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SETTING GOALS FOR DRUG POLICY: HARM REDUCTION OR USE REDUCTION?

Abstract

Historically, United States drug policy has focused on use reduction; harm reduction is a prominent alternative. This paper aims to provoke and inform more debate about the relative merits of these two. Since harm is not necessarily proportional to use, use reduction and harm reduction differ. Both terms are somewhat ambiguous; precisely defining them clarifies thinking and policy implications. Measures associated with use reduction goals are poor; those associated with harm reduction are even worse. National goals influence the many decentralized individuals who collectively make drug policy; clearly enunciating goals makes some policy choices transparent and goals serve a variety of purposes besides guiding programmatic decisions. We recommend that the overall objective be to minimize the total harm associated with drug production, distribution, consumption and control. Reducing use should be seen as a principal means of attaining that end.

Introduction

Correct, well-defined and generally understood goals can help individuals and organizations perform effectively. In some domains (e.g. prison administration), even if goals are not well articulated, responding to situational imperatives seems to work reasonably well (Wilson, 1989). Such "muddling through" is unlikely to be effective for making policy toward illicit drugs. Drug policy making is fragmented across dozens of federal agencies, hundreds of state offices and thousands, if not tens of thousands, of divisions of local government, community groups, schools and private companies. Without some common vision of purpose, many of these organizations will work ineffectively, if not at cross-purposes.

The US government has developed a set of simple and transparent goals for drug policy. Even though these goals have real policy consequences, there has been little discussion of their merits or how they compare to alternatives. Debate has focused more on policies (e.g. concerning needle exchange or legalization) than on goals, yet goals promote clarity in debate. This paper compares the two most prominent alternatives: use reduction (current US policy) and harm reduction.

Brief history of drug policy goals in the US

A commonly articulated goal has been a "Drug Free America". Few dispute that this would be a desirable end-state. Unfortunately it is no more feasible than a "Crime Free America" or a "Schizophrenia Free America". Use of psychoactive substances by some fraction of the population is nearly universal, spanning centuries and cultures.

Infeasible goals are not uncommon. Environmentalists call for "zero-discharge", consumers' groups for "zero cancer risk", and local activists for absolute guarantees that a new facility will pose no danger. Japanese and American manufacturers may have found the relentless pursuit of zero-defect production to be good business practice, but in government fanatical pursuit of noble causes frequently carries a high opportunity cost. Prison cells emptied to make room for drug offenders could have housed violent felons. Cocaine treatment counselors could have been treating alcoholics, and school-based prevention programs take time away from traditional academic subjects. Unattainable goals also offer little assistance to decision makers. How should one choose from among three competing proposals, none of which has any hope of meeting the goal?

More practical goals are needed. The 1988 Anti-Drug Omnibus Control Act demanded a strategy that included "long range goals for reducing drug abuse in the United States" and "short-term measurable objectives". The first (1989) National Strategy made a clear statement as to goals: "The highest priority of our drug policy must be a stubborn determination to reduce the overall level of drug use nationwide---experimental first use, `casual' use, regular use and addiction alike" (ONDCP, 1989, p. 8). This emphasis on use reduction was reflected in the measurable objectives enunciated in the first Strategy and confirmed by its three successors. The objectives were to reduce by specified fractions (usually 10% in 2 years and 50% in 10 years):

(1) Past month drug use measured by the National Household Survey on Drug Abuse (NHSDA).

(2) Adolescent past month drug use as measured by Monitoring the Future (MTF).

(3) NHSDA-measured last year cocaine use.

(4) NHSDA-measured last week cocaine use.

(5) NHSDA-measured last month cocaine use among those aged 12-17.

(6) Drug Abuse Warning Network (DAWN) mentions of cocaine, marijuana, heroin and dangerous drugs.

(7) Amount of cocaine, marijuana, heroin and dangerous drugs entering the US.

(7) NHSDA-measured availability of cocaine, marijuana, heroin and dangerous drugs.

(8) Domestic marijuana production.

(9) MTF-measured approval of drug use.

The Clinton Administration's Strategies have reaffirmed that there was "one overarching goal--- the reduction of drug use" (ONDCP, 1994, p. 61), although they have dropped quantitative measures, so the goals again became rhetorical.

These strategies could have established other goals: minimizing drugs' threat to civil liberties, increasing drug control efforts by a certain amount, or developing and disseminating more accurate information about drugs to allow individuals to make better informed choices. The alternative goal discussed here is to reduce the harm done by the production, distribution and consumption of drugs and by the drug policies and programs themselves. For example, although the British government's first strategy (Newton et al., 1994) eschews the word "goals", it substitutes a "Statement of Purpose" that articulates three central goals, to:

increase the safety of communities from drug related crime;

reduce the acceptability and availability of drugs to young people; and

reduce the health risks and other damage related to drug misuse (p. vii).

A literalist might object that this is not pure harm reaction, but note the lack of emphasis on prevalence of drug use. The first and third goals are clearly specified in terms of harms; the second is more instrumental, aimed at reducing prevalence. The document's specific objectives retain this harm orientation.

Use and harm reduction goals differ

Inasmuch as this paper contrasts use reduction (Robert MacCoun's phrase for the current US approach) and harm reduction, it is important to ask whether these goals truly differ. After all, zero use will generate zero harm; perhaps no reduction in harm can be attained without a reduction in use. This turns out not to be the case, however, because not all use is equally harmful.

Consider a pregnant, recovering addict who visits a shooting gallery for the first time since leaving treatment and injects heroin with an HIV-contaminated needle. Contrast that with an employed, emotionally stable adult with no dependents who uses marijuana in the privacy of his or her own home on a Friday night to relax after a week of work. Both individuals used a Schedule I prohibited drug, but by most measures the first use session involves greater harm to the user, friends and family of the user, and the rest of society.

These examples are extreme, but the principle that trends in harm and use can differ is supported by empirical evidence. A classic example is the contrasting trends observed in the National Household Survey on Drug Abuse (NHSDA) and the Drug Abuse Warning Network (DAWN). DAWN emergency room mentions of cocaine increased dramatically even as the NHSDA showed striking declines in the number of people reporting use of cocaine (Fig. 1).

Reconciling these trends is straightforward. Seeking emergency medical attention is a rare event, even for cocaine users. In the 1991 NHSDA fewer than 4% of past-year cocaine users reported seeking emergency room help for their drug use in the previous year. The number of people using cocaine in a way that puts them at risk for needing emergency medical attention can increase even as the (much larger) number of less seriously involved cocaine users declines.

What is important, though, is not the explanation but the fact that trends in a measure of cocaine use can differ dramatically from trends in a measure of harm. Reducing use need not imply harm will go down or vice versa.

This reflects the observation that much of what is thought of as the "drug problem" is only indirectly related to use. For example, most market violence and political instability in source countries is not related directly to use; indeed, one can provide sensible scenarios in which interdiction programs which reduce drug use in the United States actually increase, at least in the short term, harms in source countries (Henry, 1988). Similarly, adverse impacts on quality of life can be as much a function of public sales and public use as they are of use in and of itself (e.g. Kerr, 1987).

Defining use and harm reduction

Types of use reduction

There are three concepts of use that could be targeted for reduction: (1) prevalence; the number of people who consume a drug within a certain period of time or who define themselves as drug users, (2) quantity; e.g. the weight consumed, number of use sessions or number of hours of intoxication; (3) expenditures; the amount users spend on drugs and, hence, the amount drug sellers receive.

Choice among these three has substantial programmatic consequences. Treating heavy users is a low priority for the prevalence goal since a distressingly small fraction of treated heavy users become abstinent (Anglin & Hser, 1990). If all users are considered equal, the incentive is to focus on individuals whose behavior is easiest to change, so-called light or recreational users.

In contrast, since heavy or compulsive users consume so much per capita, the quantity objective makes treating heavy users probably the most cost-effective of all programs. For cocaine, it appears that just the reduction in consumption obtained during treatment of heavy users---even if every user resumes full consumption after leaving treatment---is enough to make treatment more cost-effective than source country control, interdiction or domestic enforcement at reducing consumption (Rydell & Everingham, 1994).

An expenditure goal provides little incentive for price-raising enforcement programs. Higher prices reduce consumption and prevalence, but the impact on spending is less favorable because spending per unit increases. Indeed, if demand is relatively inelastic, then driving up prices would actually increase, not decrease, total spending. Enforcement programs that raise nonmonetary costs of drug use, e.g. by increasing user search time (Moore, 1973), are positively regarded in all three regimes.

Types of harm reduction

Similarly, there are several conceptually distinct ways of defining the total harm which is to be reduced. Should the benefits of drug use be included as negative harms? Should harms that adults impose on themselves be included? Some argue the government has neither the

responsibility nor the right to protect people from themselves (Friedman & Szasz, 1992). Others argue that "drug consumers may be less capable than other consumers of protecting their own interests" (Kleiman, 1992). Similar arguments can be made and different conclusions reached for people presumptively less capable of looking after their own interests, such as adolescents, those with mental health problems and (possibly) people who are already addicted.

Confusion over which harms to count arises in part from uncertainty over who are the legitimate stakeholders. In particular, do criminals have a stake in the making of policies pertaining to the laws they are breaking? On one hand, most drug-law violators are US citizens and, conversely, many citizens have broken some law (Elliott, Huizinga & Menard, 1989). On the other hand, once convicted, criminals' rights are greatly curtailed, most notably by denying their freedom and, in some states, by forfeiting their right to vote.

Beliefs about the standing of drug-law offenders help determine which form of harm reduction is most appealing. At one extreme, a strict social utilitarian would count the benefits of drug use as well as the costs. Such a person might consider much casual drug use to be good, not bad, and the tremendous reductions in casual use since 1980 as a failure, not progress.

Most people would exclude the benefits of drug use, but deciding whether to include harms people impose on themselves is also consequential. Enforcement makes users worse off directly by imposing sanctions and indirectly by raising prices, reducing availability and increasing variability in potency. In contrast, treatment programs help users break the cycle of addiction and avoid some of the harshest consequences of use. Hence, one is more likely to favor treatment over enforcement if users are seen as legitimate stakeholders.

Policy implications

Policy implications flow directly from how one defines use and harm reduction (Table 1). Use reduction generally leads to more hawkish policies, but not always.

Formulating measurable objectives for use and harm reduction

The full utility of goals cannot be realized until they are associated with tangible measures, which allow one to assess a situation, monitor progress and evaluate interventions.

Measures of use

Estimating even the most basic measure of use, prevalence, is difficult and expensive. The US spends about $ 12 million/year surveying the household population and $2 million/year surveying high school seniors to learn about their drug use (GAO, 1993). These surveys primarily generate national prevalence figures, but for many programmatic purposes city or community level figures are more relevant (Haaga & Reuter, 1990). Furthermore, the data have significant limitations, most notably that they rely on self-reports of activities which are both widely disapproved of and legally prohibited. Also, only a small fraction of people use illicit drugs, particularly hard drugs, and use is more common among difficult to reach populations such as high school dropouts and the homeless.

There are many other sources of prevalence information (Ebener, Feldman & Fitzgerald, 1993). However, even after combining all such information, prevalence estimates are still highly suspect (Spencer, 1989).

Estimates of the quantity consumed can be made from the demand-side or supply-side. Demand-side estimates are based on the same sources as prevalence estimates and, hence, inherit all their limitations and more. For instance, although some surveys ask respondents how much they use, people are rather poor at estimating their own consumption (Harrell, 1985) and heterogeneity in consumption makes it hard to determine what level of use is average.

Supply-side estimates subtract the quantity seized from estimates of total production (based, e.g. on acreage under cultivation) and assume the remainder is consumed. This procedure worked reasonably well for US cocaine consumption in the early 1980s when the United States consumed most of the world's cocaine. It works less well for current cocaine consumption and is virtually useless for heroin since US heroin consumption only accounts for about 7% of the world heroin export market (Childress, 1994).

The basic method for estimating spending on illicit drugs is to multiply estimates of the quantity consumed by price. Hence, spending estimates cannot be any better than estimates of consumption and finding the average price paid is non-trivial (Caulking, 1994). Thus, high quality, transparent, reliable measures are not available for any of the use reduction goals.

Measures of harm

Difficult as it is to find suitable measures for use reduction, it is much harder to find measures for harm reduction. Measures of each form of harm are poor. For example, DAWN is often looked to as a source of information about drug-related morbidity, but it is poorly suited for this task (Caulking, Ebener & McCaffrey, 1995). Only limited data are available on the share of property crime and violence that is "drug-related" (Bureau of Justice Statistics, 1991). The large literature on domestic violence is rather weak quantitatively and methodologically, making estimates of drug-related domestic violence tenuous (Weis, 1989). It is difficult even to imagine calculating aggressive street enforcement's toll on civil liberties or the social cost flagrant dealing imposes on neighborhoods.

Even if perfect data existed on individual harms, there is no way to aggregate them. With what common unit can one denominate both battered children and burglaries? It is simply not possible to report a scalar, aggregate measure of drug-related harm.

The lack of definitive measures for either goal has an ironic consequence. Even if one's goal is to reduce use, one might still monitor measures that are more closely related to harm because they indirectly convey information about use. For example, one of the 1989 Strategy's measurable objectives was to reduce the number of DAWN emergency room mentions. Conversely, even if one's goal is to reduce harm, one might be forced to rely on measures of use. For example, estimates of the number of female users of child-bearing age might be used to develop proxies for harm to unborn fetuses.

Choosing between use and harm reduction

Since use reduction and harm reduction are clearly different goals, it is natural to ask which is better? Keeney (1992) advises that goals be selected based on one's ultimate values. Following that argument, harm reduction makes more sense for people who do not care about drug use per se, but care about use because it contributes to health problems, poverty, spread of infectious diseases, property crime, violence, reduced productivity, etc.

Others view drug use itself as "bad". They view as bad even a hypothetical situation in which an adult user could freely choose to use a psychoactive that has absolutely zero risk of damaging self or others, directly or indirectly, in the short- or long-term. For such people, use reduction may be the ultimate goal.

Besides relation to ultimate values, other relevant criteria include the extent to which goals are: (1) objectively defensible, (2) integrative, (3) politically feasible, (4) inspirational and (5) relevant to policy decisions.

Objectively defensible. Striving to reduce harm is closely related to maximizing societal welfare, which is one responsibility of government, so harm reduction has intrinsic appeal. Use reduction goals are more problematic because it is not clear how to decide which drug's use is inherently wrong and to justify that decision. Alcohol can be just as intoxicating and tobacco just as addictive as some of the currently prohibited drugs but, arguably, we do not make reducing alcohol use a national goal. If alcohol and tobacco should be included as drugs whose use is inherently wrong, should one also include caffeine? Xanthines in chocolate? It is difficult to divine a simple rule for judging which substances are inherently bad that neither condemns benign substances nor condones dangerous ones, and there is ample opportunity for cultural prejudice to color those judgements.

Integrative. Ideally national goals should unite people in a common struggle. Goals which ally the government with one group against another are rarely productive in the long term, particularly when they divide the populace along racial or religious lines. The Cultural Revolution in China is an extreme example.

Use reduction goals tend to be divisive. They make it easy to think about drug offenders themselves---not their actions---as the problem, perhaps even as the "enemy" in a "War on Drugs". Such labels can exaggerate and solidify the breach between drug offenders and the rest of society. In theory, harm reduction goals are more pragmatic, less judgemental and, hence, more conducive to reintegrating offenders into mainstream society. Pragmatically harm reduction goals would also be divisive, for political reasons.

Politically feasible. There is little sense in promulgating objectives that will be blocked by another agency or level of government. For much of the past 15 years it has been politically unwise to appear "soft on drugs". Harm reduction runs the risk of appearing "soft" when it strives to reduce the harms drug offenders impose on themselves and each other, as well as the harms they impose on the rest of society. Of course, there is nothing intrinsically "soft" about harm

reduction; some might argue that extending prohibition to tobacco would reduce harm. Nevertheless, use reduction goals are less vulnerable to such criticisms.

Inspirational. Goals can motivate. President Kennedy's announcement that the United States would put an astronaut on the moon by the end of the decade galvanized the nation. People invested time and energy in learning about space and lent their sympathies even though they were not directly under the control of any presidential mandate. Not all goals motivate, as attested by the fraction of New Year's resolutions which remain unfulfilled. National goals that are foggy, bureaucratic or overly technical can squander motivational potential.

Use reduction goals have intrinsic appeal. Many will respond to calls to "cut drug use by our youth!" However, harm reduction goals, which are defined in terms of human suffering not abstract counts, can be even more powerful: "Protect our children from drug market violence!" Thus both use and harm reduction goals have greater potential to inspire than do process-orientated goals, such as "spend more on drug enforcement".

Relevant to policy decisions. Goals should be chosen such that the responsible individuals and agencies can affect the extent to which the goals are attained. No one would suggest giving the National Weather Service the goal of increasing the number of sunny days by 20%, yet only slightly more plausible goals are common. Politicians pledge to reduce high school drop out rates, yet in a democratic society, individuals and families make decisions that are largely beyond the control of the government let alone any single official.

Setting drug policy goals is similar to setting educational targets in this sense. It is easy for the government to outlaw consensual crime, but hard to prevent it. Drug use is characterized by long-term cycles of greater and lesser use (Musto, 1987). Government interventions certainly affect the quality of these cycles (e.g. whether use is severely punished or grudgingly tolerated) and they presumably have some impact on their magnitude and length, but the larger trends are a function of demand. Demand is the summation of the tastes and preferences of hundreds of millions of potential consumers, not a policy variable which the government can easily control.

Both use reduction and harm reduction are inferior to process-orientated goals in this respect. For example, the government could be held accountable for the extent to which it achieved a goal such as providing treatment on demand to all users. This is not an endorsement of process goals which have other, obvious limitations. The comparison illustrates, however, that neither use nor harm reduction goals are particularly good "score cards" with which one can evaluate the government's performance; too many factors outside the government's control also affect use and harm.

Coda

Use reduction and harm reduction each have strengths and limitations. Our goals in writing this paper are (1) to prompt more debate about the choice of drug policy goals and (2) to provide the reader with insight and information that inform his or her own opinion. Having (hopefully) achieved some degree of success in those two respects, we will close by offering our own opinions.

Our recommendation is that the overall objective be to minimize the harm associated with the production, distribution, consumption and control of illicit substances. Reducing use should be seen as a principal means of attaining that end. However, although reducing use is a principal way of reducing harm, it is neither the only way nor a foolproof way. Some programs that have a negligible effect on use may reduce drug-related harm. For example, encouraging injection drug users to avoid unsafe sexual practices might reduce the spread of HIV. Similarly, some programs that reduce use may actually increase harm, e.g. prosecuting pregnant users for distributing drugs through their umbilical cord may discourage those who use anyhow from seeking prenatal care.

If explicitly articulating harm reduction goals were deemed politically infeasible, then expressing use reduction goals in terms of the quantity consumed and/or amount spent on drugs, rather than prevalence, would be a "back door" way of making goals more reflective of the harms drugs impose.

Revising national goals in this manner could, if pursued, lead to substantial changes in policy. It is our belief (see Reuter & Caulkins, 1995) that augmenting use reduction with explicit harm reduction goals and admitting the possibility that one might at times be willing to accept higher use if it yields substantially less harmful use, would encourage wiser policies.

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Table 1. Programmatic consequences of pursuing various goals

Goal	Some key policy implications
Use reduction	
Reduce number of users	Focus on light users, prevention, and "soft drugs"
Reduce quantity consumed	Treat heavy users and increase enforcement that raises prices
Reduce money spent by user	Treat heavy users of expensive drugs and (perhaps) cut high-level enforcement so prices fall
Harm reduction	
Reduce net total harm (i.e. total harm minus benefits of use to users)	Ignore (perhaps promote?) casual generates benefits as well as costs
Reduce total harm	Favor treatment over enforcement
Reduce harm to non-users and ignore harm to users	Focus on users who are prone to violence/infectious diseases and finance drug use through property crime, and/or whose use affects intimates
Reduce harm to non-users and count harm to users as a good	Favor enforcement over treatment

Figure 1. Contrasting trends in NHSDA measured 30-day cocaine prevalence and DAWN cocaine mentions (in 10 000s).

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