Australian Sports Drug Agency report on marijuana and testing in a sporting context

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AUSTRALIAN SPORTS DRUG AGENCY

REPORT ON MARIJUANA AND TESTING
IN A SPORTING CONTEXT

Introduction.

Marijuana in sport has not been an issue until recently as has been pointed out: "Currently the marijuana in sport issue is really only a concept. It has been brought to media attention by the detection of NSW rugby players with marijuana in their urine."

Further, some commentators have questioned the need for a report at all when alcohol and tobacco cost the community much more in social and financial terms. This is an extremely important and valid point which serves to keep this issue in perspective.

However there is a very clear need to discuss the issue to help dispel misconceptions and clarify what can be an emotive topic.

There is a dearth of information relating specifically to marijuana and sport. There is however an abundance of research, commissions, enquiries and reports on cannabis in the wider social field which can be interpolated into the sporting arena.

In addition there is a growing body of information specific to drugs in sport which the Australian Sports Drug Agency, ASDA, has gathered from experience and research. Further to this the Agency sought submissions from a broad spectrum of the community on any issues relating to the use of marijuana by people involved in sport.

The aim of this report is to synthesise the information gathered into a form which will assist in policy development.

What follows is not a regurgitation of existing information on marijuana - the breadth of which is extensive - but a focussing on issues involved in the use of marijuana in the sporting environment.

ASDA's Role

ASDA was established as Statutory Authority by The ASDA Act 1990. It functions as an independent body to educate the sporting and general community about drugs in sport and to carry out independent sampling and testing of sports people as well as serving as a focus for policy development on matters concerning drugs in sport.

The drug sampling and testing function that the Agency fulfills is governed by the ASDA ACT and Regulations.
Under the Act "scheduled drug or doping method" means a drug, or a doping method, included in the schedule maintained by the Agency. This schedule is developed in relation to each drug or method listed by the International Olympic Committee (IOC).

Marijuana

The appendix at the back of this document lists studies and titles dealing with marijuana for those wishing for more detail. What follows is a brief summation on the chemistry, psychopathology and physiology of marijuana.

Marijuana is made from the dried flowers and leaves of the hemp plant Cannabis sativa. Hashish and Hashish oil are made from the resin of the cannabis plant. Marijuana is usually smoked in hand rolled cigarettes or in special pipes.

The major constituents of cannabis are termed cannabinoids of which tetrahydrocannabinol (THC) has been shown to produce the euphoric or psychoactive effects. Once absorbed into the bloodstream THC is carried to the brain which produces the "high" effect hence it is metabolised by the liver and redistributed to the tissues, principally fat tissue. There is then a slow release (over a number of weeks dependent on how often the drug has been taken) back into the bloodstream where it is eventually excreted in the urine.

The effect is dependent on the strength of the dose. In low doses feelings of happiness, giggling, heightened sensory perception and a slowed sense of time are commonly experienced. With more moderate doses the sensory changes are accentuated. High doses can cause acute mental disturbance which may last for some hours or days. Hallucinations may be experienced with very high doses.

Physiological effects include

* Increase in the heart rate
* Increase in blood pressure.
* Impairment in motor and mental skills eg loss of coordination, slowed reaction time retarded visual tracking- making tasks such as catching a ball difficult or driving a car dangerous. This relationship between levels of cannabis and psychomotor performance is exact if the levels are high.

Long term effects of regular usage can include

* Increased risk of bronchitis, lung cancer, and respiratory diseases which are associated with smoking.
* A change of motivation in users losing energy drive.
* Decreased concentration, memory and learning abilities.
* Interference with sexual and hormone production. Most of these effects gradually disappear when usage is stopped.

* Association with psychotic episodes but this is more common in individuals predisposed to these events.

Marijuana is a drug of low toxicity. No death has ever been reported in humans solely from an overdose of marijuana. The therapeutic index, which indicates a drug's safety margin, is 40,000 compared with a value of 10 for alcohol. It is noteworthy that a dose of alcohol only five times greater than that required to achieve a social intoxication can put a person into a coma, which will be followed by death.

Cannabis may be habit forming but it is not truly addictive i.e., it is the pleasurable effect of the drug that induces a person to use it rather than an overriding physical need as evident in morphine or narcotics.

Cannabis Use

There has been no survey which has attempted to measure the actual usage of cannabis in the sporting environment but given the potential performance decreasing effect of the drug it is fair to assume that actual usage would be no more and probably less than that found in the wider community. Estimates of use in the wider public show differing prevalence of drug use amongst different age groups but for the 14-29 age group 12.6% of people surveyed admitted to having used marijuana in the last 12 months.
Legislation

It is illegal to grow, cultivate or use marijuana in all states in Australia. However, there is considerable variation in legislation between states. South Australia has a Cannabis, Expiation Notice (CEN) system for possession, cultivation or private use of small amounts of cannabis. This is a fine which, if paid, does not result in a criminal record. In all the remaining states however it is a criminal offence with the difference being in the size of the penalties imposed.

From a sporting perspective the International Olympic Committee (IOC) is the major international policy body. It is the IOC Medical Commission's list of banned substances which sporting bodies worldwide adopt. It should be remembered however that the list was drawn up specifically for the 14 days of Olympic Games competition held every 4 years and as such does not translate very well to all situations. eg the banning of a lot of cough and cold medications which may confer an advantage during an event but do not confer any advantage when used during training (by definition).

They have placed marijuana on a restricted list which means "athletes competing at the Olympic Games may be tested for marijuana. In addition any International Federation may request a laboratory to test for marijuana. It was not the intention of the Medical Commission to require all labs to test for marijuana on routine samples."

Currently the only sporting body in Australia which has undertaken to test for marijuana is the New South Wales Rugby League.
Rehabilitation.

As previously noted marijuana is a drug of low toxicity which when combined with the absence of physiological withdrawal, noted in other drugs (licit and illicit), has meant there has been appreciable need for treatment or rehabilitation.

Two quotes from doctors working in related fields sum up thus:

There is very little literature existing on the treatment of cannabis consumers because very few such individuals report to health professionals seeking help.

and

Hemp (cannabis) was in the pharmacopoeias of both ancient Egypt and of Mesopotamia some five or six thousand years ago. In all probability hemp and its derivatives have been used therapeutically and recreationally since then, in many countries... If it is smoked it has all the dangers of smoking, perhaps more so than tobacco. Nevertheless the plain fact is that although it is widely used, it is quite exceptional in medical practice to encounter anyone suffering significant problems from the use of marijuana. It causes much less trouble than aspirin.
Issues

Arguments advanced for banning drugs in a sporting context can roughly be divided as follows:

1. Performance enhancing effect.
2. Harm to the health of the individual.
3. Harm to others.
4. Legal status.

1. Performance Enhancing Effect.

The rationale behind banning most drugs in the sporting environment is primarily to stop the unfair advantage that may accrue to users of drugs. Marijuana however does not fall into this category. The IOC comments: "There are no scientific data which clearly demonstrate that marijuana enhances athletic performance accordingly the IOC has not placed marijuana on the list of banned substances."

The immediate net result of use of marijuana in a sporting sense is a decrease in performance with impairment of motor and mental skills both obviously necessary in the pursuit of sporting excellence. The use of marijuana by sportspeople therefore is more likely to have a performance decreasing effect, with the probable outcome of this being non selection at existing levels of competition or to higher levels. Thus there is a type of natural selection or checking in progress. Clearly then with marijuana the performance enhancing argument cannot be advanced as a reason for drug testing.

2 Harm to Health of the Individual.

The second major factor behind banning drugs in a sporting environment is the adverse effects that they may have on an individual's health. The irreversible masculinising effect on women that anabolic steroids has is an obvious example.

Most drug use has potential health risks either intrinsic (ie harm due to the properties of the drug itself (eg. masculinising effect of anabolic steroids)) or extrinsic (ie harm resulting from the use of the drug (eg. contracting AIDS from dirty needles whilst injecting steroids.))
However since marijuana does not have any performance enhancing effects and ... to health are documented as being no greater than those of alcohol and tobacco, then using harm to an individual's health as a warrant for testing is not justified.
3 Harm to Others

If by using marijuana significant harm is caused to others then intervention needs to be considered. However the evidence suggests otherwise as using marijuana does not confer on the user any sporting advantage then in a sporting sense no one is unfairly disadvantaged i.e. harmed.

There are certainly other types of harm that could accrue from using marijuana e.g. driving whilst under the influence, but this is a broader social issue which may justify some form of intervention but not testing by the Agency.

4 Legal Status of marijuana.

One of the "findings" of the Report on the South Australian Cannabis Epiation Notice policy was that there is a strong belief in the symbolic and educative value of the law. There is the same feeling with regards to sports. Thus it is reasoned not to test for an illegal drug is akin to condoning its use. Whatever the merits of this argument, the question becomes, who is responsible for policing this law.

One of the functions of ASDA is to reinforce policies, such as those dealing with banned drugs, with drug testing. However the drugs that are tested for are tested because they are performance enhancing drugs not because of their legal status. In fact there is potential conflict with civil law as the Agency is providing evidence of usage of illegal drugs which is a role that the agency was not created to fulfil.

To use the justification that marijuana is an illegal drug per se should not be seen sufficient cause for inclusion in any testing programme.

Additional Considerations.

The question now needs to be asked

Why test for marijuana?

Of all the arguments discussed above it is the legal status of marijuana that is often voiced as the major concern which begs the question to what extent should statutory authorities and national sporting organisations be involved in this ostensibly a civil matter.

It is not within the ambit of this report to discuss in detail the pros and cons of the legality of marijuana but it is important to note that most literature, commissions and reports in the last ten years recommend that there should be some form of reform to the issue of marijuana primarily because it is the illegality of the drug not the drug itself which is causing all the harm i.e. crime, corruption etc.

Indeed South Australia now has on the spot fines for
personal marijuana use and possession and the Office of Crime Statistics has found no harmful social consequences as a result. This finding is consistent with other countries where similar approaches have been adopted. The idea then that marijuana is inherently "evil" causing major harm to individuals and society (which is presumably the basis for its legal status) has not been borne out.

In summary then there is no compelling argument that warrants the inclusion of marijuana on a list of banned substances. Furthermore a look at potential problems that have arisen in attempting to police legislation that a sizeable minority of the population see as irrational or as displaying double standards adds to the notion that the ill effects of testing for the use of marijuana in a sporting environment outweigh any positive effects accruing from protecting athletes. These problems are as follows:

- The Status Quo and Civil Liberties
- Reduced Compliance
- Reduced Respect
- Reduced Credibility
- Publicity
- Alcohol and Tobacco
The Status Quo and Civil Liberties.

Janus-faced, the current environment with regard to drug use is one which atters to build youngsters self esteem, teach them sk to make decisions based on sound judgements; in short to encourage the growth of responsibility for their actions once adulthood is reached, (ie empowerment), whilst at the same time taking away responsibility for decision making through policies based on demonstrably illfounded and irrational arguments, once adulthood is reached.(ie disempowerment)

We need to consider to what extent people in our society have a right to use drugs recreationally to alter their moods. Ideally use would lead to a minimum of addiction and/or physical, mental or social harm.

Current tobacco and alcohol are permissible but can and do lead to addiction and considerable harm. Do we really have sufficient grounds for justifying an incursion into the private lives of our athletes and sports people by testing for a drug that is arguably less damaging, than current legal drugs, to an individuals health and to society as a whole? More so as it has been shown that it is the very legislative measures that the community has adopted to combat the use of marijuana which causes the majority of the harm (crime, corruption) associated with the use of this drug.

Harm can only increase with the introduction of testing for marijuana. The harms and implications of this situation are discussed below.
ALCOHOL AND TOBACCO

The majority of submissions received by the Agency with regard to the use of marijuana in sport mentioned alcohol and tobacco. This relates to a large degree the current status quo in the wider community with debate focusing on the morbidity, mortality and social costs of alcohol and tobacco to the community which far outweigh the costs of all other drugs put together. Therefore any discussion of marijuana and testing by necessity requires mention of alcohol and tobacco; they cannot be divorced. The focus on this association stems principally from the fact that cannabis is used under similar conditions and for similar reasons to alcohol and tobacco—namely social use.

The recent National Conference in Alcohol and Drugs in the workplace issued a communique which recognised the "substantial impact of alcohol and drug problems in the Australian Community"

This is an acknowledgement that is currently alcohol and tobacco issues which need and should be addressed. It is also pertinent to note the approach being adopted at a policy level, which was the marrying of drug and alcohol policies and responses to health and safety policies. Thus the issue of concern was not one of legality or illegality but health of individuals and safety in the workplace with a view to making the workplace safer and more productive. Furthermore one of the major outcomes of the conference was a recognition that there was a need or endorsement by all relevant parties of a national consensus on drug testing in the workplace.

Thus by addressing a clear need with input from all relevant stakeholders a uniform and consistent approach to the problem was recommended.

How does this translate to the sporting environment?

Many commentators have suggested that marijuana and attempts at policing its use testing may or may not be warranted but when compared to the tobacco and alcohol issue it is a very small problem indeed.

Even more so sponsorship and advertising by the tobacco and alcohol industry figure so prominently in sport today.

It is also pertinent to note that until recently no sporting body saw marijuana as an issue.

The current situation of condoning and promoting alcohol and tobacco whilst censoring the use of marijuana the problems of reduced credibility, respect...
Reduced Credibility.

By placing marijuana in the same category as steroids and other drugs used to enhance performance, there is a danger that information about harms that can arise from the use of performance related drugs become less believable. Marijuana is used as a "social" drug, as is alcohol and tobacco, not to enhance performance. In addition the fact that the vast majority of people who have tried marijuana have not suffered any significant side effects serves to reinforce the disbelief towards information given by authorities.

This has obvious repercussions for education, information, and testing efforts being planned by sporting bodies and agencies.

Reduced Respect.

This follows on from reduced credibility; as people distrust the information/justifications for the proscription of marijuana, they lose respect for the law and the rules and subsequently those administering these rules.

Respect is further undermined by the continued 'double standard' on the issue of alcohol and tobacco. If protecting the health of an individual in a sporting environment is the aim of legislation concerning marijuana then to be consistent alcohol and tobacco should be pursued with the same measures and with the same zeal. Cynicism and disrespect towards rules is not an attitude that any sporting body or agency would wish to promote.

Reduced Compliance

The outcome of loss of credibility and respect is reduced compliance. The very fact that so many people have tried marijuana (28% overall and as much as 56% for males aged 20-39)* bears testimony to this reduced compliance. In attempting to enforce, by testing, a law with which a sizeable majority disagree means that the currently high acceptance among athletes of the principles of urine testing is likely to suffer.
Publicity

Making public results of any test for marijuana would be counterproductive because there is a strong possibility that the most likely outcome from any publicity generated by a testing programme for marijuana would be an increase in the use of the drug. Studies show that the most common reason, up to 84% for not using marijuana is the fact that the respondents were 'not interested'.

Any publicity of drug use is potentially advertising that drug, especially with 'illegal' drugs can also serve to 'romanticize' the use by serving as a focus (amongst other things) for rejection of authority.

It is hard to imagine no publicity resulting from implementing a testing strategy for marijuana given the ill feeling that this would generate even if media bans were implemented.

The result?

It has been asked "What would promote the public acceptance of marijuana more than the revelation that many of our heroes use it?"