

Perspectives on the Drug Policy Research Landscape



Policy debates are increasingly debates over research and science. Players on all sides are wielding scholarship with growing sophistication and staking claim to “evidence-based” policies. Yet research on drugs and drug policy is deeply politicized, and most policies that are in place today are either not “evidence-based” at all or based on weak or flawed research.

Despite a number of researchers focused on drugs, criminal justice, and substance use and harm reduction interventions, the field of drug policy research faces serious limitations. As described in more detail below, problems include: 1) inherent biases due, in part, to the current funding landscape; 2) systemic methodological weaknesses; 3) an over-emphasis on outcomes that never escape an abstinence-only or prohibitionist framework; and 4) a lack of organizations or individuals “connecting the dots” between the disparate disciplines involved in drug policy. These weaknesses, combined with the highly politicized nature of drug policy reform, have resulted in a significant gap between research and policy and an overall lack of innovation and creativity within the field.

In particular, there is little research that brings together criminal justice, treatment, and harm reduction to craft policies and interventions that reduce criminalization, increase public safety, improve public health, and save money. With the current momentum behind criminal justice reform, there is a greater need than ever for smart solutions and effective alternatives to incarceration. Our criminal justice allies have a deep understanding of how to reduce incarceration, but some lack sophistication when it comes to truly understanding addiction and how to address the needs of impoverished drug users in ways that advance public safety and health. Drug courts are one example where millions have been invested despite an equivocal evidence base, without much attention to the nuances of implementation, and without necessarily achieving the best outcomes.

Drug policy researchers have an important contribution to make to improving the effectiveness of criminal justice reform by bringing a deep understanding of addiction, treatment, and harm reduction. We know from international examples that when criminal justice is informed by harm reduction and treatment, we can achieve reductions in crime, improvements in public safety, and cost savings. Drug decriminalization in Portugal, syringe exchange programs, supervised injection facilities, and heroin-assisted treatment have demonstrated that harm reduction-oriented policies can help individuals stabilize their lives and access treatment, while reducing incarceration, improving public order, and saving money. Unfortunately, it precisely this kind of research – bringing together harm reduction, criminal justice, and treatment – that existing funders are least likely to support.

Sources of Research Funding

Many of the problems with drug policy research stem from the sources of funding. The vast majority of the research money available goes to studies focused at the individual, not the policy, level. By far the biggest drug research funders are governmental, and the biggest of those is the National Institute on Drug Abuse (NIDA), which is part of the National Institutes of Health (NIH). The Substance Abuse and Mental Health Services Administration, U.S. Department of Veterans Affairs, Office of National Drug Control Policy, and Department of Justice also provide modest research funding. The National Institute Alcohol Abuse and Alcoholism (NIAAA) also funds research about that particular substance.

Funding from NIDA represents about 80% of the global expenditure on research on drugs (Malizia & Ferro, 2014), but their mission and scope are narrow. With a budget of just over \$1 billion, NIDA's stated mission is "to lead the Nation in bringing the power of science to bear on drug abuse and addiction." This mission has been interpreted by their leadership as largely restricting research into harm reduction interventions and the therapeutic potential of drugs (such as marijuana). Moreover, they generally do not fund projects that examine the harm associated with our existing drug policies, such as criminalization and its collateral consequences. Little of NIDA's funding is focused on policy interventions per se but rather on basic research and individual-level interventions. (This is in contrast to NIAAA, which has financed a robust array of policy analyses and structural interventions.)

Not only is NIDA focused narrowly on the problems caused by drug use at the individual level, they are deeply committed to a biomedical model of addiction and spend much of their resources on addiction neuroscience. In fact, one scholar describes NIDA as largely responsible for making "the neuroscientists' laboratory ... an obligatory passage point for the production of truths about addiction (Vrecko, 2010: 58)." Prominent addiction researcher Wayne Hall and colleagues (2015) recently noted that despite significant investments in addiction neuroscience, the brain disease model of addiction has failed to deliver on its promises either in terms of policy or treatment. The neuroscientific agenda detracts from population-based interventions that could ultimately help more people than the current focus on the neurobiology of the most severely addicted individuals. While addiction neuroscience may be an important area of investigation, it has led NIDA to overemphasize the brain and de-emphasize other important factors influencing drug use, such as poverty, racism, and the social environment (see for example NIDA's [most recent strategic plan](#)). In addition, the chronic relapsing brain disease model endorsed by NIDA ignores the fact that most people quit using drugs on their own, and has thus inhibited research into natural or spontaneous recovery.

Some have argued that NIH's extramural funding system, including NIDA, creates another problem: it favors more experienced researchers over younger ones and more conservative projects over more innovative ones. According to an essay by four scientists, including Harold Varmus, MD, Nobel Prize co-recipient and director of the National Cancer Institute, "The system now favors those who can guarantee results rather than those with potentially path-breaking ideas that, by definition, cannot promise success (Alberts et al, 2014)."

Private foundation giving for drug policy research is quite limited. The Robert Wood Johnson Foundation's Substance Abuse Policy Research Program funded some important work but ceased operations in 2009. In fact, drug use (with the exception of tobacco) is no longer listed as one of the topics they fund. Drug-related research may be incorporated into other project areas within RWJF's portfolio, but it no longer has dedicated funding. The Open Society Foundations primarily funds public education and advocacy with modest funding devoted to research. Most OSF research money is for fellowships and little for the evaluations of specific initiatives (with the notable exception of research on drug reform efforts in Uruguay). While other foundations may fund services or interventions, few fund policy level research and analysis. On the criminal justice front, the MacArthur Foundation, Arnold Foundation, Ford Foundation, Pew Charitable Trust, and a number of local foundations have committed significant resources, though this funding is generally not focused on drug policy or research per se. Though not focused on drug policy, the Arnold Foundation's Evidence-based Policy and Innovation program and Data-Driven Decision Making project that is part of the its criminal justice portfolio are notable for their focus on using data and research to drive policy.

As a result of this research funding environment, most advocacy focuses on moderate reforms within criminal justice and public health for which the evidence base is already substantially conclusive, leaving more innovative policy efforts to languish.

Problems With Existing Research

As suggested above, the funding for drug policy research and relative lack thereof have contributed to a number of problems with drug policy research. First, there are methodological and quality issues. Second, the outcomes being studied often overemphasize the negative consequences of drug use on individuals rather than taking a broader view that incorporates the harms of our current policies or the potential therapeutic benefits of certain substances. In addition, there is relatively little research on the social environment that may foster or inhibit drug use or on policy and structural interventions to address substance use and related problems. This problem, combined with the siloed nature of drug research, leads to a third problem, the profound lack of “big picture” thinking or analysis.

Methodological Problems & Poor Quality Studies

Research on drug use is overwhelming subject to a selection bias since most samples are drawn from treatment settings. This means that only those who have a significant problem and who have access to treatment are typically studied. Moreover, studies looking at treatment and other interventions often only look at “completers,” excluding those who dropped out from the analysis and falsely inflating the efficacy of the program. Studies based on treatment samples ignore the vast majority of people who are able to stop using drugs on their own or who use drugs in moderation or without a problem. While there have been a few studies on so-called “natural” or “spontaneous” recovery, relatively little is known about this phenomenon even though it characterizes the experiences of up to 80% of people who use drugs (Hart, 2013) and could lend invaluable insight into the conditions and circumstances that foster controlled use of drugs and/or quitting drug use. The focus on the most addicted and disordered individuals also distracts from other important research, such as how prohibition and criminalization can increase the dangers of drugs.

Compared to other fields of study, there are also relatively few randomized controlled trials (RCT). RCT’s are often not practical in treatment or criminal justice settings, but we need more well-designed historical control strategies and “intent-to-treat” analyses. Furthermore, much of the research being done does not meet the standards for high-quality research, and unresolved in the field is what even qualifies as “evidence-based.” For example, Wright and colleagues (2010) found that more than half of the “substance abuse” interventions targeting criminal justice programs that were designated as evidence-based by SAMHSA’s National Registry of Evidence Based Programs and Practices had significant methodological problems, such as sample size or the program lacking an independent evaluator. Another typical problem with drug treatment studies is variability in the length of the evaluation and disagreement on what qualifies as treatment “success.” In general, because the population can be difficult to follow, few studies evaluate people once they leave treatment.

Limited Outcomes Studied

Beyond the problem of not agreeing on what qualifies as success are biases in which outcomes get studied. Drug research focuses overwhelmingly on abstinence, rather than on public health and safety measures. For example, too often research on diversion or alternative to incarceration programs for drug offenders look at abstinence from drugs as an outcomes instead of metrics, such as reductions in drug use, health

improvements, and family reunification. This reflects a broader problem within drug policy where harm reduction interventions are marginalized in favor of abstinence-only approaches. While there is an increasing body of sound research on harm reduction interventions, there are notable gaps, especially in the U.S. context (described more fully below).

Lack of “Big Picture” Thinking

Another significant problem is the lack of “big picture” analyses that cross disciplines, can bring together the research from different fields and jurisdictions, and generate new ways of thinking. For example, there are few studies that provide a comparative analysis of different policy approaches from around the world. This lack of broad conceptual thinking means that policymakers are typically only considering a narrow range of interventions, such as expanding drug treatment or particular criminal justice interventions, rather than asking bigger questions, such as “how can we reduce incarceration and improve public health without compromising public safety?”

A related problem is the dearth of organizations and researchers who are translating research into forms that are useful to policymakers. This problem goes beyond the fact that few policymakers will ever read a peer-reviewed journal article. Drug researchers, like a lot of academic researchers, generally do a poor job of spelling out the policy implications of their findings. When they do, their recommendations are often not grounded in the reality of how policy is actually made. In addition, research is typically so narrowly focused that solid policy recommendations require a broader analysis of multiple studies.

Areas of Need

Big Picture and Comparative Analyses

As suggested above, one area of great need is for research and analysis that can synthesize work across disciplines, focus on the big picture, and provide guidance on the directions in which drug policy should move. We need more comprehensive studies and meta-analyses that illuminate the strengths and limitations of novel or promising approaches and that can provide a holistic view of drug reform controls and levers. For example, how might efforts to reduce criminalization work hand in hand with harm reduction or treatment interventions? We need conceptual works that can look objectively at a range of different approaches and evaluate them against and in relation to one another. Rydell, Caulkins and Everingham (1996) did some analyses looking at the role of treatment, interdiction, source-country control, and local law enforcement in managing cocaine, but these kinds of studies are rare. Also rare are studies that examine how treatment and harm reduction can improve public safety outcomes and cost savings.

Similarly, we need more research that compares different approaches to policy change. Take, for example, the approach to marijuana legalization pursued in Colorado versus the approach taken in Washington. What are the strengths and limitations of the innovative approaches to drug decriminalization being taken by Portugal, Switzerland, the Czech Republic, Ireland, and the Netherlands? We also need more research that examines the contexts that are favorable to drug policy reform. What were the circumstances that allowed LEAD to flourish in Seattle and can those be replicated elsewhere? What unique features characterize Portugal and how did these contribute to the success of its drug decriminalization efforts? Comparative analyses allow us to examine a diversity of models and draw out lessons to be learned from each so that they can be applied in other contexts.

Implications of a Changing Reform Landscape

We are in an era of exciting change in drug policy. We have seen the legalization of medical marijuana in half the states for medical use and in four states more broadly with up to ten states considering ballot initiatives on legalization. Criminal justice reform (some meaningful and some not) is taking place in localities around the country. And harm reduction services are appearing in even the most unlikely places, such as the creation of syringe exchange programs in Kentucky and Indiana. We need research to examine exactly how such reforms affect incarceration rates, drug use, public safety, and public health. What are the unintended consequences of such reforms and how are the reforms shaping changes in attitudes and beliefs? What are the international impacts of reforms in the U.S.? What new possibilities are being opened for reforms domestically and abroad because of the changes taking place?

Benefits and Harms of Drugs

When a new drug emerges, historically the policy response has been to criminalize it without a careful evaluation of its actual risks and harms. Synthetic cannabinoids, known as K2 and Spice, are only the latest example of policy preceding research. We have seen an explosion in concern about the use of these substances. Even among our progressive political allies, the impulse in the face of any new drug scare is to move immediately to criminalization in the absence of any evidence that such responses will improve public safety or public health.

In New York City, when we tried to stop policymakers from knee jerk responses of the type that led us into problems with mass incarceration, we largely failed in part because of political imperatives but in part because we could not offer research on the actual harms of the drugs, details on patterns of use, or the effectiveness of policy alternatives. Cracking down on these substances may reduce use, but it may also backfire leading to the emergence of new, more dangerous substances or driving people to use other drugs, such as heroin and cocaine.

What we need is pharmacological, ethnographic, and epidemiological research to answer questions about the dangerousness or relative safety of different drugs; who is using them, how and why; the markets for these drugs; and creative policy responses for controlling their use and reducing their harms. We also need research that factors in incarceration and increased criminalization in our assessments of harm. Studies that do so could powerfully inform policymakers as to the choices that are in the best interest of public safety and health and potentially break the cycle of reactive policies that lead only to increased criminalization. When we proposed such studies to NIDA, they tell us they cannot act quickly. These kinds of analyses – both of new drugs and of our policy response to them – need to happen rapidly on a timeframe government funding mechanisms are ill suited to meet.

Harm Reduction and the Application of International Models

As noted above, harm reduction research is only a small part of NIDA's funding, but there is an excellent research base both from the U.S. and internationally supporting particular harm reduction interventions. Research on the effectiveness of syringe exchanges is global, while that on supervised injection facilities (SIFs) and heroin assisted treatment (HAT) is extensive but outside of the U.S. context. Given the effectiveness of HAT and SIFs in diverse setting around the world, there is excellent reason to believe that they would be highly effective in the U.S., although U.S. models need to account for the absence of a national healthcare system and robust social safety net. Despite its promise, researchers in the U.S. face some obstacles in conducting such research. First, many of them feel that the interesting questions have been asked and answered about SIFs. Second, most understand that funding for such research is unlikely to come from

the existing sources. This is the perfect place for a private funder to step in and provide the funding and the freedom that researchers will want to explore new questions (e.g., dosing, comparative effectiveness among different populations).

HAT is another opportunity ripe for a private funder. HAT trials first emerged in Europe out of concerns about persistence heroin use and associated public disorder. In fact, urban police chiefs became key champions of HAT because they understood (and research supports) that HAT can lead to a decrease in crime and arrests – not mention reductions in illicit drug use, disease, and overdose as well as improvements in health, wellbeing, social reintegration and treatment retention (see for example, Strang et al, 2015). Research has also shown that HAT is more cost effective than methadone (Nosyk et al, 2012; Byford et al, 2013). These benefits are little known in the U.S., and the gap between the existing research base and policy could be addressed in part by translational research and products that make existing research more accessible to policymakers and the public (e.g., fact sheets, meetings with key researchers, public forums). And despite strong evidence of its efficacy from European research, HATs need to be evaluated in the U.S. to demonstrate if and how they can work in the U.S. context.

Now is particularly good time for such harm reduction-oriented research. The opioid crisis has created a new receptivity to harm reduction interventions as policymakers struggle with how to stem the tide of fatal opioid overdoses. The impetus for HAT and SIFs in Europe grew out of a concern for rising HIV rates but also for public safety and a sense that public disorder was increasing, related in part to people injecting drugs in public places. Many cities in the U.S., including New York, are facing similar issues as the homeless population increases and our elected leaders struggle with what to do about public drug use. There is growing support for SIFs, in particular, from the public health community, elected leaders, and community members both internationally and in the U.S. Several jurisdictions in Canada are moving forward on opening SIFs, Ireland has announced it will open a SIF, the *Boston Globe* editorial board recently wrote in favor of SIFs, and in New York City more than 650 people turned out for a public forum on SIFs. One avenue for opening a SIF is through a carefully evaluated pilot program, but funding for such a program is needed.

In addition to these well-known harm reduction interventions, more research is needed to develop and evaluate other harm reduction programs, including those aimed at non-opioids, such as stimulants and nightlife drugs. For example, what is the efficacy of interventions for cocaine users, such as education on how to use the drug more safely? How feasible and effective are interventions in nightlife venues and festivals, such as drug checking and education? How much impact could reality-based harm reduction education (e.g., explaining dosing, how to recognize what drug you are taking, or what drugs not to mix) have on overdose deaths? Finally, there is little research on bringing together harm reduction and criminal justice interventions. We need research that looks at the effectiveness and feasibility of model programs (beyond LEAD) that, for instance, divert individuals to harm reduction services instead of abstinence-only treatment.

Treatment and Prevention

As noted above, much of the existing research on treatment and prevention of drug use is methodologically flawed and of poor quality. What is needed are rigorous high quality studies that avoid the problems inherent with much of the current research. We must start with a concerted effort to draw attention to the existing methodological problems and potential solutions, and to help researchers, funders, and policymakers broaden the scope of what constitutes a meaningful outcome. How can we get people to move beyond abstinence only as an outcome for a treatment intervention to look at elements, such as social costs, quality of life, and public safety? How can we get researchers to devise study designs in ways that treat addiction as a chronic

relapsing condition requiring evaluation at multiple time points? Similarly, the quality of research on drug prevention programs needs to be strengthened as does the breadth of prevention interventions that are studied. While abstinence-only programs have been well studied (and found to have an equivocal efficacy at best: see for example, Ennett et al, 1994), reality-based prevention programs, such as the Drug Policy Alliance's *Safety First*, need to be evaluated. In addition, there is little research on the effectiveness of harm reduction education among youth.

There are a number of additional areas that have not received as much attention as they should. There are too few studies on how people use drugs in a controlled way or stop using drugs without any intervention. More studies of “natural” or “spontaneous” recovery could help us better understand the circumstances, support, and strategies one needs to reduce or stop problematic drug use. Better understanding of the estimated 80% of people who use drugs without problems could also help us understand techniques for controlled drug use and harm reduction. Millions have been invested in studying treatments (including medications) for stimulants without success. But relatively little has been invested in innovative harm reduction interventions for stimulants. The Affordable Care Act (ACA) provides new opportunities for funding harm reduction and drug treatment services but relatively little is known about how different jurisdictions and insurers are taking advantage of these opportunities. Finally, while the effectiveness of medication assisted therapies have been well documented, less is known about the barriers people face in accessing such treatment. Studies that examine what prevents people from accessing buprenorphine, methadone, and vivitrol could guide policies to improve the use of these effective strategies.

Regulation

One area in much need of attention are alternatives to criminalization of drug use and drug sales. What other systems of control or regulation are possible? Can we model their effects? Such discussions are sorely needed for emerging psychoactive substances as well as for more creatively and effectively addressing the current opioid crisis, which spans both the legal pharmaceutical market and the illicit market.

Recommendations

The Drug Policy Alliance suggests supporting the following kinds of initiatives and research:

1. Think tanks and efforts like DPA's Office of Academic Engagement that are working to synthesize drug research across disciplines, produce big picture thinking about evidence-based drug policy reform, and translate research into forms accessible to policymakers, media, and the general public.
2. Projects that examine how harm reduction and treatment approaches might enhance criminal justice reforms in ways that improve public safety, drive down costs, and reduce incarceration.
3. Research that looks at the impact of policy-level interventions and the social environment on drug use, incarceration, public safety, and public health.
4. Projects that allow for the comparative analysis of a range of different interventions, their advantages, and disadvantages and help policymakers understand the benefits and drawbacks of different approaches to drug policy reform.

5. Projects that focus on how new policy reforms work or do not work, any unintended consequences, and their impact domestically and abroad.
6. Studies that assess the harms and benefits of emerging substances, such as synthetic cannabinoids, as well as efforts to regulate these substances.
7. Studies on the feasibility and efficacy of harm reduction interventions, including HAT and SIFs in the U.S., interventions aimed at non-opioids, education programs, drug checking programs, harm reduction programs at festivals and nightlife venues, and barriers to accessing MAT.
8. Projects that illuminate and help resolve the methodological and quality problems inherent in much drug research.
9. High quality studies of treatment, harm reduction, and prevention interventions that assess a broad array of public health and safety outcomes.
10. Research focused on natural or spontaneous recovery and unproblematic drug use.
11. Studies on if and how the Affordable Care Act is being used to support harm reduction and drug treatment.
12. Studies on the impact and unintended consequences of increased supervision and surveillance in the criminal justice system.
13. Analyses of alternatives to criminalization in order to control or regulate drug use and improve public safety outcomes.

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