A SCIENTIFICALLY BASED SCALE OF HARM FOR ALL SOCIAL DRUGS

COLIN BLAKEMORE

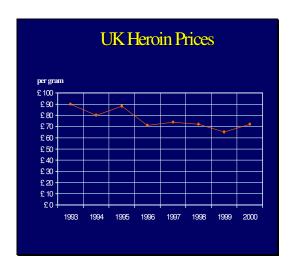
Chief Executive, Medical Research Council, London Waynflete Professor of Physiology, University of Oxford

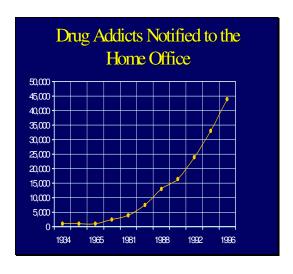
ALCOHOL IS A DRUG

- Alcohol is a drug and has features in common with other psychoactive drugs, both legal and illegal.
- Alcohol, like other social drugs, acts, in part, through brain mechanisms that generate the senses
 of need and pleasure associated with such natural activities as eating and sex.

FAILURE OF CURRENT UK DRUG POLICIES

- The post-1920s war on illegal drugs has clearly failed...
- Investment in policing has escalating continuously, but this draconian approach to drugs can no longer be defended: it has been unsuccessful by any reasonable criterion.
- Street drugs have never been:
 - o more freely available
 - o more potent
 - o lower in cost
 - o so widely used
- For instance, in real terms, UK heroin prices have fallen steadily since the early 1990s. The number of notified drug addicts is increasing rapidly and is currently approximately 150,000 compared to 1,000 in 1965.



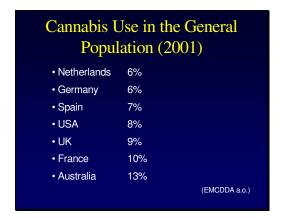


- The stated target of stopping illegal drug use is unattainable: "In the course of our enquiry it has become inescapably clear to us that the eradication of drug use is not achievable and is not therefore either a realistic or a sensible goal of public policy." *Runciman Report* (2000).
- The increasing emphasis on harm reduction seems to be more sensible than attempts to eliminate drug use entirely

- Any effort to reduce harm clearly requires rigorous methods to estimate the potential harm from illegal drugs, set in the context of other socially acceptable risks.
- To be rational and consistent, any methodology for assessing the potential harm from illegal substances should include, as a calibration, an estimate of the harm associated with the use of legal drugs, especially alcohol.

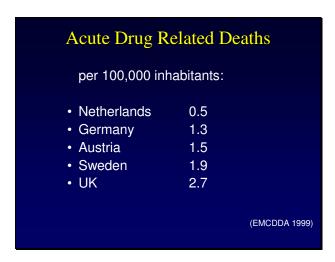
LESSONS FROM THE RELAXATION OF CANNABIS LAWS IN THE NETHERLANDS

- In the Netherlands, it is no longer a criminal offence to use cannabis, or even to supply it in small amounts in certain licensed places e.g., some coffee shops.
- Despite this relaxation of the law, cannabis use is lower in the Netherlands than in the USA, the UK, and the rest of Europe. It is notably lower among young people, the group that legislation in the UK is most concerned to protect.





- "Hard" drug use in the Netherlands is the lowest in Europe, dramatically contradicting the "gateway" argument against decriminalization of less harmful "soft" drugs.
- The number of drug-related fatalities in the Netherlands is less than one-fifth of that in the UK.



• The Netherlands seems to be achieved an attitude to cannabis similar to the approach to alcohol in the UK. Cannabis use is treated like gambling, voting and sex – one of those somewhat risky pursuits in which adults are permitted to indulge.

- The extension of this attitude to cannabis has made it possible for the Netherlands to take a more open, less hypocritical approach to education about drug
- The successes of the Netherlands experiment are all the more remarkable since it was conducted
 against the initial disapproval of many other European states, and despite the tight control of
 international agreements, mainly driven by the attitude of the USA. There are now signs that
 other European countries would be willing to shift from all-out war on drugs to a relaxation of
 the law in relation to the evidence of harm

HOW SHOULD DRUGS BE CLASSIFIED?

Present classifications of drugs relate more to the purposes for which they are used or the needs of courts to impose penalties than to a rational analysis of their potential harm.

- Social drugs. This category includes both legal and illegal drugs. Illegal drugs are often termed "hard" or "soft". They are classified by the Misuse of Drugs Act as Class A/B/C, an inflexible system of classification that is based on a mixture of scientific evidence, familiarity with the particular drug, and the needs of the legal system.
- *Medicinal drugs.* These are therapeutic and preventive drugs, and others useful in medicine, such as anaesthetics and antidepressants. The use of prescription drugs without prescription is illegal. Yet non-prescription medical drugs, some of them psychoactive and some potentially lethal, are entirely legal.
- Enhancing drugs. Many medicinal drugs, some prescription, others not, are used to enhance or modify performance or behaviour in the absence of what would normally be defined as illness. Benzodiazepines to reduce anxiety, Viagra to improve sexual function, sleeping aids, and steroids to improve athletic performance are well-known examples. Some would argue that the widespread prescription of Ritalin to control the behaviour of inattentive children falls into this category. Others would say that alcohol, nicotine and "soft" illegal drugs are often used largely to facilitate normal life.

DIFFICULTIES WITH CLASSIFICATION

- The distinctions between these classes are blurred and inconsistent. Drugs in very different classes are distinguished more by the objectives of their use and the way in which they are supplied than by their potential for harm.
- For example, both codeine and heroin work through the production of morphine in the brain, which then activates opioid receptors. But one is available over the counter as a medicinal drug whereas the other is an illegal Class A drug. Equally, methadone, a prescription opiate that acts on the same brain receptors, is widely used as a substitute treatment for the illegal use of heroin
- The "hard"/"soft" distinction implies a judgement of relative harm, but it is not based on an explicit analysis of risk.
- The current ABC system also relates to a perception of harm, and this is the rationale for its linkage to laws and penalties, but is not sufficiently quantitative and evidence-based.
- Some legal drugs are widely supplied illegally, including 30% of all cigarettes.
- The acceptability of social drugs varies from culture to culture around the world, so there is no sharp global distinction between legal and illegal drugs. Alcohol is legal in the UK but not in some Muslim countries.
- Medicinal drugs are used for performance enhancement, e.g. Modafinil, a drug that prevents sleepiness and is used to treat narcolepsy, is also used to maintain vigilance in troops and to improve athletic performance.

Medicinally useful drugs are also used for recreational purposes, e.g. Ketamine, Viagra, Valium.

KEY QUESTIONS FOR CLASSIFICATION

A number of questions should underpin a rigorous system of classification of drugs.

- Does the drug in question harm any individual other than the user? A libertarian argument emphasises personal freedom as long as it does not negatively impinge on other lives.
- Is its use costly to society in other ways, for instance placing additional demands on health and social services? This is the position taken by the Runciman Report, 2000
- Is it so patently dangerous to the health or well-being of users that society is obliged to protect them from their own wishes?
- How do the risks compare to those of legal drugs such as alcohol and tobacco? To keep a sense
 of proportion, it is vital to compare illegal drugs with others that are accepted by society.

PROPOSED SCALE OF HARM

"We believe that the present classification of drugs in the MDA should be reviewed to take account of modern developments in medical, scientific and sociological knowledge." *Runciman Report* 2000.

The Runciman Report suggested reclassification on the basis of better knowledge than that underpinning present classification, but suggested that the same distinctions between A, B and C should be retained because they facilitate the application of the law.

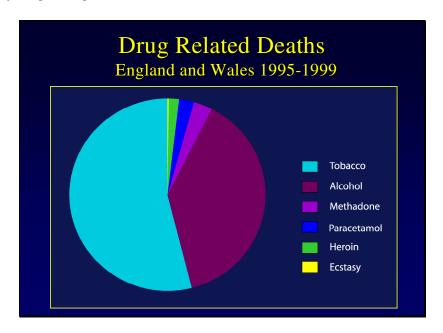
I propose the introduction of a *Scale of Harm*:

- There should be a continuous review of scientific and sociological evidence by a panel of experts, with representation from the police, relevant NGOs and the general public.
- The classification should be regularly reviewed, as new evidence emerges.
- Drugs should be ordinally ranked according to the current evidence of relative harm, rather than grouped into sharp, arbitrary categories.
- Alcohol, tobacco and certain medicinal drugs that are abused should be included for purposes of "calibration".
- Such a classification would not suffer from the inherent conservatism and inflexibility of the current ABC system. It has taken over 15 years to reclassify cannabis from Class B to Class C.

CRITERIA OF ASSESSMENT

The following are suggested as criteria that might be considered for the ranking of drugs according to their potential risk. Under each heading, I give a few anecdotal observations on the nature of the criterion and its relevance to legal and illegal drug use. I do not wish to anticipate the judgement of an expert group, but I shall, in particular, consider the likely position of alcohol on such a scale of harm:

- Biological harm, toxicity, mortality and dependency
 - Analysis of the pathological effects of drugs on users is obviously a crucial factor is assessing harm. Consideration of mortality reveals some interesting facts:
 - Tobacco claims more than half of all drug-related deaths: on average, every cigarette smoked removes 7 minutes from life expectancy.
 - Alcohol accounts for the majority of deaths not caused by smoking. Between them, tobacco and alcohol claim about 90% of all drug related deaths.
 - There were 27 ecstasy-related deaths in 2002 (the yellow sector for these deaths in the piechart below has had to be exaggerated to make it visible). Analysis has shown most were associated with simultaneous use of other illegal drugs: it is very likely that alcohol was also involved
 - o Individual anecdotal stories of deaths of young children resulting from ecstasy overdose are shocking, but they are atypical and the total number of fatalities is very small.
 - Methadone the drug most commonly used to treat opiate addiction kills more people than any illegal drug.



Relation to violent behaviour:

- Violent behaviour is the most evident and public effect of drug use.
- Most crimes of violence, particularly domestic violence, are alcohol related.
- Crack cocaine has a strong connection to violent behaviour, but the number of users is still low.

• Relation to crime

- A large fraction of crime is drug-related: one-third of the proceeds of acquisitive crime are used for the purchase of heroin or cocaine.
- Alcohol is associated with criminal actions, e.g. injury and violence to others, especially domestic violence.
- o Smuggling is significant for both legal and illegal drugs, e.g. tobacco, as well as cocaine and heroin.
- $\circ~80\%$ of drug misusers have convictions for theft.

• Cost to the NHS:

o The economic costs associated with drug use (legal and illegal) are very significant.

- The costs to the NHS of medical problems arising from the use of tobacco and alcohol are many times higher than those of all illegal drugs put together.
- General impact on others:
 - Addicts and drug abusers can have significant negative effects on the lives of those around them.
 - o Injected opiates often ruin the lives of the users, their families and dependents.
 - Smokers often suffer ill health in later life and this can have a huge impact on their families. Passive smoking can be fatal.
 - Alcohol dependence and the violence often associated with it are common factors in family break-up
- Total economic impact:
 - o This factor would integrate the economic impact on both the individual and society

CONCLUSIONS

Alcohol and tobacco are likely to be at or near the top of the comparative scale of harm for every criterion listed. This must be kept in mind when framing attitudes to other drugs, which are currently illegal and consequently viewed as unacceptable by society.

The following proposal was put to the North Wales Drug & Alcohol forum (a large group with representation of the police, social workers, etc) in September 2002:

This conference supports a re-examination of the entire basis of drug classification. The current A/B/C system and the deceptive "hard/soft" distinction should be replaced with a "scale of harm" for all drugs. Drugs (including alcohol and tobacco, to provide familiar standards for calibration) could be placed on the scale on the basis of a continuous review of the scientific and sociological evidence by panels of experts, with representation of the police, relevant NGOs and the public.

90% were in favour of this proposal and only 6% against.

The present classification of drugs makes little sense. It is antiquated and reflects the prejudices and misconceptions of an era in which drugs were placed in arbitrary categories with notable, often illogical, consequences. The continuous review of evidence, and the inclusion of legal drugs in the same review, will allow more sensible and rational classification, putting illegal drugs in context with those already accepted.

QUESTIONS & ANSWERS

Nicotine itself does not have the same toxic effect as tobacco tars so it is different to other drugs where the active ingredient is the problem. Can we still compare it for this reason?

The dangers associated with many illegal drugs are also not so much attributable to the chemistry and pharmacology of the pure substance but to the way it is delivered and to common contaminants. Neglect of hygiene, poor diet and infection, not to mention the social penalties of drug use, are at least as damaging as the drugs themselves. It is true that nicotine itself is not inherently very dangerous, but weight-for-weight, it is perhaps the most powerfully addictive social drug. It is the coupling of a highly addictive substance with a highly toxic delivery vehicle that makes smoking so insidious.

An argument can be made that addiction, though socially undesirable, is not necessarily of itself damaging. There are many examples of opiate addicts who lived productive, essentially normal lives, because they had access to controlled doses of clean drugs. Addiction is inconvenient but not necessarily biologically dangerous.

Is the current A/B/C classification system not an attempt to classify drugs according to the harm they cause?

The A/B/C classification is indeed ordinal and is based on an assessment of risk. Moreover, the technical committee for the Advisory Council of the Misuse of Drugs is reviewing the harm caused by different illegal substances, using a more objective basis, appraisal across a number of dimensions not too dissimilar from those that I propose to underpin the scale of harm. A big problem is to decide what weighting to give to the different criteria for harm. The current classification system gives a lot of loading to drug-related deaths, and it is biased by the novelty of drugs and by media attention and public opinion. The main problem with the A/B/C system is the artificial sharpness of the boundaries and the difficulty that it presents to the reclassification of drugs on the basis of changing scientific evidence. Look, for instance, how long it has taken for cannabis to be reclassified. Another major difference between the A/B/C system and what I am proposing is that the scale of harm would include legal drugs, to provide familiar anchors for the interpretation of risk. There is already discussion about classification schemes with various European agencies and it would be good to have consensus across Europe in terms of the approach adopted

How will penalties be decided upon if all drugs lie on a single scale of harm?

I recognise the convenience of the A/B/C system for application of the law. But a continuous scale produces problems only if sentencing for possession and use of drugs is regarded as the right way to tackle the drug misuse. Many consider supply to be the real evil. The production, distribution, pricing, advertising and supply of illegal drugs, as well as most education about them, are in the hands of criminals. Users are, to a large extent, victims of this crime.

Are there any feasible alternatives to putting alcohol and tobacco into the drug act?

An alternative that has not been fully explored, but which might be feasible, is to put these legal substances into the Medicines Act. If alcohol were to be regulated under the Medicines Act, the content, labelling and advertising would come under much stricter controls. The tobacco and nicotine content of cigarettes would be necessarily regulated, as would the promotion of these dangerous substances.

What is the difference in the way people learn about the use of alcohol as opposed to the use of other drugs?

Most children secure a good deal of their education about alcohol use from their parents. Most parents surely hope that their children will develop a sensible attitude to the eventual moderate social use of alcohol. Good parents consider it part of their parental duty and responsibility to educate their children in its use, and they do it by a mixture of warning, control and example. I am not saying that children always follow their parents' advice, but at least the educational process is more or less explicit and is based on the knowledge that use of alcohol in moderation after a certain age of maturity both legal and socially acceptable. This provides a good example of the way in which parents can deal with education about substance use.

By comparison, most children derive their "education" about illegal drugs from their friends, from the grapevine, from pop culture, from unreliable sources on the Internet, and, even worse, from pushers and suppliers. We now have a new generation of parents, roughly half of whom have used illegal drugs. Is it so outrageous to suggest that they could also play a role in education about the use of presently illegal drugs?

I firmly believe that, rather than pursuing an uncompromising approach to the regulation of illegal social drugs, we should identify the greatest problems to society posed by drug use (including the two great legal killers, alcohol and tobacco) and concentrate resources on reducing the harm that they cause. The protection and education of young people would be very high on my list of priorities in this respect.

If we can rationally consider new approaches to tackling alcohol while it is legal, why is it not possible to extend that approach to other drugs?

The fact that alcohol is legal facilitates new approaches to tackling the undoubted problems associated with its use. The very fact that illegal drugs are illegal (even though very freely available and widely used) makes it difficult to approach education and regulation openly and rationally. Government and non-governmental agencies find it hard to give advice and guidance about what is, after all, a crime. The statistics for illegal activities like gambling and prostitution are poor. The same applies to illegal gambling and prostitution: because they are outside the law it is therefore more difficult to gather and analyse evidence about them and to approach control rationally. Paradoxically, prohibition makes sensible control more difficult. The American experiment with alcohol prohibition proved that it is not the answer to the alcohol problem. Yet we continue to pursue that strategy for illegal social drugs.

What is the difference between how you regulate individuals and corporate organisations? Regulating corporate behaviour should surely be distinct from regulating individuals, although the one can affect the other. In the case of tobacco and alcohol, regulatory strategy is largely directed at the industry – both through taxation and through regulation of advertising, product quality and supply. Such tools are powerful but the government cannot use them to influence the supply and use of heroin, cocaine or other illegal drugs, merely because they are illegal.