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# Harms or highs? Regulating narcotics, alcohol and nicotine

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Recreational drugs amount to a very large global industry, perhaps two trillion dollars annually. The market is estimated at $1 trillion for alcohol[1], $800 billion for nicotine[2] and $330 billion for illicit drugs[3]. These estimates are approximations, but they provide a sense of the immense scale of the supply enterprise and, of course, the demand and the willingness (or desperation) to pay for the experience of recreational drug use. The use of some recreational drugs such as caffeine is so ubiquitous that it is often not even seen as a drug. The various policy frameworks for managing the risks and the benefits of this vast trade are antiquated, and far from delivering the best overall welfare outcomes.

Fortunately, the policy environment for recreational drugs, both legal and illicit, is changing. Two fundamental shifts are evident. Firstly, a recognition that use of psychoactive substances is pervasive in human societies everywhere and throughout history. This is leading to an increasing focus on the *harms* arising from drug use and less on a judgemental approach to the use of a psychoactive substance *per se*. In the history of drug policy there has been a casual conflation of the drug use itself and the harms caused to the individual and to society. Secondly, there is growing recognition that much harm can be caused by the very policy interventions designed to address drug use, up to and including the destabilisation of entire 'narco-states' but including many counter-productive unintended consequences of drug policies. These are positive directions in the policy environment, and, if pursued towards rigorous conclusions, would lead us towards a rational policy framework for recreational drugs that is both far more effective and better aligned with the values of modern liberal democracies.

## 1 The rising focus on harm

The important insight is that many drugs, including some 'hard drugs' can be used *relatively* safely if used in moderation. This is not to overlook the dependence-forming characteristics or tendency towards tolerance of some drugs, meaning greater doses are needed to maintain an effect. Nor do I seek to downplay the effects of intoxication in terms of safety and as a cause of violence. However, much of the harm to the individual arises from the method of drug delivery and the conditions under which it is obtained. Some examples are discussed below to illuminate this argument.

### 1.1 Dance drugs

There are risks associated with using dance drugs like MDMA ("ecstasy") but by far the greatest risks come from adulteration with toxic contaminants, uncertain dosing of the drug, not knowing how much to take, and where entirely unexpected psychoactive chemicals are present in pills with no obvious marking. The problem has been recognised in communities in several countries, including the Netherlands, Switzerland, Austria, Belgium, Germany, Spain and France, where services have been established to test pills at the point of use for their authenticity and safety[4]. It is of course a paradox that services should be designed to provide quality control for product that are illegal to make, sell, buy or possess. But that reflects the tacit preference for *harm reduction* over prohibition with a pragmatic recognition that greater harms arise from the unregulated illegal market than from consumption of the drugs as intended.

### 1.2 Injected drugs

Intravenous drug users are at great risk from infections such as Hepatitis and HIV. The risk is not from the drugs they take, but from the dirty syringes and paraphernalia used to take the drug – the delivery system, not the drug. The emergence of needle exchanges has been a valuable harm

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reduction response, endorsed by the World Health Organisation in a landmark 2004 report[5], in which it concluded:

*There is compelling evidence that increasing the availability and utilization of sterile injecting equipment by IDUs reduces HIV infection substantially … There is no convincing evidence of any major, unintended negative consequences*

This idea has been extended to embrace the concept of supervised injection sites ("shooting galleries"), the purpose being to change the situation is which drugs are consumed. This reduces the vulnerability of the user, reduces overdose risk, ensures good hygiene, protects the surrounding community from anti-social aspects of drug self-administration and controls drug-related waste. Many facilities of this nature now exist in Europe and beyond[6].

## 1.3 Alcohol

For alcohol, the drug itself when taken to excess causes intoxication and can put people at risk through a heightened inclination to violence, accidents if driving, or increased vulnerability to sexual assault. In this case, affecting the situation in which drinkers find themselves when drunk mitigates the harm. For example, emphasis on safe rides home and designated drivers or reliable pre-booked taxi services can reduce vulnerability. It is increasingly understood that just ejecting drinkers from private establishments into an ungoverned public realm provides an incubator for disorder and conflict, ultimately resolved by the police. In response, local governments increasingly try to create a more sympathetic public environment for the nighttime economy, using taxi marshals or street pastors for example[7]. The effects of violence have also been mitigated by simple measures like use of plastic glasses, which do cause far less injury in fights.

## 1.4 Nicotine

The strongest example of the tearing apart of the false conflation of drug use and harm is the case of nicotine. There are over one billion smokers in the world, consuming around six trillion cigarettes annually[8]. Smoking causes extensive illness and premature death principally through cancer, cardiovascular disease and respiratory illnesses. The World Health Organisation estimates that 100 million people died in the 20th Century from smoking-related disease and, on current trends, one billion will die prematurely in the 21st Century[9]. However, the primary psychoactive agent in tobacco, nicotine, is not in itself especially harmful. It provides users with control of mood and anxiety (explaining its popularity in war zones), enhancements to concentration and may even have protective effects against some diseases. However, it is the delivery system – the smoke particles, and hot toxic gases associated with combustion of organic material – that does the vast bulk of the damage to the user. It has been understood for four decades that: "*people smoke for the nicotine but die from the tar*"[10]. As with a dirty syringe, if it is possible to find a clean delivery system for nicotine, then much of the burden of disease could be eliminated, if there is widespread uptake as an alternative to smoking.

The UK's Royal College of Physicians has been synthesising the science on tobacco and smoking since its ground-breaking 1962 report on smoking and health. In its 2007 report, its major work on 'harm reduction'[11], the Royal College of Physicians made the case for reduced risk options for nicotine users:

*This report makes the case for harm reduction strategies to protect smokers. It demonstrates that smokers smoke predominantly for nicotine, that nicotine itself is not especially hazardous, and that if nicotine could be provided in a form that is acceptable and effective as a cigarette substitute, millions of lives could be saved.*

This thinking underpins support for use of smokeless tobaccos like snus, tobacco held in a pouch and placed between the lip and gum, where nicotine is absorbed directly into the blood stream. Snus is widely used in Scandinavia and to a lesser extent in the United States. It is likely to be at least 98% less risky than smoking, taking all cancer sites into account and it is the reason why Sweden has the lowest rates of smoking and smoking related disease in the developed world[12]. The use of snus provides compelling proof of concept for the idea of achieving harm reduction through an alternative nicotine delivery system.

It also has caused many experts to welcome the emergence of e-cigarettes and other vapour technologies as an opportunity rather than a threat[13], though many tobacco control activists

have often opposed these technologies, believing their purpose is to attract and 'hook' new users[14]. The weight of evidence is strongly on the side of those who see the great potential, given the right regulation [15] there is no evidence to suggest 'gateway effects' and what evidence there is suggests that e-cigarettes are an *alternative* to smoking even for young users. An expert report for the English government agency Public Health England concluded[16].

*Smoking kills, and millions of smokers alive today will die prematurely from their smoking unless they quit. This burden falls predominantly on the most disadvantaged in society. Preventing this death and disability requires measures that help as many of today's smokers to quit as possible. The option of switching to electronic cigarettes as an alternative and much safer source of nicotine, as a personal lifestyle choice rather than medical service, has enormous potential to reach smokers currently refractory to existing approaches. The emergence of electronic cigarettes and the likely arrival of more effective nicotine-containing devices currently in development provides a radical alternative to tobacco, and evidence to date suggests that smokers are willing to use these products in substantial numbers.*

Electronic cigarettes, and other nicotine devices, therefore offer vast potential health benefits, but maximising those benefits while minimising harms and risks to society requires appropriate regulation, careful monitoring, and risk management. However the opportunity to harness this potential into public health policy, complementing existing comprehensive tobacco control policies, should not be missed.

The key challenge for the continuing development of safer nicotine products will be the regulatory framework emerging in the United States and European Union, and the direction set by the World Health Organisation. There will also need to be a clear understanding, among users and policy-makers, of the relative risks involved in the different ways of taking nicotine. The major difference is between products involving combustion and those that involve no combustion or just heat to vaporise nicotine: the difference in risk is 1-2 orders of magnitude. The potential benefits of building this insight into policy are extremely large.

# 2 Harms caused by policy interventions

There is a widespread asymmetry in the approach taken to assessing policy for managing recreational drugs in society. This is a tendency to focus on the drug and its harms without adequately counting the harmful consequences of the policy interventions intended to tackle drug related harms. There have been official attempts to recognise unintended consequences, but never sustained and never systematically. For example, the UN World Drug Report in 2008 contained a discussion of unintended consequences, but this has never been built into its routine statistics or reporting, or its overall narrative[17]. Some examples of unintended consequences follow.

## 2.1 Problems with prohibitions

The most egregious failure in policy-making for drugs has been to avoid assessing the full costs of the policy of the prohibitions of illicit drugs[18]. These costs broadly include: development and security; public health; human rights; stigma and discrimination; crime; environmental; and economic and enforcement costs[19]. The costs are astonishingly high, and the benefits, compared to not making these drugs illegal, are far from clear. The main costs arise from substitution of a legal supply chain with a criminal supply chain. The observations below explain some of the impacts.

- **Prohibition *does not mean zero sales***. A prohibition does not mean that the prohibited good is no longer available. It just means it is supplied through a different, usually criminal, supply chain. A large number of citizens become engaged in this commerce as buyers or sellers – and hence commit crime and contribute to the proceeds of crime. See table:

| Use of illicit drugs in France | | | | |
|---|---|---|---|---|
| | **Cannabis** | **Cocaine** | **Ecstasy** | **Heroin** |
| Lifetime users | 13.4m | 1.5m | 500,000 | 500,000 |
| Used last year | 3.8m | 400,000 | | |
| Regular users | 1.2m | | | |
| Daily users | 550,000 | | | |

Source: French Monitoring Centre for Drugs and Drug Addiction (OFDT), 2013[20]

- **Conflict and instability**. Efforts to eradicate supply or fighting over the spoils at the point of production have proven extremely destabilising. In Mexico some 100,000 people have been killed in drug related violence since 2006. Guinea-Bissau now has an illegal drug trade that exceeds its national income excluding drugs. In Afghanistan, targeting decisions in the poppy eradication programmes allowed officials to extract bribes from poppy farmers or left farmers without a crop and drove them towards the Taliban.

- **Tax losses and proceeds of crime**. A prohibition means products are sold without tax, causing rents to accrue to the criminal supply chain rather than to the state. Involvement of criminal enterprise has second order effects – for instance in sponsoring other forms of crime or terrorism. The Taliban in Afghanistan has relied on the opium crop since it came to power and then as a terrorist insurgency.

- **An unregulated market.** Instead of contract law, product standards, informative packaging and controls on marketing, the illicit supply chain is regulated by the honour codes and alliances of criminals backed up with ultimate recourse to violence. There is no consumer protection, and a default 'buyer beware' regime for quality and safety.

- **Proportionality of punishment.** Prohibitions have a problem with penalties. If the penalties are too light, then they will be ignored and the law will be ineffective and fall into disrepute. If they are too heavy, then they will be disproportionate to the offence – in which usually no-one else is harmed, and mostly not even the user. The challenge, never adequately met, is to find a regime that is both proportionate and effective.

- **Criminalising users.** There are significant harms caused to users by the range of offences in a prohibition – imprisonment and criminal records can blight lives to a greater extent than drug use. This can be aggravated by racial factors: in the United States drug related incarceration rates are ten times higher for the black population than for whites. The inflated prices caused by the illicit status of some drugs lead to secondary crimes or anti-social behaviour like theft or coercive prostitution.

- **Law, enforcement and corruption.** There is a danger that the law falls into disrepute if it looks disproportionate, and that officials do not enforce measures or take backhanders – prohibitions create a corruptible opportunity for police and officials. The costs of criminalising drugs includes $100 billion per year in fighting the war on drugs through law enforcement, intelligence and prison.

- **Offsetting risk behaviours.** To the extent that a certain type of risk behaviour is closed down by a prohibition, it does not mean that *risk* is reduced commensurately. It depends what behaviour is undertaken instead – a 'heroin drought' can cause switching to crack, or risks to health through cutting the pure drug with fillers. Bans on e-cigarettes now in force in some countries can cause more smoking.

- **Offsetting interactions with legal markets.** It is possible that the prohibition of marijuana has the effect of increasing demand for alcohol as these drugs have several functional overlaps. Marijuana use however is not associated with violence or disorder. The prohibition on marijuana and widespread availability of alcohol may sub-optimal from a welfare perspective.

- **Innovation.** Bans on many illicit drugs create a lucrative incentive to innovate. The response has been a range of 'legal highs' or novel psychoactive substances that are not classified as illegal. This has placed regulators and innovators in an 'arms race' of innovation and prohibition – possibly with greater dangers that come experimentation with unfamiliar drugs.

## 2.2 New prohibitionists

Although the highly negative impacts of prohibitions have been well documented, initially for alcohol in the United States and more recently for illicit drugs, this has not stopped some of the leaders in tobacco policy proposing new ideas for tobacco control that have significant elements of prohibition within them[21]. Examples include: a 'sinking lid', which would limit and reduce over time the quantity of tobacco available for sale; a 'smoke free generation', which would ban sales to

everyone born after a fixed date such as 2000; a proposal to reduce the nicotine content in cigarettes to a sub-addictive level; and an outright ban on sales, on the basis that cigarettes would not be permitted if introduced today. These proposals have been criticised both for their intractable practical problems (there are over one billion current users and rising), but also for the implied relationship between the citizen and the state that underpins a prohibitionist approach to public health[22].

## 2.3 Problems with regulation of legal products

There are three categories of problematic regulation of lawful products.

***1. Unintended behavioural consequences***

The first problem is unintended harmful consequences arising from user or supply chain responses to the regulation. For example a minimum unit price for alcohol has been proposed as a means to reduce alcohol abuse[23]. This could have a number of perverse consequences: it may be fiscally regressive, taking a larger share of the disposable income of poor households; it provides windfall profits to low cost vendors and may reduce quality; it is may cause realignment of the budgets of problem drinkers, who may continue to drink and choose to reduce their household expenditure on food; or it may lead to problem drinkers buying on the black market or a trade in neat alcohol as an additive. There is extensive support for this measure in the medical profession in the UK, for example. But the health and welfare impact rests on *economic* questions: how do heavy drinkers react to a price signal and what weight should be placed on the economic detriment to moderate drinkers who are penalised for no health gain?

***2. Consumers defection from the regulated market***

Many problems arise from regulation that is so restrictive, burdensome or costly that it starts to adopt the characteristics of a *de facto* prohibition. A black market or work-arounds will develop for products that consumers wish to buy but are no longer commercially viable under the chosen regulatory regime, or simply cost too much through taxation and compliance costs. For example, many regulators, legislators and activists say they would like to ban certain e-cigarette flavours that they believe are attractive to children[24] (although there is good evidence that teenagers are hardly interested in flavours [25] ). The likely result will be development of separate trades in flavours and nicotine liquids, with users learning to mix their own – an arrangement which would not be as safe as the commercial availability of these products through lightly regulated legal channels.

***3. Misleading signals about risk-taking behaviour***

A third form of problematic regulation applies when there is a spectrum of risks associated with the products available in a market. If regulation favours the higher risk product, or simply does not reflect the relative benefits of using or switching to the lower risk product, then users may suffer unnecessary harm through excessive use of the higher risk product. One example of this is the regulation of smokeless tobacco or especially 'snus' (powdered tobacco held in a porous pouch placed between the lip and gum). As discussed above, snus use is at least 98% lower risk than smoking cigarettes, and it does not have to be 100% safe to yield very significant benefits for those who use it instead of smoking to consume nicotine. However, the regulatory framework adopted for this product does not reflect this disparity in risk in any jurisdiction. For example in the European Union, the product is *banned* outside Sweden, even though it is the reason why Sweden has such low rates of tobacco related mortality and even though cigarettes are freely available. In the United States, snus is treated as a problem, not an opportunity. The US Food and Drug Administration is currently considering an application to change the generic warnings on snus as follows[26]:

From: **Warning**: this product is not a safe alternative to smoking

To: **Warning:** no tobacco product is safe, but this product presents substantially lower risks to health than cigarettes

The communication of risk conveyed by these two warnings is very different, with the latter giving a reasonably proportionate and realistic account of the relative risks. The former, while technically correct, may suggest that the user should be indifferent between the risks. Unfortunately, a number of prominent health advocates and advisers to the FDA oppose the change. In doing so they

risk the counterproductive effect of protecting the far more harmful product (cigarettes) from competition from the much lower risk product (snus), by concealing from smokers a dramatically improved risk profile for nicotine use.

The rise of e-cigarettes poses many similar challenges – almost every regulatory proposal made for e-cigarettes suffers from an unintended consequence: that being protection of the cigarette trade from competition, and that may far outweigh its intended value. For example, a ban on advertising or internet sales would favour incumbent tobacco companies with established cigarette brands. Bans on vaping in public places may drive vapers back to smoking. Highly demanding technical standards or compliance costs will create regulatory barriers to entry at the firm and product level, driving many smaller producers out of the market and reducing the diversity of products and pace of innovation. It may sound prudent and cautious to classify and license e-cigarettes as medicines, like a form of nicotine replacement therapy. However, the effect of the costs, restrictions and burdens of this form of regulation would radically contract and reshape the e-cigarette market in a way that would protect the much more harmful cigarette trade from competition[27].

## 3 Towards rational regulation of recreational drugs

"*From my experience of being responsible for drugs policy... I came to the conclusion that legalisation and regulation of all drugs was the only way to reduce the harmful effects of this unstoppable activity*."

Mo Mowlem MP, Minister responsible for UK Drug Policy 1999–2001 in September 2002.

What principles can we apply in rethinking regulation of all recreational drugs, whether currently legal or illegal?

- **Avoid unrealistic goals**. We should accept that a risk-free or drug-free society is impossible *and undesirable*, and the efforts to achieve it will be immensely harmful, as they always have been in the past.

- **Focus objectives on harm and welfare**. The policy objective should be to manage the use of recreational drugs in way that maximises welfare and reduces harm, while respecting individual liberties and personal choices. Policy measures should differentiate to the extent possible between problem users and users who do not suffer or cause particularly serious harms, with intervention targeted to address harms not all use.

- **Develop a clear rationale for intervention**. The policy choices should be grounded in a clear rationale for government intervention, based largely on: preventing harm to third parties; reducing harm to users without preventing use; and limiting uptake by new users, but mediated by respect for individual liberty and the right to engage in risky behaviour if it does not harm others.

- **Assess *all* relevant costs, risks and benefits**. The policy framework must be based on nuanced consideration of the broad risks and benefits of the use psychoactive substances *and* the risks and benefits of policy interventions, accounting carefully for the impact of unintended, though foreseeable, consequences of poorly designed policy.

- **Design regulation to be sensitive to risk**. Where users have a range of options to achieve similar functional effects, particular care should be taken to ensure that regulation does not distort choice or favour the more risky options. More restrictive regulation should be reserved for those drugs with the highest abuse potential. For example, heroin could be available on medical prescription, while cannabis and alcohol could be sold in licensed premises[28]. Cigarettes could be heavily taxed, but smokeless tobacco and e-cigarettes lightly taxed.

- **Apply principles of good regulation**. Regulatory measures should be evidence-based, proportionate to risk, and non-discriminatory while subject to justification and challenge and to change in response to new information. These are tests that should apply to regulation in any consumer market, and there is no reason not to apply them to recreational drugs.

- **Consider the situation not just the product**. Policy-makers should consider the situation in which recreational drugs are used, which can vary from sipping fine wine in high-end Parisian restaurant to the squalor of a Mexican crack house. The harms are often defined by context, and can be mitigated by improvements to the situation in which drugs used.

- **Help consumers make choices through good communication.** In communication of risk, it is necessary *but not sufficient* to be merely truthful. Risk communicators must be truthful but also take care to ensure communications are correctly understood and well aligned with a realistic scientific understanding of risks.

- **Engage consumers as stakeholders**. Many consumers have valuable knowledge and insights not captured in established literature, and there are many value judgements in policy-making that need to be informed by those directly affected. The mantra "nothing about us without us", which originated in the policy discourse over the response to HIV/AIDS should ring in the ears of those making policy on recreational drugs.

## 4 Think of the children: the danger of infantilising adult society

Given the emotion, fear and anger that surrounds this issue, the ideas discussed above represent an immensely challenging agenda for anyone holding office, even though a vast prize is there to be won for the leaders who will eventually make it work. The arguments against prohibitions and for enlightened risk-based regulation are extremely strong. However, opponents of this direction in policy thinking have what they consider a potent *force majeure* argument that overrides all else: "*think of the children*".

Of course we should think of the children. But we should not let adult society be bent out of shape by excessive attempts to control the behaviour of young people or to isolate them from adult life. When it comes to recreational drugs, we should recognise that many young people grow up with a risk appetite, are hostile to authority, seek adult experiences to bond with each other and so on. Just as the availability of contraception for teenagers may appear to condone teenage sex, it offers a better strategy than abstinence only "true love waits" lectures followed by inevitable teenage pregnancies.

Much can be done to discourage adolescent drug use, but too much discouragement or blockage will stimulate an in-principle opposition to the imposition of adult authority. For the best welfare outcomes, we should treat young people with respect and try to reduce the risks they are exposed to, an approach no different to an enlightened approach to adult recreational drug use. The reaction to the rise in e-cigarette use among adolescents in the United States has provided a fascinating insight into divisions in public health. For some it is a tragedy and emergency, demanding a forceful regulatory intervention[29]. For others, including me, it is a triumph because it is accompanied by record declines in teenage smoking – it appears the far less harmful nicotine delivery technology, e-cigarettes, is displacing the most dangerous way to take nicotine: smoking.

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