TESTIMONY

An Assessment of the Scientific Support Underlying the FY2011 Budget Priorities of the Office of National Drug Control Policy

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CT-344

April 2010

Testimony presented before the House Oversight and Government Reform Committee, Subcommittee on Domestic Policy on April 14, 2010

Published 2010 by the RAND Corporation
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Before the Committee on Oversight and Government Reform
Subcommittee on Domestic Policy
United States House of Representatives

April 14, 2010

Chairman Kucinich, Ranking Member Jordan, and distinguished Members of the Subcommittee, thank you for inviting me here today. My name is Rosalie Pacula and I serve as co-director of the RAND Corporation's Drug Policy Research Center.

I am honored to appear before you to discuss whether the Office of National Drug Control Policy (ONDCP) under the Obama Administration is addressing reasonable priorities and objectives with its treatment and prevention funds, as reflected in the FY2011 budget request. As the 2010 National Drug Control Strategy was not yet released at the time in which I had to prepare my written comments, I cannot speak to the balance and evidence base supporting the overall strategy. I will instead speak to the scientific evidence regarding particular broad initiatives clearly reflected through budget items and additional supporting documents available from ONDCP and the various agencies contributing to these budget amounts. I will draw comparisons with spending as reflected in the Bush Administration's FY2009 budget instead of the budget for last year (FY2010), as the Obama Administration's incoming appointees did not have sufficient time for its leadership to articulate a clear vision across all agencies before the previous FY2010 budget had to be submitted.

I should also point out that I am trained as an economist, and therefore have a particular way of thinking about drug policy in terms of its effect on aggregate and interrelated markets which are influenced by both supply and demand factors. I am also concerned, as an economist, about the efficient use of our limited taxpayer dollars, and therefore think not just about the effectiveness of various approaches but the cost-effectiveness of them. My testimony today reflects this

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perspective, but it represents only my opinion and not that of the RAND Corporation or the National Bureau of Economic Research, both of which I am affiliated.

Compared to the last formal drug budget prepared by the Bush administration (FY2009), there are a number of very encouraging signs in the FY2011 National Drug Control Budget that suggest to me that the current administration is giving careful consideration to the science base regarding effective drug policy in particular areas. First and foremost, treatment dollars have increased from $3.477 billion (FY2009, Bush Administration) to $3.883 billion (FY2011, proposed by the Obama Administration), representing a 12% increase overall and bringing our national expenditure on treatment to a level that is now on par, at least according to current accounting methods used by ONDCP, with spending on domestic law enforcement (requested amount for domestic law enforcement in FY2011 is $3.918 billion). Furthermore, there are increases in targeted treatment dollars for specific populations that are known to be heavy users and place a particularly large burden on society when left untreated, including the homeless, criminal offenders, and the veteran population. While total prevention dollars have decreased from $1.815 billion in FY2009 to $1.718 billion in FY2011, those dollars that have been allocated on prevention are more focused on initiatives that are supported by science as generally effective. Spending on some programs for which there was little or no scientific support, in particular student drug testing as a form of prevention, has been removed from the prevention budget. There remains a focus, in absolute dollar terms, on supply reduction. However, since FY2009, there has been a 3.4% increase overall in spending on demand reduction and a much smaller 0.92% increase in supply reduction strategies, suggesting that the majority, albeit not all, of the additional dollars being requested are going toward reducing demand, not supply. Finally, resources are being dedicated to improve data monitoring systems of drug markets and problem users, which are vitally important for understanding how to effectively and cost-effectively intervene in these markets. These are all very encouraging signs that the current administration is making research and science based decisions in the formulation of its strategy.

Today I will speak briefly to some of the areas where I believe there remain significant shortcomings and I'm sure my fellow panelists will identify other areas of concern. But it is very difficult to tell given the relatively short time period in which the Obama administration has been in place whether these shortcomings remain because of a purposeful decision to overlook these issues or the more realistic possibility that it takes time to get all the relevant government agencies on board with a new vision. Moreover, these shortcomings should not be viewed without consideration for the rather dramatic and significant changes made on the demand reduction side, for which ONDCP should be applauded. Clearly important steps are being taken and I, for one,

feel it is important to recognize the significance these steps have in terms of drawing on science to improve general policy.

(1) Treatment Strategy

In terms of the strategy toward treatment, I believe that the proposed budget reflects strong support for evidence-based approaches. Rather than just allocate all the extra money into general Substance Abuse Prevention and Treatment (SAPT) block grant mechanisms, in which ONDCP would have limited control on how the money got used, it instead specified how the gains in treatment funding will be spent. First, increases in treatment funds are targeted to specific populations that research has demonstrated to be in particular need and generate high societal costs when left untreated (Zarkin et al., 2005; McCollister et al., 2003; Marlowe, 2003; Belenko, 2001). The current budget proposes to expand treatment to drug-involved offenders (through drug courts and alternative to prison initiatives), drug-involved prisoners (through ex-offender and re-entry court initiatives), native populations (through Indian Health Services), the veteran population (through the Veterans Health Administration), and the homeless population (through funds dedicated to after-care and recovery support services for the criminally involved the VA system).

Second, in addition to expanding treatment for these populations, the plan, as reflected by the budget, provides thoughtful consideration for how to improve the effectiveness of services already being provided to these key populations. Specifically, the proposed budget maintains the level of funding for treatment within prison but expands funding for re-entry and ex-offender programs for those leaving prison and re-entering the community. Significant research demonstrates that the continuation of care particularly for this high-risk population is critical for achieving greater treatment success (Inciardi, et al. 1997; Marlowe, 2002; Inciardi, Martin and Butzin, 2004; Taxman, Young and Byrne, 2004).

Third, funds are targeted to a variety of Substance Abuse and Mental Health Services Administration (SAMHSA) initiatives that together should help reduce the barriers for adoption of Screening, Brief Intervention and Referrals to Treatment (SBIRT) programs in primary healthcare systems. While SBIRT programs have been shown to be clinically effective at identifying individuals in need of treatment, providing effective interventions for those at risk, and linking individuals in need to treatment (Babor et al., 2007; Madras et al., 2009; Estee et al 2010), their broad adoption within the health care system has been stymied by a variety of systemic issues, including the refusal by some states to “turn on” these SBIRT billing codes (denying reimbursement of providers willing to do these procedures), providers lack of training in SBIRT

methods and procedures, and a general lack of awareness among providers regarding the ability to get reimbursed for these services. Specific programs within SAMHSA are being initiated to help reduce these systemic barriers to adoption rather than just create more SBIRT programs that face the same general barriers to adoption.

The focused resources on key treatment populations coupled with the expansion of treatment benefits among the privately insured due to Federal Parity legislation passed in November 2008 should have a significant impact not only on access to effective treatment but also to the success of those entering treatment. That being said, it would be valuable for ONDCP to be actively engaged in the development of final regulations regarding the implementation of parity given the considerable expertise the office currently has on effective and evidence-based substance abuse treatment.

(2) Prevention Strategy

Perhaps the biggest change emerging from ONDCP's FY2011 budget request is the consolidation of prevention resources to fund programs that target common risk factors associated with unhealthy and antisocial behaviors among youth rather than drug prevention specifically. While I am confident that some prevention scientists will be upset by this shift of resources, as there is a literature suggesting that specialized programs aimed at reducing particular types of substance use yield statistically larger effects than those that target broader substance use behaviors more generally, the absolute difference in effect sizes between these specialized programs and broader substance abuse programs is relatively small and only rarely persist (Manski, Pepper and Petrie, 2001; Caulkins et al., 2002). More generally, substance abuse prevention programs generate relatively small reductions in initiation and drug use for short periods of time. While these reductions are important, similar reductions have been observed from broader prevention and early intervention programs, such as Head Start, Big Brothers Big Sisters, and the Seattle Social Development Project (McKey 1985; Grossman and Tierney, 1998; Aos et al., 2004; Hawkins et al., 2005). These general programs are able to realize similar reductions in drug initiation and abuse because they address many of the same common risk factors that underlie at-risk adolescent's decision to engage in substance use in the first place, including poor social or institutional bonding, low self-esteem, poor stress management or resistance skills to peer pressure.

So, a shift in funds to support a collaborative program aimed at improving overall student achievement by focusing on students' physical and mental health and wellbeing could be a very effective strategy for extending the limited dollars schools have available for drug prevention

alone, and the benefits can accrue not just in terms of substance use but also other behaviors (like high school completion). However, the real potential of this strategy will depend on the quality of the programs that get funded through this initiative. Not all programs are alike or equally effective, which is why it is important to maintain support for research that can evaluate the relative effectiveness of alternative broad prevention programs at reducing illicit drug use in particular. This is indeed the approach taken by the current Administration, as they recommend continued funding for prevention research. But ONDCP needs to be prepared to take leadership and advocate within the Department of Education for the broad adoption of those scientifically supported programs that are found to be the most effective at reducing substance use and abuse rather than simply supporting a variety of alternative prevention programs that may have highly variable impact on drug use per say.

There remains support in the proposed budget for drug-specific prevention initiatives, which is useful to ensure that the field develops and strengthens. For example, the federally funded Drug Free Communities program, which supports the development of community drug-free coalitions and options for youth, is included, but the budget for this program is reduced by an amount sufficient to help pilot a new initiative entitled “Prevention Prepared Communities” to be administered by SAMHSA. The goal of this new program is to encourage communities to adopt evidence-based prevention interventions targeting youth continuously throughout adolescence rather than developing programs that intervene during only one period of time. Indeed the philosophy of sustained contact and reinforcement of protective messages is one that has been at the heart of several effective drug prevention programs, including Life Skills and Alert Plus (Botvin et al., 1995; Ellickson et al., 2003).

The continuation of funding for the National Youth Anti-Drug Media Campaign at levels similar to the FY2009 budget is something that is difficult to understand in light of the research suggesting that the existing campaign has not been effective (Hornik et al., 2003a, 2003b). While there is scientific evidence demonstrating the effectiveness of media campaigns at reducing tobacco and other drug use when coupled with effective community and school based prevention programs (Pentz, 2003; Flay 2000; Flay et al., 1994, 1997), it is not clear to me that significant modifications and improvements to the National Youth Anti-Drug Media Campaign have been made to improve its success. However, I am not a media expert and suggest that someone who is more qualified than I can better ascertain whether continued funding for a modified program is indeed a useful endeavor.

A significant change in the proposed drug control budget for FY2011, which was also demonstrated in the prevention budget for FY2010, is the elimination of funding for student drug

testing, a program that remains highly contentious in the scientific literature (MacCoun 2007; Goldberg et al., 2007; Levy 2009), and the inclusion of funding to assess drug impaired driving. There is increasing evidence from the Department of Transportation that drugged driving is a real problem and the development of data collection efforts to accurately depict the problem and provide public information and outreach about it could be very effective at preventing significant harms associated with drug use.

(3) Enforcement and Supply-Side Strategies

Many careful studies have demonstrated that very few specific supply-side strategies can be effective at reducing demand for specific drugs and raising their prices, but the effects of these interventions are typically limited in duration. A recent study published by my RAND colleague Nancy Nicosia and her co-author Carlos Dobkin examined the effects of the 1995 U.S. Drug Enforcement Agency's successful effort to shut down two major precursor chemical distributors who were responsible for generating more than 50% of the precursor chemicals for methamphetamine production in the United States (Dobkin and Nicosia, 2009). The study showed using monthly time series data that this supply reduction led to an increase in the price per pure gram of methamphetamine from less than $100 to almost $1,200. The precursor chemical shortage led to a reduction in methamphetamine use among arrestees and a decrease in amphetamine-related hospital admissions. While the study demonstrates how enforcement can influence the market and subsequently consumption, this study also showed just how quickly the market rebounded. Purity-adjusted price fell back to below $100 in less than 12 months, and other measures of use rebounded within 18 months. In earlier studies of the effects of federal regulation of precursor chemicals used in the production of methamphetamine, it was found that a tightening of these regulations also influenced methamphetamine harms associated with use but again the effects were temporary (Cunningham and Liu, 2003 and 2005). Similarly, studies of the 2000-2001 Australian heroin drought demonstrate effects in that the shortage had an immediate effect on purity adjusted prices and consumption in the short run, but purity has been slowly recovering (Weatherburn, et al., 2003; Dietze, 2008). The message I take from these studies is that enforcement can clearly be effective at disrupting markets in the short run, but suppliers are adaptive and respond to these disruptions in innovative ways.

This raises the inevitable question regarding how much law enforcement is desirable for managing the current drug problem. While a body of RAND work evaluating cocaine markets in the United States during the late 1980s and early 1990s offer important insights for thinking about the relative cost-effectiveness of law enforcement strategies for dealing with the cocaine market at a particular point in time (Rydell and Everingham, 1994; Caulkins et al., 1997; Caulkins et al.,

1999), this body of work examined a single drug market at a particular point in time. Moreover, it studied a drug market that operates quite differently than many drug markets operate today, particularly the primary drugs of abuse (i.e. prescription drugs and marijuana). Caulkins and his colleagues have demonstrated using mathematical models that capture the dynamics of drug epidemics that the role of enforcement (and the cost-effectiveness of supply side interventions) depends on the stage of a particular drug epidemic. The gains of conventional enforcement (as well as prevention) are greater when a new drug is emerging in a market and the size of the market is relatively small (Caulkins, 2007; Behrens et al., 2000; Behrens et al., 1999). However, as the size of the market grows and the epidemic becomes mature, treatment becomes more cost-effective at reducing use for that drug. In all of the scenarios, a mix of approaches were used, but the relative gains of greater enforcement or treatment depended on what stage of the epidemic the drug is in. Thus, in order for one to evaluate whether the current mix of spending between supply reduction and demand reduction is appropriate overall, one has to first consider the appropriate mix of strategies for each drug based on the stage of the epidemic for each drug and aggregate up. As drugs of abuse change over time (as might the goal of total users versus harm from use), this suggests an ongoing and dynamic assessment conducted on a drug-by-drug basis, which has not yet been seriously undertaken since RAND's original work as far as I know.

When considering the appropriateness of our current level of funding for interdiction, it is difficult to justify expenditures at the same level as treatment and domestic law enforcement expenditure, which is what the current budget allocation suggests. It is evident from the data that interdiction efforts do not eliminate drugs from entering our markets; they at most may reduce the quantity that makes it to the market by a very small amount and they occasionally force traffickers to incur new costs associated with shifting distribution routes to avoid detection. The negative implication of these shifting trade routes on transit countries is not inconsequential (Reuter et al., 2009).

Nonetheless, the effectiveness of interdiction efforts when considered in light of the impact of these efforts on the domestic price of the drug is not inconsequential. When one examines purity-adjusted prices for cocaine and heroin at different points in the distribution chain, there is suggestive evidence that interdiction efforts in general are effective at raising the price of drugs. A recent examination of drug price data by my colleagues, Beau Kilmer and Peter Reuter, shows that 1 kilogram of 100% pure cocaine has a farm-gate price in Colombia of $800 (Kilmer and Reuter, 2009). When that one kilogram of cocaine reaches the United States, it has a purity of 76% on average and can be sold for $15,000. The difference between the farm-gate purity-adjusted price and import purity-adjusted price is substantially larger than what one would see for any legally traded good, indicating that interdiction efforts are effective at raising drug prices beyond typical transportation and importation costs (Caulkins and Reuter, 1998). The question

one needs to answer is, what is the minimum level of spending on interdiction efforts that is necessary to achieve the desired price effect domestically? This is a question that should be re-assessed in light of our primary drugs of abuse in the United States today and how they arrive to our markets.

I have stated in previous testimony to this subcommittee that I do not believe many of the line items listed in ONDCP's international supply reduction strategy should be considered as part of our nation's drug budget (Pacula, 2008). For example, efforts to fund Colombian Rule of Law, Human Rights and Judicial programs as well as programs to assist the Afghan government's capacity to address the drug trade there are policies we have adopted to promote our general national security, not specifically reduce the quantity of drugs coming into the United States. Thus, including them as part of our national drug policy budget inflates estimates of our supply reduction efforts and places unrealistic expectations on ONDCP to coordinate, guide or direct spending on these activities which it will likely have little or no influence. Alternatively, the continued omission of criminal justice spending associated with the arrest, prosecution and incarceration of drug offenders from ONDCP's national drug policy budget is also misleading as it ignores a significant burden our nation's policy of criminalization imposes and ignores an area of policy that ONDCP can directly influence. These budget inconsistencies have existed for years and are likely based on historical factors that my colleague John Carnevale can address more thoroughly than me. Nonetheless, they remain issues that are important if policy makers rely on budget allocations as a way of assessing the appropriateness of ONDCP strategy for managing the national drug problem.

Before closing I'd like to applaud the current Administration's effort, as reflected in the proposed FY2011 budget, to allocate funding to improve data monitoring systems related to prevention, treatment, and supply in drug markets that are absolutely vital for understanding the current drug problem and evaluating the effectiveness of specific strategies at managing the problem. Without systems like the Arrestee Drug Abuse Monitoring Program, the National Household Survey on Drug Use or Health, and the Treatment Episode Data, we would not have as large a science base to inform our current drug policy as we do today. It is vitally important that we continue to expand and improve existing data systems so that we have systems in place in which we can monitor and evaluate new initiatives or growing epidemics. The proposed budget reflects a realistic attempt to maintain and build the necessary data systems to monitor and evaluate key elements of the strategy proposed by the budget. I applaud and support their efforts and hope that this Subcommittee will do the same. It is equally vital that to remove the many limitations on access to these data that have prevented researchers and analysts from making full use of them to improve drug policy development.

In conclusion, I'd just like to reiterate that while the proposed national drug control budget may be far from perfect, there are clear steps in the area of demand reduction that I think are based on sound science and concerted effort to use limited resources effectively. Treatment dollars have increased and are being focused on specific populations that are likely to benefit the most from our scarce treatment dollars. Prevention dollars, although smaller than in FY2009, appear to be more focused and may be effectively leveraged by resources being allocated from other areas of government to deal with related youth problem behaviors (including tobacco use, antisocial behavior, and drinking). Spending on specific prevention programs for which there was little or no scientific support, in particular student drug testing, has been removed. And resources are being dedicated to improve data monitoring systems of drug markets and problem users, which are vitally important for understanding how to effectively and cost-effectively intervene in these markets. While major changes related to supply reductions strategies are less apparent, there is also far less of a scientific basis to guide how big those changes should be. More attention needs to be given to understanding the relative effectiveness of our current supply strategies in light of the drug situation we are facing today.

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