The art of medicine Tilting at windmills and the evidence base on injecting drug use

After reading through many of the 500 or so papers on harm reduction in drug users listed in the *PubMed* database, it's hard not to conclude that researchers are really bad at understanding the evidence base. Paper after paper begins its introduction with a homily about the need for evidencebased policies. Paper after paper concludes with a stirring call for policies that deliver what the research promises: lower rates of HIV, blood-borne infections, mental illness, and social disruption for places that are bold enough to give drug users easy access to sterile injecting equipment, opioid substitution therapy, cognitive therapy, and the other lesser jewels in the harm reduction crown. So says the science. So say we, the high priests of evidence-based policy.

But there's another body of evidence, just as overwhelming. It shows, time after time, that elected politicians don't give a damn about scientific evidence when it comes to policies that benefit a minority that holds little sway over other voters. Injecting drug users form just such a minority. People who choose to sell sex for a living do, too. Policies around addiction and prostitution bulldoze happily through the scientific evidence in a quest to do what works best at the ballot box. What's the



response of the research community? Most often, we call for more research. The notion that 501 studies will prove more persuasive than the 493 current is at best quixotic. At worst, a cynic might say, it is self-serving, although to be fair to the cavaliers of harm reduction research, most are driven more by the quest for decent services for addicts than by the wealth and glory that might cascade from a more commercially and thus politically popular goal—a cure for cancer, for example. But the windmills of public opinion at which they tilt are unlikely to be skewered on the lance of another well-honed p value.

This is not to suggest that well-designed research does not shape policy. It can, and it sometimes does even in areas such as addiction where a scientific evidence base is built on a marshy foundation of morality and the slurry of legal and cultural history. The evidence base didn't change between US President Barack Obama's election in November. 2008. and the end of the ban on the use of federal funding for safe drug-injecting programmes in December, 2009. The 20-year ban was dropped as part of the messy horsetrading that always surrounds omnibus spending bills. As it happens, the end of the ban went almost unnoticed: even that bastion of public morality Fox News let it pass without a rant. But had there been a challenge, Obama would have been able to point to around a dozen reviews-at least one by every one of the Gods in the country's scientific pantheon, the earliest ones dating back to 1991-showing that needle and syringe programmes save lives and money.

So why didn't his predecessors, either of the George Bushes or, indeed, Bill Clinton, support those programmes? The inescapable conclusion is that the lives of injecting drug users don't matter all that much to the 55% of American adults who voted in earlier elections. Obama judged, correctly, that he could get away with doing the right thing for people who inject drugs by keeping a low profile and appealing to the data where necessary. But it is a risk that politicians in many other countries are still loathe to take.

Our financially, scientifically, and socially irrational drug policies are more than just a mismatch between research and policy; I would suggest that they are a spotlight on a fundamental weakness of the democratic system. In functioning democracies, we get governments that represent the needs, interests, desires, and prejudices of the people who vote. And there aren't that many countries where most voters are gunning for programmes that spend their tax money doing nice things for heroin addicts, rapists, thieves, prostitutes, or any one of an exhaustingly long list of people whose behaviour we have chosen, rightly or wrongly, to criminalise. Don't read that as a value statement; read it as a fact.

The next fact-that elected politicians are reluctant to invest in programmes that will benefit the people who didn't vote for them and enrage (or even just mildly irritate) those who did-can hardly come as a surprise. That's one of the reasons the more politically engaged members of the research community tie themselves in knots trying to show that what is good for the minority is good for the majority too. We argue (and indeed demonstrate) that preventing fatal infections in injecting drug users will prevent fatal infections among other people too. Subtext: invest in prevention for the Wicked to protect the Innocent. Which is of interest if you happen to have sex with the Wicked, but that's hardly the majority of voters, either. We argue (and indeed demonstrate) that investing in prevention now will save treatment costs later. But that's another fragile platform on which to build our evidence base, because democratically elected governments are inherently shortterm in their thinking. If they take unpopular decisions now, they will probably be rewarded by being thrown out of office. It is hardly a consolation that a government run by their political opponents will save money as a result of their wise public health investment choices.

Although many people are at first surprised by the contention, it in fact follows guite logically that autocratic regimes have a better chance of putting in place public health measures that benefit minorities who are widely despised by the majority. And the evidence base provides many examples. The first nation-wide programme providing easy access to safe injecting equipment was rolled out on a whisper of evidence and a chorus of common sense in the UK in 1986. The UK is a democracy, admittedly. But in 1986 it was a democracy led by Margaret Thatcher, who was riding towards a then unprecedented third term as Prime Minister on a wave of popular support. No-one was about to accuse her of being soft when she endorsed policies that would (cheaply) save junkies from infections that the National Health Service would otherwise have (expensively) to treat. A number of other European countries with publicly financed health systems and traditions of social solidarity followed suit. Many of the more dog-eat-dog democracies, including the USA, India, Thailand, and Russia dragged their feet for an inordinately long time and many continue to do so, 493 studies and reviews notwithstanding.

Meanwhile, some of the world's least democratic countries are looking at the evidence and putting their money on harm reduction. Few would accuse Iran's rulers of being soft. Some, indeed, might suggest that it is because of their intransigence that one young Iranian man in 100 shoots up heroin, although it's just as probable that the roots of Iran's addiction go only as deep as those of the poppies that grow so abundantly in the region. Whatever drives the addiction, the country's fiercely conservative rulers are determined that it won't drive a massive HIV epidemic. Clean injecting equipment is available from dispensing machines on the streets of Tehran and needles are available in jails. That's true of Kyrgyzstan, too—hardly a model of democratic openness—though it is more than can be said for the UK's prisons. That latter anomaly is an indication of how very political the decision making around harm reduction is. The UK's Department of Health, responsible for the public health system, supports harm reduction. The Home Office, responsible for the nation's prisons, does not. So injecting drug users can get clean needles as long as they don't get arrested, but the supply dries up as soon as they are in a confined space with a lot of other bored young men who are very much more likely than those on the streets to be drug users, and also more likely to be HIV-infected. Go figure.

It can take time for autocrats to get their heads around the evidence base. In China, service providers at eight tiny demonstration projects providing methadone to heroin users diligently pumped out evidence of reduced use of needles and syringes, needle sharing, and transmission of viruses for years before the politicians took any notice. It's worth noting that the police were equally diligently collecting data that suggested a fall in crime around the methadone project areas. Lower crime is always good; lower HIV rates became a major bonus for the keepers of the public purse once China had committed to providing antiretrovirals to everyone who needed them. Whether whipped up by science, security, or the promise of a healthier balance sheet, once China's politicians get the bit between their teeth they run. Within 2 years of deciding to go ahead with methadone maintenance therapy, China reported nearly 100 000 heroin users in regular treatment.

The figure would have been greater but for the recent decentralisation of both decision making and service provision in China's health system-not all local governments are convinced they should be providing services to drug users. Indeed, many autocrats are just as unwilling to act on scientific evidence as elected politicians are. Very often, they fall back again on the perpetual inadequacy of the evidence base. It may work over there to the west of the mountains, but over here in the east, our culture is different. A red rag to researchers promoting the scientific evidence base. If only we could do a 494th study to show the local autocrat that harm reduction works in her territory. That still presupposes that the local autocrat cares about programmes that work for injecting drug users. If that's not the case, no amount of scientific data will make any difference. And so I think it is time for a change of tack. We should stop looking for yet more evidence confirming that we know how to improve the health of drug users. In many places, we need to start making a case for why we should improve the health of drug users. The answer, for anyone with even an ounce of humanity, is simply that it is the right thing to do. How guixotic is that?

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Further reading

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