

# A Return on the Prevention Investment

## Money Spent Upfront Can Save Costs Down the Line

By Bridget Ingebrigtsen

Prevention efforts can be difficult to quantify and, as a result, to justify. What is the value of someone's well-being or the cost savings for preventing drug use? For many preventionists, there is no amount of money that truly captures these accomplishments. But, when it comes to funding and support, there is a definitive need for empirical evidence reflecting the success and effectiveness of prevention programs. Luckily, research on the topic is increasing, and studies are beginning to capture the effectiveness of prevention in concrete dollars and cents.

### The Cost

The National Institute on Drug Abuse (NIDA) estimated in 2002 that drug abuse cost society \$181 billion, \$107 billion of which resulted from drug-related crime.<sup>1</sup> Untreated substance abuse adds significant costs to communities, arising from violent and property crimes, prison expenses, court and criminal costs, emergency room visits, child abuse and neglect, lost child support, foster care and welfare costs, reduced productivity, unemployment and victimization.

Specifically, drug use and drug-related crime increasingly have been blamed for the growing prison population. Studies have begun focusing on the relationship between drug abuse and the propensity for crime. A comprehensive report by NIDA entitled, *Principles of Drug Abuse Treatment for Criminal Justice Populations*<sup>2</sup>, included startling statistics on the connection between drug use and incarceration. The report noted, "In 2003, nearly 6.9 million adults were involved with the criminal justice system, including 4.8 million who were under probation or parole supervision. The Bureau of Justice Statistics estimated that about 70 percent of state and

57 percent of federal prisoners used drugs regularly prior to incarceration. A 2002 survey of jails found that 52 percent of incarcerated women and 44 percent of men met the criteria for alcohol or drug dependence."

Statistics such as these have ignited a call for increased prevention efforts and alternative resolutions for persons suffering from drug abuse, aside from incarceration. Contributing to the growing epidemic is the fact that juvenile offenders also are abusing drugs at an early age and finding themselves entangled in the justice system. The NIDA report further stated, "Juvenile justice systems also report high levels of drug abuse. A survey of juvenile detainees found that about 56 percent of the boys and 40 percent of the girls tested positive for drug use at the time of their arrest."<sup>3</sup>

While the justice system offers drug abuse services and counseling, it can be too late and insufficient at stopping the abuse and curbing the criminal behaviors. The key to prevention is intervening early, before the abuse takes root and the justice system becomes involved.

According to a study from the National Center on Addiction and Substance Abuse at Columbia University, 12.2 percent of state spending in Illinois is the result of substance abuse. This includes the criminal justice system, educational system, health care and mental health services, child and family assistance and public safety.<sup>4</sup>

The cost of drug use and abuse to society is becoming increasingly obvious. The burden placed on tax dollars and public and private programs diverts funds away from education, health care and other quality of life programs.

Prevention programs offer a means to reduce these costs and though such programs require funding, the subsequent return on the investment far outweighs the substantial costs associated with drug use and abuse.

## The Return

The significant savings to society produced by prevention programs tells the true story of their impact, not only on the individuals served, but on society as a whole. A recent *Monitoring the Future* survey<sup>5</sup> found, “During 2006, alcohol and illicit drug use by American teenagers continued a decade-long decline. Yet adolescent abuse of prescription drugs remains relatively high ... Lloyd Johnston, principal investigator for the survey, said that the nation’s drug prevention efforts are paying off – and need to be sustained.”

Prevention programs provide long-term results and are geared toward preventing problems as well as addressing the warning signs. As more research on the impact of such programs is conducted, the benefits of the prevention efforts are becoming quite clear. Prevention programs have proven to provide a significant return on their investment. The Partnerships in Prevention Science Institute at Iowa State University shared its empirical findings in 2005, following 15 years of NIDA-funded experimental research on partnership-based implementation of interventions for youth and families. Dr. Richard Spoth, the institute’s director, led the research effort, and he noted a return on investment of \$9.60 for every dollar spent on prevention.<sup>6</sup> The research, published in the *Journal of Studies on Alcohol*, was funded by NIDA and the National Institute of Mental Health.

Acting NIDA Director Dr. Glen R. Hanson noted in the article that, “This study demonstrates that investing dollars in preventive intervention programs is not only a good public health practice, but it is a good economic practice as well. The personal and public health benefits of preventing teen drinking and adult alcohol abuse are well known. Less well known by the public are the costs of these problems.”

Stopping drug and alcohol abuse through prevention efforts affects many of the costs resulting from the abuse and its related behaviors. As use and abuse declines, spending in such areas as health care, unemployment and court and criminal costs also declines. Not only do the communities directly benefit from the spending reduction as funds can be redirected toward other areas, but many of the socioeconomic problems are positively impacted as well.

According to the NIDA publication, *Preventing Drug Use Among Children and Adolescents*, “Research has shown that preventing drug abuse and other problem behaviors can produce benefits for communities that outweigh the monetary costs ... For every dollar spent, a \$10 benefit was measured as a result of the Guiding Good Choices program.”<sup>7</sup>

Being able to prove through empirical evidence that prevention efforts are indeed effective is crucial to sustaining and increasing programming. Having cost-benefit analyses that reflect the degree to which the monetary benefits and savings outweigh the costs is imperative. Society and legislators need to know that prevention funding is paying off and providing definitive results that directly benefit them.

One area of particular concern for communities and preventionists is drug use and abuse among students. In the study *What We Can – and Cannot – Expect from School-Based Drug Prevention*,<sup>8</sup> researchers examine the effectiveness of school-based drug prevention programs from a social policy perspective. The authors wrote, “The social benefits per participant stemming from reduced drug use (approximately \$840 from tobacco, alcohol, cocaine and marijuana) appear



to exceed the economic costs of running the programs (approximately \$150 per participant); while the benefits associated with reduced cocaine use alone (approximately \$300) exceed the costs, the corresponding figure for marijuana (approximately \$20) is small. Even if prevention reduced the use of other illicit drugs (e.g. heroin) by as much as it reduced use of cocaine, the majority of benefits would still

stem from reductions in use of tobacco and alcohol, which has implications for how school-based drug prevention is funded and whether it is perceived more as a weapon in the war on illicit drugs or as a public health measure.”

In a study conducted at Iowa State University’s Institute for Social and Behavioral Research entitled, *Universal Family-Focused Interventions in Alcohol-Use Disorder Prevention: Cost-Effectiveness and Cost-Benefit Analyses of Two Interventions*,<sup>9</sup> it noted, “Epidemiologic research suggests that significant public health benefits can accrue from preventive interventions that delay the initiation of youth alcohol use ... Conservative estimates for the Iowa Strengthening Families Program intervention were a cost-effectiveness figure of \$12,459 per case prevented, a benefit-cost ratio of \$9.60 per \$1 invested, and a net benefit of \$5,923 per family. For *Preparing for the*

society at a proportionally small intervention cost. Economic analysis of such interventions is a largely unexplored area that could provide valuable guidance in forming public policy.”

## The Challenges

Mary Jo Peavy, prevention coordinator for the Illinois Alcoholism and Drug Dependence Association, said showing the effects of prevention is one of the “hardest things to prove.” But, on whether prevention programs and efforts are cost-effective? “Absolutely,” she said with confidence.

As preventionists continue to fight for increased funding and support, the challenge of empirically proving the impact of their efforts becomes a growing concern that agencies are attempting to effectively handle. Peavy said that to secure funding for programs such as Operation Snowball, the agency has to show numbers that reflect the success rates. They attempt to do so but admittedly cannot measure the true scope of their effectiveness. This is especially true with programs such as Operation Snowball, which provides opportunities for youth and adults to work together in a spirit of cooperation to plan, implement and evaluate a community-based alcohol and other drug prevention program. “Our goal is to keep healthy kids healthy, so how do you necessarily measure that?” she said. Belinda Sims, program officer for NIDA, echoes the problems faced when trying to quantify prevention efforts. She said while NIDA attempts to measure the impact of prevention, it can be difficult. “Unfortunately, there aren’t really nice, neat numbers that can show how effective prevention is, but there are numbers out there,” said Sims. “It is a priority for our agency to look at the economic benefits of preventive efforts and whether they are cost-effective and cost-beneficial.” Peavy said that from her years in prevention, the most effective prevention approach is “comprehensive prevention – not just one-day events or handing them a brochure.” The payoffs of prevention are many, she said, whether measurable or not.

<sup>1</sup> <http://www.nida.nih.gov/newsroom/06/NR7-24.html>

<sup>2</sup> *The National Institute on Drug Abuse, National Institutes of Health, “Principles of Drug Abuse Treatment for Criminal Justice Populations.” 2004.*

<sup>3</sup> *The National Institute on Drug Abuse, National Institutes of Health, “Principles of Drug Abuse Treatment for Criminal Justice Populations.” 2004.*

<sup>4</sup> *National Center on Addiction and Substance Abuse at Columbia University, 2001.*

<sup>5</sup> *Monitoring the Future survey conducted by the University of Michigan and funded by the National Institute on Drug Abuse, [www.monitoringthefuture.org](http://www.monitoringthefuture.org)*

<sup>6</sup> <http://cadca.org/CoalitionsOnline/article.asp?id=1147>

<sup>7</sup> *The National Institute on Drug Abuse, Preventing Drug Use among Children and Adolescents. [www.nida.nih.gov/Prevention/Prevopen.html](http://www.nida.nih.gov/Prevention/Prevopen.html)*

<sup>8</sup> *Caulkins JP, Pacula RL, Paddock S, Chiesa, J. “What we can—and cannot—expect from school-based drug prevention. *Drug Alcohol. Rev* 2004;23:79 – 87*

<sup>9</sup> *Spoth RL, Gyll M, Day SX. “Universal family-focused interventions in alcohol-use disorder prevention: cost-effectiveness and cost-benefit analyses of two interventions.” 1: *J Stud Alcohol.* 2002 Mar;63(2):219-28.*

*Drug Free Years*, estimates were a cost effectiveness of \$20,439 per case prevented, a benefit-cost ratio of \$5.85 per \$1 invested, and a net benefit of \$2,697 per family.”

The study concluded that, “Family skills training interventions designed for general populations have the potential to delay the onset of alcohol use and may avoid substantial costs to