptures), hepatic (e.g. jaundice), and reproductive-endocrine (e.g. prostate hypertrophy for males and reduced breast size and voice deepening in females). Therefore, the costs associated with AAS use definitely outweigh their benefits. Unfortunately, despite the wide variety of adverse effects reported by users, it is very common for them to reject any negative judgments about steroids and feel that AAS cannot inflict any serious harm.

Q: How does steroid use impact people with existing medical conditions?

A: Individuals with a family history of cardiovascular issues (e.g., heart disease), diabetes, or prostate cancer are more likely to develop these medical issues - and fast. There have already been cases of AAS-using men in Kuwait dying from heart failure in their 20s and 30s.

Q: What are the behavioural effects of AAS use?

A: AAS are very psychologically addictive since they give users an immediate heightened sense of self, euphoria, increased confidence, and feelings of 'invincibility' - similar to the effects of cocaine and amphetamines.

Extreme bouts of mania and anger, also known as 'roid rage', are very common in steroid users. Depression is more common in past users.

More research is needed to determine the prevalence and severity of each of these side effects in Kuwait.

Q: Apart from AAS, is there reliance on any other form of enhancers in Kuwait such as human growth hormone, insulin, etc?

A: Yes, our qualitative study, which has yet to be published, suggests that other performance enhancing drugs (PEDs) such as the human growth hormone (HGH) are common in Kuwait. It is also common for men to use a number of other substances, including those not designed for human consumption (we will not publish the list of these until they are verified). Some will also go to the extent of injecting silicone into their bodies to make their muscles appear larger than they are.

Q: Is responsible usage of AAS possible?

A: AAS use will always pose health risks, regardless of how responsibly men are using them. Harm reduction, however, is possible for individuals who use AAS, although this is only realistic if there are strict laws that keep the control of steroid distribution under the Ministry of Health as opposed to non-medical personal trainers. Some methods of harm reduction include controlled doses and 'cycling' (i.e., alternating between periods of using and not using). The main reason why

responsible AAS use is difficult in Kuwait is because there is no guarantee that users are getting what they are paying for in the black market. Additionally, AAS use should never occur without thorough medical examinations, before, during, and after using, by a medical doctor who is trained in sports medicine. Finally, doctors should be trained in providing lengthy consultations for their patients who wish to use AAS, and encourage them to exercise and develop meal and exercise plans that do not involve the use of AAS. Additionally, since a doctor's words carry a lot of weight in Kuwait, it is important for them to deter their patients from having such high expectations of themselves and remind them of all the physical, psychological and psychological risks associated with AAS use. Finally, it is also important for physicians to reassure their patients that they can be healthy and look fit without the use of steroids.

Q: How easy is it for regular people to access AAS? Are they completely legal in Kuwait? How costly or inexpensive are they?

A: It is very easy for any young man to gain access to AAS, and they range in price from relatively inexpensive to more expensive.

We found that it is common for steroid dealers to give their clients stimulants, such as caffeine pills or amphetamines; when combining high doses of stimulants with the placebo effect, many individuals may feel that they have taken steroids when in fact they have not.

Based on our study, we found that there is a general lack of awareness and confusion from the general public about its legal standing; increasing awareness about this issue, and its legal standing, is absolutely crucial.

Q: Do gyms and trainers encourage steroid use?

Yes, and not necessarily because they think they are safe. They are generally well aware of their negative effects. When involved in sales (e.g., gym membership sales) - particularly for key-stakeholders within the business or if individuals are working on commission - the ethics surrounding the policies and practices within a company or institution might wane. Personal trainers might be driven by financial incentives to deal steroid under the table, knowing full well that they can harm their clients. Gymnasiums that allow these transactions to take place (or at least turn a blind eye to them) are more likely to make money since they will have a more loyal client-base. Therefore we believe that the financial incentive for gym managers and personal trainers to keep young men hooked on steroids and keep them exercising at their gyms long-term, is a significant contributor to prolonged AAS use in Kuwait.

Q: Is there any shame attached to steroid use? Do users recommend steroids to others?

A: Our first study did not address shame associated with steroid use in Kuwait. Our second study, however, did highlight that shame with one's body is associated with steroid use in Kuwait - i.e., young men who feel ashamed of their bodies (e.g., by going to a public beach with their friends) are more likely to use steroids - particularly if their peers are using them.

Q: What is the prevalent method of delivery in Kuwait? What is the frequency of intake?

A: Among the 70 individual who reported AAS use in our study, 41.4% used tablets, 31.4% injected, and 27.1% used oral and intravenous methods of delivery simultaneously. Most users consume them 3-4 times per week.

Q: How would you rate the aware-

ness of the negative consequences of steroid use?

A: People in Kuwait are educated; they generally know the negative effects of using steroids, however we feel that there is very little that is being done about it. Additionally, most users will rationalize using steroids (e.g., "my doctor said I'm healthy"; "my friend did it for 5 years and nothing bad happened"; "I'm only using it before my vacation in Europe, and then I'm quitting"), and deny their negative effects. However, health professionals in the medical community, as well as those working in rehabilitation (e.g., physiotherapy and occupational therapy), and psychological services, are fully aware that many of their patients and clients are using steroids to bulk up, have witnessed their negative effects, and generally agree that it is a public health issue that needs to be addressed.

Q: What policy and institutional reforms would you recommend to mitigate the rise of AAS use?

A: First of all, it is very important to have strict regulations in gyms that stop personal trainers from distributing steroids to their clients. This will begin with gym owners and managers, who are equally, if not more responsible than the trainers. This will require a combined effort from the Ministry of Health, medical lawyers, and gym owners and managers.

That being said, it is unrealistic to abolish AAS use in Kuwait and to think that young men will stop using steroids just because they're told to. Therefore, to make sure that those who choose to use steroids are being safe, all performance enhancing drugs should be high quality and administered by the Ministry of Health under very strict supervision of a physician who is well versed in Sports Medicine, and preferably also Sports Psychology to help their patients work on realistic exercise goals and outcomes. Therefore, given that Kuwait has a strong body-building culture and community, it would be ideal for the Ministry of Health to fund degrees related to sports medicine and sports psychology to Kuwaitis, as one possible long-term goal.

It would be beneficial for ex-users or male health professionals to openly discuss some of their negative side effects to younger men and the methods by which they can stop using, and healthier alternatives to using steroids or other performance enhancing drugs. These awareness campaigns should target young men who are finishing high school and those already in university. Given the sensitive nature of this topic, it would be ideal if these discussions occurred privately among men only - especially in school settings - so as to increase open discussions about men's health/biology.

By shifting the onus of poor body-image and AAS use from internal (i.e., individual, psychological) to external (economic and social) factors, potential and current users will become more aware of how they are being influenced, and will be in a better position to make more informed decisions when faced with the option to start using anabolic-androgenic steroids or other performance enhancing drugs. This process will be extremely empowering for young men and women alike, who suffer from issues related to poor body-image.

The total elimination of AAS use is very unrealistic, and - according to a torrent of social scientific research - we can predict that any attempts to punish the individuals who use them will backfire. However, realistic goals include: public awareness, regulations that enforce very controlled distribution of AAS by the Ministry of Health, and harm reduction.