DRUG POLICIES TO MINIMIZE AGGREGATE HARM

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The central proposition that underlies today's meeting is that we ought to have evidence-based, harm-minimising drug policies, where the controls placed on each drug are proportioned to the harmfulness of that drug. Since that is a relatively well-agreed doctrine among the participants today, I wish to challenge it.

An evidence-based harm-minimising policy is obviously better than a policy made at random or the one-size-fits-all 'war-on-drugs' policies aimed at a mythical 'drug-free society' (where alcohol and tobacco are not counted as drugs). However, the notion that we can nicely proportion controls to harmfulness may be one degree too simple to constitute useful policy advice. Harm is multi-dimensional. Therefore, it is not possible to arrange all the possible psychoactives on a spectrum from less harmful to more harmful without comparing incomparables.

Not all drugs yield to the same policies. By any reasonable set of standards, heroin is a more harmful and dangerous drug than cannabis. That suggests that heroin should have stiffer, stricter policies applied to it than cannabis does. Yet cannabis maintenance seems like a silly idea, while heroin maintenance might actually work. Thus what seems like a looser policy would apply more appropriately to what is clearly a more harmful drug.

By the same token, the intensity of enforcement should be less related to the harmfulness of the drug than to its stage in the epidemic cycle. Early in the spread of a drug, enforcement can be quite useful. Later on, when use has stopped soaring and market connections have thoroughly exfoliated, even the highest levels of enforcement severity do roughly no good. That observation suggests that the level of enforcement should not simply be a function of how harmful a drug is.

The discouraging historical data on enforcement levels and prices presented by Peter Reuter cast serious doubt on the assumption that the primary utility of drug law enforcement is reducing the extent of drug abuse. The laws introduced to prevent abuse do, in fact, do so to some extent: cocaine, for example, would be more widely used if it were available at your local chemist or on the same terms on which alcohol is available. However, there is reason to doubt that, once a mature market is established, drug law enforcement can further reduce the extent of abuse. Thus most of the drug abuse control benefit of drug prohibition is a property of the laws themselves, along with enough enforcement to prevent their becoming dead letters, and additional enforcement (after the epidemic phase) has little additive effect.

If that is the case, then the job of drug law enforcement ought primarily to be to manage the side effects of prohibition. The cost of the reduction in drug abuse we get with prohibition is an increase in crime and disorder. Those unwanted effects might yield well to highly focused and targeted enforcement strategies, as long as

enforcers are not under the illusion that it is their mission to reduce drug use. Particularly in the US, where there exist extremely violent drug markets, there is considerable evidence that focused enforcement can make the use of violence, and open, indiscreet dealing, sources of competitive disadvantage (rather than of competitive advantage) to dealing organisations, and can thus change the conduct of the markets without markedly changing their volume.

There is another reason to doubt that we should scientifically judge the relative harms of various drugs and devise interventions solely on that basis: *the harm minimisation principle ignores benefits*. But, in a proper analysis, benefits count. There is no particular reason to believe that just because a substance is currently illicit it has no benefits. Many otherwise illicit drugs are approved for medical use and their use restricted by a differentiated control regime. Nor is medical utility the only utility a psychoactive drug might have. Any attempt to design an optimal alcohol policy that failed to acknowledge the fact that tens of millions of people get harmless pleasure from alcohol would be, to that extent, deficient, and the resulting policy sub-optimal. More generally, therefore, policies to reduce harm ought to be tempered by the opportunity-cost of the benefits forgone by the drugs being controlled.

There is some scientific evidence that hallucinogens can be useful in various medical situations, and intense anecdotal evidence, not yet backed by controlled studies, that hallucinogens can generate important non-medical benefits such as facilitating collective worship, individual spiritual exploration, and the acquisition of self-knowledge. The potential benefits of doing research in this area are great, and anything that interferes with such research ought to be a matter of concern.

One unnecessary consequence of making something a Schedule 1 or Class A drug is that research is burdened. The considerations about how tightly to attempt to enforce the controls against casual use of a given drug are not the same considerations that ought to determine whether research with it ought to be allowed to proceed. Some drugs, such as LSD, are potentially quite dangerous if used unwisely, but quite safe under controlled conditions.

Research with scheduled drugs can be blocked both by official research approval bodies such as the Food and Drug Administration in the United States and the human subjects protection panels (called Institutional Review Boards in the United States) that are required by the institutions that fund research and managed by the institutions that carry it out. Both sets of bodies, but especially the human subjects panels, have displayed what seems to me excessive caution in approving research with currently illicit substances. There is no earthly reason that it should be harder to do research on cannabis than on cocaine, or for that matter on heroin as opposed to fentanyl. In the United States, research on the medical uses of smoked cannabis to increase appetites in AIDS patients has been substantially blocked for no good scientific or ethical reason. We should be vigilant against the danger that human subjects protection will become a cover for scientific censorship.

Even setting benefits aside, to create an appropriately differentiated policy of harm-minimisation based on relative risk, we would need to consider not just some imagined total risk but the varieties of harm done by different drugs.

Drug-taking creates three kinds of risk:

1. *Toxicity*- acute or chronic, physical or psychological;
2. *Intoxicated behaviour* - especially behaviour that constitutes crime or leads to accident;
3. *Addiction.*

While we would not bother to restrict substances, even dependency-inducing ones, if they did not have toxic effects on the body, mind or behaviour, it is also true that toxicity and intoxication alone, without addiction, would justify only rather minimal controls. In the absence of the loss of control over drug-taking that characterises addiction, we would expect healthy adults to adjust their drug-taking in the light of their experiences, as we expect people to do in dealing with other potentially unsafe consumer products or activities. Warning labels, not criminal penalties, would be the primary policy tool.

The primary evidence for the loss of control over drug-taking – a phenomenon which has been denied on theoretical grounds by some philosophers, psychologists, and economists – is self-report. Many people complain about their own use of cigarettes or alcohol, heroin or cocaine, methamphetamine or (much less frequently) cannabis. That is simply a lot less true of blue jeans or compact disks or automobiles, or of skiing or scuba-diving or mountain climbing. Certain drugs keep their dependent users from appropriately adjusting their behaviour despite the harms they observe. In fact, a defining characteristic of abuse is continued use despite knowledge of damaging effects.

Five factors influence the harm level associated with a given drug:

1. *Prevalence*
2. *Harmfulness in ordinary non-addictive states* - 25% of the damage done by alcohol is done by people who do not have a diagnosable alcohol problem. It is not diseased behaviour to get drunk once in a while, yet because being drunk is risky and alcohol use is common, a great deal of damage gets done to and by people who are not identifiably "problem drinkers." Cannabis produces quite intense intoxication, but there is little evidence that cannabis intoxication is importantly linked to accident or crime. Alcohol, by contrast, can cause even its casual, non-dependent users to behave very badly.
3. *Capture rate to abuse* – Drugs vary in the proportion of the population that starts to use them winding up losing control. Half or more of those who try more than a few cigarettes will become dependent smokers for at least a period of months. Heroin has a "capture rate" somewhere below that, smoked cocaine about 30%, snorted cocaine 20%, alcohol somewhere in the high teens, cannabis 11%, hallucinogens a percent or two at most.
4. *Harm from heavy use* - Abuse matters mainly if there is a lot of damage associated with heavy use. The damage done by a month of heavy nicotine use is tiny compared to the damage done by a month of heavy alcohol use. Thus, although cigarettes are more addictive, alcohol does more aggregate harm.
5. *Chronicity* - Nicotine and opiates are typically very long-lasting addictions. It used to be thought that addiction to the stimulants was not as long-lasting because the physical side-effects become so unpleasant, but recent statistics are not reassuring: e.g. crack addiction seems to be nearly as durable as heroin addiction. Methamphetamine addiction tends not to last as long, merely because the body will not stand for it. Alcohol is a complicated case,

with a moderately high capture rate but low average chronicity. Chronic alcoholism is atypical, even among those who become alcohol abusers. Most people who have a drinking problem have a problem once and then get over it.

That pattern is more typical than ordinarily believed for other drugs as well. Treatment is not the primary cause of desistance from heavy drugs use; substance dependence primarily comes to an end through unassisted quitting. Yet there is little public appeal for hard-drug users to stop. The treatment world has convinced us that drug addicts cannot recover without professional help. By contrast, public appeals are the primary focus of intervention into smoking, even though there is nothing very useful to tell smokers about quitting, except that they should quit. Although the success rate for any given quit attempt is low, over time in the United States, half the adult dependent smokers who have not died, have quit. People who go into nicotine addiction treatment are actually less likely to succeed than those who do not seek help, due to self-selection.

Substances that combine high capture, high damage, and high chronicity are thought of as "hard" drugs: e.g. cocaine, heroin, methamphetamine and alcohol.

As noted above, the toughness of alcohol policy is appropriately limited by the number of satisfied customers. The same ought, in concept, to apply to the currently illicit drugs. That implies that we should pay some attention to consumer reports. Relatively few people who are long-term hard drug users would recommend the activity to a friend or think they benefit from their drug use. The picture is entirely different for MDMA or hallucinogen users. We would be rash to take their positive self-reports at face value, but equally rash to ignore them. If somebody who used MDMA four times in his life twenty years ago is now writing articles describing how much his life has been improved by it, those reports should not be dismissed out of hand. He might easily be self-deceived, but he might equally well be right. It is worth finding out, by doing the research.

And the notion that the research would be unethical because the benefits to the user are unproven, and the risks unknown, seems to me to turn the notion of "informed consent" on its head. It is not impossible to give potential subjects a clear understanding of what is now known, and not known, about what MDMA is likely to do to them, subjectively and neurologically. If, once having that understanding, some of them decide to try it under laboratory conditions, it's hard to see how allowing them to do so would amount to maltreatment. It is not, after all, as if those same individuals couldn't easily obtain the chemical illicitly, as tens of millions of people have already done.

Another conceptually important (but not, at the present, quantitatively important) issue is ritual use, e.g., ayahuasca use in Amazonia, which has now spread in the form of syncretic, part-Christian ayahuasca-using churches; the peyote cult in Central and North America; psilocybin mushrooms still in use among smaller indigenous groups, and some unknown amount of ritual use among the cosmopolitan population in connection with various New Age, Wiccan, or neo-pagan cults. Note that there is not a good fit between international conventions on psychedelic drugs and international conventions on human rights. Freedom of religion cannot be properly understood without the right to proselytise, and yet most

current laws, where they protect the rights of indigenous peoples to use traditional substances at all, do so as long as *only* members of narrowly defined ethnic groups participate in those rituals. Nor is it obvious why someone who is not a member of an indigenous group but whose rituals involve hallucinogens should be denied the opportunity to undertake a spiritual quest involving the use of hallucinogens, under conditions safer than, say, mountain-climbing or scuba-diving. (Whether the existence of a congregation or some congregation-analogue ought to be among the required conditions is a harder question.) American courts are now wrestling with these problems, with one hallucinogen-using church having won a preliminary injunction to prevent the government interfering with their use of Schedule 1 substances in religious rituals. These decisions arguably would benefit from more scientific knowledge than is now available.

Thus, I would argue, benefits research should not be limited to medical benefits and treatment of disease. For example, there is good evidence that the class of profound psychological phenomena variously called awe-inspiring experiences, primary religious experiences, or unitary or mystical experiences can have benefits both for those that experience them and for others. There is also some evidence, including evidence from ritual use, that such states can be relatively reliably produced with the use of hallucinogens in the appropriate settings. It would be a shame to let concern about crack-smoking interfere with research on materials that do not have the addictive, toxic or behavioural risks of smoked cocaine and which might, if properly used, produce extensive benefits.

To sum up, it would be massive progress to scale policies to harms, as estimated from rational evidence. But the phenomena are too complicated to make that simple idea quite right conceptually. Properly, we should have more differentiated measures than a single unidimensional "harmfulness", and include a scale of "benefits" too.

QUESTIONS & ANSWERS

John Strang
Many in this room are comfortable with the objective of reducing individual and societal aggregate harm. Harm reduction does not necessarily mean reduction of drug use, but at the same time, we must be careful not to throw this objective out, as it is one possible effective way of reducing aggregate harm.

Mark Kleiman
Aggregate damage is determined by the product of the harmfulness of a drug (i.e. its rate of damage per unit consumed), and the quantity consumed. Reducing either harmfulness or quantity, without increasing the other, will reduce aggregate damage. Minimising harmfulness, which often goes under the label "harm reduction," is not in fact a complete strategy for minimising aggregate harm.

John Strang
With regard to having maintenance for cannabis use, there is a need to look at where we have effective levers and want to apply them. It may seem unfair that we have treatments for some diseases and not for others, but this should not stop us using what we have, e.g. hepatitis B vaccination should be applied even though we do not have one for hepatitis C.

Mark Kleiman
Again, I agree entirely. There are some things we can do something about, and other things we care about, but cannot do anything about. On balance, one would rather cure crack addiction than heroin addiction, but we have no treatment for crack addiction a tenth as useful as methadone or any other maintenance therapy for heroin addiction.

John Strang
We need to factor in different sub-populations within substance misuse, to have a different approach to an addict versus a recreational drug user, to an injector versus a non-injecting drug user. Planning would be different, and ways in which it may backfire could be different for these different sub-populations.

Mark Kleiman
Yes, differentiating by user is crucial. The widely-accepted statement that drug misuse is a chronic recurring disease is simply not evidence-based. Most people are able to stop using without seeking treatment, and those seen by treatment services are the minority who could not quit on their own. So the treatment services are busy with the small minority of chronic, relapsing, drug-dependent users, and that small minority is therefore taken as typical of all drug-abusing individuals, or even of all drug users generally. That is simply a mistake. It is unfortunate to have established a very negative set of beliefs based on this filtering system.

David Nutt
Why do the media always seem to side with demonstrably unsuccessful repressive policies?

Mark Kleiman
Drug warriors engaged the mass media in the late 1980s and early 1990s and instigated media self-censorship and fairly deliberate propaganda. As citizens and parents, media leaders were easily led to believe that it was their job to make sure everyone knew that "all drugs are bad." The audience for drug policy discourse is the same as the consumer base, so anything positive you say about any drug in a mass-media context may influence somebody to go out and try that drug. Nobody wants the responsibility of promoting use, so the media become very wary of saying anything positive about any illicit drug, or anything against prohibition or its enforcement.