Drug use among Maltese sportsmen and gym members – a serious, unaddressed crisis: A personal view

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Educational aims

- To understand the physical and mental disorders associated with performance enhancing drugs.
- To familiarise oneself with the dependency syndrome, obsessive behaviour, narcissistic thought processes and learning theory.
- To be aware of the local performance drug abuse scene.

Key words
Performance enhancing drugs, body dysmorphic disorder in athletes, narcissism

Performance enhancing drugs and recreational drug use is rife locally. This is clearly observed when engaging in conversation with those who practise sport and with gym attendees. The pervasive nonchalance with which these people use these substances to perform, look or simply feel better is alarming. This article attempts to give an insight into the present doping situation from the eyes of the author who has more than 15 years' experience in the health and fitness field. The author also attempts to give reasons why such drugs are used with recreational drugs and their relationship to the social scene. Other aspects tackled in this article include: legislation, the types of drugs used, their devastating effects on the body and mind as well as the thought processes of those taking them. Finally, a plan on how to tackle this challenge locally is suggested.

Case no. 1

A footballer from one of the leading local teams approaches me discretely in the gym changing room for help. He comes to the gym daily as part of his training schedule but he never undresses there to shower and change. He shyly removes his sweaty top and shows me his breasts. These are not normal breasts but sagging female type breasts. Judging from his embarrassment and from his muscles suddenly increasing in size of late, it is obvious to me that he is another victim of steroid abuse.

This man developed body dysmorphic disorder and severe social phobia i.e. he feels his body is puny and imperfect. He will thus go through extremes to increase his muscle size and look better. He is however so conscious of the inevitable side effect (the development of female breast tissue) that he does not change in front of others and is not going out any longer (social phobia). He is distraught: he anxiously asks for an operation to remove his breast tissue and an 'antidote' for his testicles which are now peanut- size.

Case no. 2

A weight lifter needs to lose weight within a week to be able to compete in a particular weight category. His 'expert' friend who runs a health business decides to give him a cocktail of drugs in order to make him eligible for his weight category. This 'expert' gives him oral and intravenous loop diuretics in doses fit for a rhino. The athlete loses weight so quickly that he sweats very little indeed, to the extent that salt and uric acid crystals materialise on the skin. On one occasion, he collapses due to excruciating loin pain and goes into coma. He goes into renal failure and develops large kidney stones.

The athlete becomes depressed after this close shave with death. He has never regained his former self since. Despite seeking help, he cannot stay away from performance enhancing drugs. He becomes psychotic, thinking that the neighbourhood gym manager is reading his mind and scrutinising his small genitalia through the fitness centre cctv. His relatives are told he needs admission to a psychiatric ward but they refuse, saying they will take full responsibility for him and will monitor him round the clock. A few months later, he becomes so exasperated that he thinks about taking his life. Despite this, his family refuse to take him to a hospital for help. His father

subsequently discovers his son's lifeless body hanging in their garage.

Case no. 3

Yet another sportsman approaches me during a competition. He is tremendously upset, as he explains that he took some ephedrine that morning to improve his timings and he is now ejaculating in his shorts. During the past five years, he spent over EUR12,000 worth of products which he purchased over the web to perform and look better. He has become so anxious that he now has trouble getting a firm erection. This has led him to purchase more pills over the internet. He now has liver cirrhosis.

The thought process of performance drug users

The above are just a few of the many cases which healthcare professionals encounter on a weekly basis. Patient confidentially and data protection obviously precludes one from divulging details. That could be a better deterrent for aspiring users who give in to media perceptions of a healthy and sexy body and to peer pressure. Nobody would be ready to disclose that he needed hospitalisation to a Mater Dei ward or to Mount Carmel Psychiatric Hospital due to such drugs. Not having heard of such cases, instils a false sense of security into gullible inexperienced individuals and veterans alike.

Another misconception is that there is an antidote to any potential side effect which such drugs may produce. This is a dangerous myth. The physical and mental repercussions are very real and may be permanent or tragic (Table 1).

Even if many users thankfully do not develop such illnesses, a change in personality with an 'I- need- a- drug- to- look / feel /- be- ok' type of thinking unfortunately predominates in the long term. This is a type of psychological addiction which enslaves people for a lifetime if left untreated. There is also a risk of dependency syndrome developing.

According to my observations, this thinking pattern also extends to other physical illnesses i.e. such people resort to pills very frequently for sundry symptoms and they tend to self medicate and shop around various healthcare professionals to address their fear of illness. This is known as hypochondriacal disorder. It goes without saying, that as professionals, taking a thorough drug history is key in detecting drug abusers.

Table 1

Common psychological manifestations associated with performance enhancing drugs:

- Anxiety
- Phobias
- Panic disorder
- Mania and depression
- Body dysmorphic disorder
- Eating disorder
- Psychosis
- Paranoid syndromes
- Hypochondriacal and somatization disorder
- Obsessive compulsive and narcissistic traits

The gym / sports field / social scene continuum hypothesis

I would suggest that a proportion of people who take such drugs do so not only to perform better, but also to look better. Within the Maltese athlete cohorts, I have observed that there appears to be strong narcissistic personality traits in some users. These traits revolve around a pattern of grandiosity, a need for admiration, and a sense of entitlement. Often individuals feel overly important. They will exaggerate achievements and will accept and often demand, praise and admiration. They may be overwhelmed with fantasies involving unlimited success, power, love or beauty and feel that they can only be understood by others who are, like them, superior in some aspect of life.[1]

This sense of entitlement, grandiosity and admiration is fed and nurtured in nightspots. I have met a large number of these people at dance concerts and other local nightspots. Learning theory would confirm the continuum hypothesis: the admiration and compliments received about their body image and performance (i.e. the reward) at social scenes is enough to fuel their determination to continue taking drugs.

Narcissistic body image regulation and performance thus dominates one's life. This was aptly termed an addiction by some in the context of a dependency syndrome. The criteria are listed hereunder:

Dependency syndrome

This is defined as a cluster of behavioural, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use and persisting in its use despite harmful consequences. In dependency syndrome, a higher priority is given to drug use than to other activities and obligations. One experiences increased tolerance i.e. increased amounts of the drug are needed to attain the same result. A withdrawal state is also seen in many cases i.e. abstinence from the drug will cause physical and psychological distress (e.g. sweating, tremors, mood swings, anxiety etc.). This state will force the unsupported user to crave the drug and take it again in order to reverse these unpleasant symptoms.

The dependency syndrome may be present for a specific psychoactive substance (e.g. tobacco, alcohol, or diazepam), for a class of substances (e.g. opioid drugs), or for a wider range of pharmacologically different psychoactive substances.[1]

Excessive concern with body image and performance could develop into unpleasant intrusive thoughts which persecute the patient who does not give in to such thoughts i.e. 'if I do not look and perform better I will never be good or look good enough.' This thought can enslave the person preventing him from getting on with his daily activities. Once the action is carried out i.e. taking the drugs, exercising etc. then the thought abates and the person calms down until the next wave of intrusive thoughts. This is what Pope *et. al*. termed the Adonis complex in their book entitled, 'The Adonis Complex-the secret crisis of male body obsession'.[2] This cycle of thinking is in fact an obsessive and oppressive thought which needs a compulsive ritual to decrease the anxieties of the person.

In this context, an obsessive thought would centre around the need to exercise and take performance enhancing drugs. This thought does not leave the person's mind and resisting it causes a lot of stress. Once the deed to exercise and take drugs (the compulsion) is carried out, the thought abates as does the associated anxiety, until the next wave of similar thoughts attacks the brain again.

The above thinking errors encompass core beliefs (I am not good enough) and negative automatic thinking (If I do not take drugs I will never be successful). This is good fodder for cognitive behaviour therapy which tactfully challenges dysfunctional thinking patterns and hopefully removes the mental shackles tormenting the athletes.

Table 2 Common classes of banned drugs

Stimulants: e.g. cocaine, amphetamines, ephedrine, caffeine (in excess)

Potential benefits	Side effects
Increased short term strength	Seizures
Increased short term endurance	Arrhythmias
Increased alertness	Angina pectoris

Anabolic androgenic steroids: e.g. testosterone, nandrolone, stanozolol

Potential benefits	Side effects
Increased strength	Depression, suicide, psychosis
Increased muscle bulk	Acne, baldness, gynaecomastia
Decreased body fat	Libido changes and abnormal sperm

Narcotic analgesics: e.g. morphine, pethidine, buprenorphine

Potential benefits	Side effects
Increased pain threshold	Parkinsonism
Euphoria	Constipation, vomiting
Diminished injury recognition	Delirium (acute confusional state)

Peptide and gylcopeptide hormones
Erythropoietin

Potential benefits	Side effects
Increased oxygen carrying capacity of blood	Stroke
Improves endurance	Sudden death
	Hypertension

Human chorionic gonadotrophin (hCG)

Potential benefits	Side effects
Testosterone like effects	Headache
	Depression
	Oedema

Human growth hormone (hGH)

Potential benefits	Side effects
Muscle growth	Hypertension, cardiomyopathy
Fat breakdown	Diabetes, acromegaly
Improved muscle repair	Creutzfeld- Jacob disease

Insulin-like growth factor 1 (IGF-1)

Potential benefits	Side effects
Muscle growth	Cerebral oedema, death
Fat breakdown	Diabetic coma
Improved muscle repair	Cardiomyopathy

Corticosteroids: e.g. prednisolone, hydrocortisone, dexamethasone

Potential benefits	Side effects
Mood elevation	Depression, psychosis
Improved energy levels	Muscle wasting
Delayed tiredness	Weakness

Adreno cortico trophic hormone (ACTH)

Potential benefits	Side effects
Equivalent to systemic corticosteroids	Depression, psychosis
	Muscle wasting, osteoporosis
	Weakness

Of course, there are many athletes who are drawn into this vice out of sheer curiosity and naivety. These are easy prey for predators who deceive the inexperienced and poison their minds with lies in order to make money.

The International Olympic Committee and the war on drugs

It has to be said that there is an ongoing and longstanding war between doping (ie the use of banned performance enhancing substances) and anti-doping worldwide. This initiative is spearheaded by the International Olympic Committee (IOC) which plays 'cops and robbers' with intelligent but ruthless scientists who synthesise new drugs in an effort to avoid detection by anti-doping labs which always lag behind. It should also be pointed out that, thanks to the hard work of the Kunsill Malti Sport (KMS), Malta has ratified the IOC rules and has set up an anti-doping policy over the past year.

Classification of drugs according to the IOC

Broadly speaking, the IOC classifies all (illicit and legitimately used) drugs into 3 categories:[3]

Doping classes, which comprise the main group of substances whose administration is banned by most international [Olympic] federations.

Doping methods which include blood doping and pharmacological, chemical and physical manipulation.

Classes of drugs subject to certain restrictions which cover additional classes controlled by certain sports e.g. alcohol [in small amounts] in shooting [or the use of oral inhaled steroids for asthmatic athletes] (Cowan, as cited in Harries, Williams, Stanish, and Micheli, 1996, p. 315).[3]

The laws of Malta and prescribing of such drugs

All these substances (except for caffeine) must be prescribed by a doctor with the appropriate prescription duly filled in. Anyone who distributes such drugs who is not on the medical register is breaking the law and subject to criminal and civil procedures. Doctors who prescribe these substances off licence can potentially cause physical and /or psychological harm. This goes against the doctor's dictum, 'primum non nocere' i.e. first do no harm.

Practice points

- The trend of drug abuse is on the increase as athletes are under pressure to look / feel and perform better instantly and with minimal effort.
- Athletes and gym members are unaware of the serious and sometimes fatal potential side effects of performance enhancing drugs.
- Asking about such drugs when taking a history can help detect and treat these patients who may end up on medical or psychiatric wards.
- The thought processes inherent in such drug taking revolve around learning theory, addiction, obsessive compulsive rituals and narcissistic traits.
- The reward of taking such drugs extends beyond the sport competition: it may also be found in the admiring looks and successful dating at nightspots.
- Setting up a national action plan and committee with stakeholders from various departments may help prevent morbidity and mortality.
- Regular monitoring of pharmaceutical stocks by various departments will help detect abuse.

I have experienced patients calling me in tears because they were given such drugs by prescribers who charged them thousands of Euros and even suggested they stop their prescribed medication. On another occasion, I was on the phone with a patient who ended up on the edge of Mosta bridge. I quietly called 112 from another phone. Thankfully, the police realised what was going on and dispatched a mobile unit to the scene. Prompt police intervention saved her life.

Plan of action

Drug abuse among athletes and gym members is a veritable plague locally and few seem to care consistently. Concrete steps must be taken to avoid having a future society which relies heavily on substances to perform and look 'better.'

It is well known in sports circles that illegal substances are very easy to come by. The police do their utmost to address this issue and also investigate any alleged claims of drug abuse whenever possible.

On a national level, the plan of action I suggest is:

- To have a national drug abuse committee for sport which includes the Malta Olympic Committee, KMS, educators, the police, lawyers and the media.
- To organise a national education campaign.
- To promote healthy doping- free sport. Most athletes are well meaning, balanced people. Many have talent and aspirations. They are also eager to learn. Supporting them to achieve whilst encouraging healthy athletic progress is crucial.
- To encourage healthcare professionals to monitor stocks of sought after substances and report any abuse. Pharmacy specialists and customs play a crucial role in this.
- To educate importers, customs officers and other ancillary professionals about the importance of detecting and reporting abnormally large consignments at our ports, post offices or airports.
- To campaign for appropriate legal sanctions to deter users and traffickers.

References

1. World Health Organisation (2010). The International Classification of Diseases Version 10.
2. Pope, H.G., Phillips, K.A., Olivardia, R., (2000). The Adonis complex; the secret crisis of male body obsession. Free Press: New York.
3. Harries, M., Williams, C., Stanish, W.D., & Micheli, L.J. (1996). Oxford textbook of sports medicine. Oxford University Press: Oxford.