HARM REDUCTION OR HARM MAINTENANCE: IS THERE SUCH A THING AS SAFE DRUG ABUSE?

HEARING

BEFORE THE

SUBCOMMITTEE ON CRIMINAL JUSTICE, DRUG POLICY, AND HUMAN RESOURCES

OF THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

FEBRUARY 16, 2005

Serial No. 109–36

Printed for the use of the Committee on Government Reform

Available via the World Wide Web: http://www.gpoaccess.gov/congress/index.html
http://www.house.gov/reform

U.S. GOVERNMENT PRINTING OFFICE

22–200 PDF WASHINGTON : 2005

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HARM REDUCTION OR HARM MAINTENANCE: IS THERE SUCH A THING AS SAFE DRUG ABUSE?

WEDNESDAY, FEBRUARY 16, 2005

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CRIMINAL JUSTICE, DRUG POLICY,
AND HUMAN RESOURCES,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:45 p.m., in room 2154, Rayburn House Office Building, Hon. Mark E. Souder (chairman of the subcommittee) presiding.

Present: Representatives Souder, McHenry, Brown-Waite, Cummings, Norton, Davis of Illinois, Watson, Waxman, Ruppersberger and Higgins.

Staff present: Marc Wheat, staff director; Nick Coleman and Brandon Lerch, professional staff members; Pat DeQuattro and Dave Thomasson, congressional fellows; Malia Holst, clerk; Sarah Despres and Tony Haywood, minority counsels; Josh Sharfstein, minority professional staff member; Earley Green, minority chief clerk; and Jean Gosa, minority assistant clerk.

Mr. SOUDER. The subcommittee will now come to order.

Good afternoon, and thank you all for coming. Today we are holding our subcommittee's second official hearing of the 109th Congress. Last week, we held a hearing with the Director of the White House Office of National Drug Control Policy to get a clear understanding of how the Federal drug budget brings resources to bear on reducing drug abuse, whether it be law enforcement, drug treatment or drug use prevention. Today we will focus on how the public's resources and trust may be abused through programs that fit under the self-identified label of harm reduction.

I believe this subcommittee was the first to hold a hearing on measuring the effectiveness of drug treatment programs and was the first to hold a hearing on the President's Access to Recovery initiative, which seeks to increase and enhance the availability of drug treatment in the United States. In the last Congress, many members of this subcommittee worked together to pass the Drug Addiction and Treatment Expansion Act and will do so again this Congress. The members of this subcommittee are not just talkers, we are doers, and I'm pleased that we have the opportunity to work on so many important matters together.

As President Bush refers to it in the National Drug Control Strategy, we should all work for healing America's drug users. I ap-

plaud the administration's 50 percent increase to the Access to Recovery program for a total of $150 million. This initiative, administered by the Substance Abuse and Mental Health Services Administration [SAMHSA], will provide people seeking clinical treatment and/or recovery support services with vouchers to pay for the care they need. And it will also allow assessment of need and will provide vouchers for clients who require clinical treatment and/or recovery support services but would not otherwise be able to access care.

As I stated last week, when evaluating drug control policies, we must look beyond the intent of the program and look at the results. We should always apply a common-sense test: Do the policies in question reduce illegal drug use? That is the ultimate performance measure for any drug control policy, whether it is related to enforcement, treatment or prevention. If we apply that test to Federal drug programs on the whole, the Bush administration is doing very well. Drug use, particularly among young people, is down since President Bush took office in 2001. Under this administration, we have seen an 11 percent reduction in drug use, and over the last 3 years, there has been a historic 17 percent decrease in teenage drug use. That is in stark contrast to what happened in the mid to late–90's when drug use, particularly among teenagers, rose dramatically after major declines all through the 1980's and early 1990's.

Now, what if we were to apply that same test to that of "harm reduction?" It wouldn't even be close. Harm reduction does not have the goal of getting people off drugs. Harm reduction is an ideological position that assumes certain individuals are incapable of making healthy decisions. Advocates of this position hold that dangerous behavior, such as drug abuse, must be accepted by society, and those who choose such lifestyles, or become trapped in them, should be able to continue these behaviors in a manner less harmful to others. Often, however, these lifestyles are the result of addiction, mental illness and other conditions that should and can be treated rather than accepted as normal healthy behaviors.

Instead of addressing the symptoms of addiction—such as giving them clean needles, telling them out how to shoot up without blowing a vein, recommending that addicts abuse with someone else in case one of them stops breathing—we should break the bonds of their addiction and make them free from needles and pushers and pimps once and for all.

We have a wide variety of witnesses today. Our first panel includes several gentlemen who worked with faith-based organizations in Asia, primarily with Muslim organizations in Afghanistan, Malaysia, and Indonesia and are having to contend with needle giveaway programs that are being promoted by foreigners, notwithstanding the cultural traditions of these countries in question. Some of these "harm reduction" programs, I must add with embarrassment and with apology to the gentlemen of the first panel, are financed by the U.S. Agency for International Development, the Federal Government foreign aid agency.

On the other hand, one of the witnesses requested by the minority, Dr. Beilenson, worked several years ago on a project which critics might call "More Drugs for Baltimore."

In June 1998, the Baltimore Sun reported that Johns Hopkins University drug abuse experts and Baltimore's health commissioner were, "discussing the possibility of a research study in which heroin would be distributed to hard core addicts in an effort to reduce crime, AIDS and other fallout from drug addiction." At that time, "Public health specialists from a half dozen cities in the United States and Canada met at the Lindesmith Center, a drug policy institute supported by financier George Soros, to discuss the logistics and politics of a multicity heroin maintenance study." Such an endeavor would be, "'politically difficult but I think it's going to happen,' said Baltimore Health Commissioner Dr. Peter Beilenson."

Another minority witness, Dr. Robert Newman, served on the board of directors for the Drug Policy Foundation as early as 1997, and presently serves on the board of directors with another minority witness, Reverend Edwin Sanders, of the Drug Policy Alliance, the new name of the Drug Policy Foundation since its merger with the aforementioned Lindesmith Center. The Drug Policy Alliance described itself as, "the Nation's leading organization working to end the war on drugs." Along with its major drug donor, George Soros, it helped produce, "It's Just a Plant," a pro-marijuana children's book, which I have a copy of here.

I would be very interested in learning from the witnesses today what they believe the U.S. Government policy should be with respect to financing heroin distribution, safe injection facilities and how-to manuals like "H Is for Heroin," published by the Harm Reduction Coalition, and other children's books on smoking marijuana produced with the help of the organization run by two of the minority's witnesses today.

We thank everyone for traveling so far and taking the time to join us. We look forward to your testimony.

And I now yield to Mr. Cummings, the ranking member of the subcommittee.

[The prepared statement of Hon. Mark E. Souder follows:]

Opening Statement
Chairman Mark Souder

"Harm Reduction or Harm Maintenance: Is There Such a Thing as Safe Drug Abuse?"

Subcommittee on Criminal Justice, Drug Policy, and Human Resources
Committee on Government Reform

February 16, 2005

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Another minority witness, Dr. Robert Newman, served on the Board of Directors for the Drug Policy Foundation as early as 1997, and presently serves on the board of directors with another minority witness, Rev. Edwin Sanders, of the Drug Policy Alliance (the new name of the Drug Policy Foundation since its merger with the aforementioned Lindesmith Center). The Drug Policy Alliance describes itself as "the nation's leading organization working to end the war on drugs." Along with its major donor George Soros, it helped produce *It's Just a Plant*, a pro-marijuana children's book.

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We thank everyone for traveling so far and taking the time to join us, and I look forward to your testimony.

Mr. CUMMINGS. Thank you very much, Mr. Chairman. And I thank you for holding this hearing today on harm reduction strategies for preventing illness and death among injecting drug users, their loved ones and the broader population. I am pleased that we are joined today by the ranking minority member of the full committee, Mr. Henry Waxman. Mr. Waxman's outstanding leadership on matters of public health is truly commendable and I welcome his participation.

I also welcome all of our witnesses. A number of them have traveled a considerable distance to share their perspectives on harm reduction and needle exchange, and I appreciate their being with us today.

As you know, Mr. Chairman, injecting drug users are at elevated risk for infection with HIV and other blood-borne diseases due to widespread use of contaminated injection equipment. In the United States, Russia and most of Asia, including China, injection drug use is a major risk factor driving HIV infection rates in these highly populous and, in many cases, highly vulnerable societies. The enormous unmet need for drug prevention and treatment in these countries, therefore, is not just a concern from the standpoint of drug policy. It is a major factor in a global AIDS epidemic, and it desperately requires effective interventions to halt the spread of HIV/AIDS among injecting drug users and the broader population.

Needle and syringe exchange has proved to be an effective intervention to prevent HIV infection among injection drug users. The science supporting the efficacy of needle exchange is thorough and consistent to the point that, today, there really is no serious scientific debate about whether needle exchange programs work as part of a comprehensive strategy to reduce HIV infection among high-risk injection users. Indeed, numerous scientific reviews conducted in the United States and internationally confirm that syringe exchange programs, when implemented as part of a comprehensive HIV/AIDS prevention strategy, are effective in reducing the spread of HIV and other blood-borne illnesses.

The most comprehensive of these was the review conducted by the U.S. Department of Health and Human Services in the year 2000. Summarizing this report, then-Surgeon General David Thatcher concluded, after reviewing all of the research to date, "The senior scientists of the department and I have unanimously agreed that there is conclusive evidence that syringe exchange programs as part of a comprehensive HIV strategy, are an effective public health intervention that reduces the transmission of HIV and does not encourage the use of illegal drugs."

Similarly, a 2004 review of the scientific literature by the World Health Organization found that with regard to injecting drug users, "There is compelling evidence that increasing the availability and utilization of sterile injecting equipment reduces HIV infection substantially."

Last fall, at the request of Mr. Waxman and myself, the National Institutes of Health conducted a further review on the scientific literature to date and reported to us that the Federal Government has extensively examined the effectiveness of syringe exchange programs [SEPs], dating back to 1993, including reviews by the Government Accountability Office. The current scientific literature sup-

ports the conclusion that SEPs can be an effective component of a comprehensive, community-based HIV prevention effort.

With unanimous consent, I would like to submit the NIH response for the record.

[The information referred to follows:]

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health
Bethesda, Maryland 20892

www.nih.gov

OCT 0 7 2004

The Honorable Henry A. Waxman
Ranking Minority Member
Committee on Government Reform
House of Representatives
Washington, D.C. 20515-6143

Dear Mr. Waxman:

Thank you for your letter, co-signed by Representative Elijah E. Cummings, in which you express concern regarding the presentation of scientific evidence on the efficacy of syringe exchange and "harm reduction" programs to prevent the spread of HIV and other blood borne illnesses. I have enclosed a brief response to the areas of interest you identified in your letter,

I hope you find this information useful. If you have further questions or need additional information, please contact Dr. Steve Gust, Interim HIV/AIDS Coordinator at the National Institute on Drug Abuse, at 301-443-6480.

An identical letter is being sent to Mr. Cummings.

Sincerely,

Elias A. Zerhouni, M.D.
Director

Enclosure

1. **Strategies That Have Proven Successful in Reducing The Risk of HIV Infection Among IDUs.**

One successful strategy for reducing the risk of HIV among injection drug users (IDUs) is to provide drug abuse treatment. Drug treatment programs provide a good setting for reaching IDUs and their partners with HIV prevention and care messages and interventions. It also can be a bridge to other needed services, such as primary health care, mental health, or other social services.

Numerous studies, primarily focused on methadone maintenance treatment (MMT), have shown that substance abuse treatment programs can have a dramatic effect on HIV transmission among opiate injectors, reducing their risk as much as 4- to 6-fold. [1,2] Drug abuse treatment works principally because it helps IDUs decrease the number of injections or helps them stop injecting altogether. Less use leads to fewer drug related risk behaviors, and that in turn leads to fewer exposures to HIV. The beneficial effects of MMT are most evident when treatment lasts a sufficiently long time and when methadone doses are high enough to effectively block drug craving: One study showed that 3.5 percent of methadone patients who had been in treatment continuously for 18 months had become infected with HIV, compared to 22 percent of out-of treatment IDUs;[3] another study showed that at 36 months, 8 percent of IDUs in treatment had become infected,[4] as compared to 30 percent of injectors not in treatment. An analysis of 20 years of social and medical data on 622 MMT patients in New York City showed that those patients who received methadone doses of 80 mg or more were significantly less likely to have HIV infection than patients who received smaller doses. [5] The protective value of higher doses was independent of a number of other risk factors, including year of last cocaine injection, needle sharing in shooting galleries, number of IDU sex partners, income, and race/ethnicity. Moreover, among non-injection cocaine users, drug treatment has also been shown to decrease cocaine use from an average of 10 days per month at baseline to 1 day per month at 6 months. Reduction in cocaine use was associated with an average 40 percent decrease in HIV risk across gender, and ethnic groups, mainly as a result of fewer sexual partners and less unprotected sex.[6]

Drug addiction treatment[7] is an essential component of a comprehensive prevention program to reduce risk of HIV and other blood-borne infections among IDUs. Since the late 1980s, studies have shown that treatment works because drug users in treatment stop or reduce their drug use and related risk behaviors, including use of non-sterile syringes and unsafe sex. Drug treatment programs also serve an important role in providing up-to-date information on HIV/AIDS, hepatitis, and other sexually transmitted diseases (STDs), counseling and testing services for these infections, and referrals for their clients to obtain medical and social services.

However, the majority of those needing treatment are not currently in a treatment program. The NIDA Community-Based Outreach Model [8,9] was designed to reach out-of-treatment IDUs who are unable or unwilling to stop using and injecting drugs and who cannot or will not access drug treatment. Compared to those in treatment, out-of-treatment IDUs are at significantly greater risk of HIV and other infections because they are more likely to inject drugs more frequently, to share drugs, syringes, and other injection equipment, and to practice unsafe sex while under the influence of drugs. The outreach program developed by NIDA attempts to reduce HIV risk through education on the risk factors for HIV transmission and by teaching effective skills in reducing those risks.

The Federal Government has extensively examined the effectiveness of syringe exchange programs (SEPs) dating back to 1993, including reviews by the Government Accountability Office.[10] Several non-governmental organizations, including the American Psychiatric Association, and others have also endorsed the use of SEPs as effective public health interventions. The current scientific literature supports the conclusion that SEPs can be an effective component of a comprehensive community-based HIV prevention effort.

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[1]Joseph H, Stancliff S, Langrod J. Methadone maintenance treatment (MMT): a review of historical and clinical issues. *The Mt. Sinai Journal of Medicine* 67(5&6):347-364, 2000.

[2]Metzger DS, Navaline H, Woody GE. Drug abuse treatment as AIDS prevention. *Public Health Reports* 113(Suppl 1):97-106,1998.

[3]Metzger DS, Woody GE, McLellan AT, O'Brien CP, Druley P, Navaline H, De Philippis D, Stolley P, Abrutyn E. Human immunodeficiency virus seroconversion among intravenous drug users in- and out-of treatment: An 18-month prospective follow-up. *Journal of Acquired Immune Deficiency Syndromes,* 6, 1049-1056,1993.

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[5]Hartel DM, Schoenbaum EE. Methadone treatment protects against HIV infection: two decades of experience in the Bronx, New York City. *Public Health Reports* 113(Suppl 1):107-115, 1998.

[6]Woody GE, Gallop R, Luborsky L, Blaine J, Frank A, Salloum JM, Gastfriend D, Crits-Christoph P. HIV risk reduction in the National Institute on Drug Abuse Cocaine Collaborative Treatment Study. *J Acquir Immune Defic Syndr* 33(1)-.82-87,2003.

[7]NIDA Principles of Drug Addiction Treatment: A Research-Based Guide. NIH Publication No. 99-4180, Oct 1999.

[8]NIDA Principles of HIV Prevention in Drug-Using Populations: A Research Based Guide. U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse; NIH Publication No. 02-4733, 2002.

[9]NIDA. The NIDA Community-Based Outreach Model: A Manual to Reduce the Risk of HIV and Other Blood-borne Infections in Drug Users. U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse; NIH Publication No. 00-4812, 2000.

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2. The Role Played by Harm Reduction Programs in Stemming the Spread of HIV in the United States.

3. The Relative Rate of HIV Infection in Cities That Have Implemented Harm Reduction Programs Versus Those That Have Not.

As a public health agency, the goal of the National Institutes of Health (NIH) and specifically the National Institute on Drug Abuse (NIDA) is to improve the quality of the Nation's addiction treatment and prevention, using science as the vehicle. The term 'harm reduction' has various meanings depending upon the context in which it is used, and is not viewed as a scientific term for any particular approach to addressing drug addiction. However, a great deal of research has been conducted on methods of reducing risks to health, such as syringe exchange programs (SEPs).

Research shows that SEPs, when implemented as part of a comprehensive HIV/AIDS prevention strategy, can be an effective public health approach to reduce the spread of HIV and other blood borne pathogens in the community. SEPs reduce the circulation time of contaminated injection equipment and thereby reduce opportunities for reuse of contaminated injection equipment and the transmission of new infections. [1-2] A number of studies conducted in the U.S. have shown that SEPs do not increase drug use among participants or surrounding community members and are associated with reductions in the incidence of HIV, hepatitis B, and hepatitis C in the drug-using population. [3-7]

Hurley, et al., [8] reviewed published and unpublished reports from 1984 to 1994 on HIV seroprevalence among IDUs in 81 cities across Europe, Asia, and North America with and without SEPs. On average, seroprevalence increased by 5.9 percent per year in the 52 cities without SEPs and decreased by 5.8 percent per year in the 29 cities with SEPs. The average annual change in seroprevalence was 11 percent lower in cities with SEPs. Thus, in cities with SEPs, HIV seroprevalence among IDUs decreased on average, but in cities without SEPs, HIV seroprevalence increased, suggesting that SEPs led to a reduction in HIV incidence among IDUs.

References:

[1]Kaplan, E.H., & Heimer, R. HIV incidence among needle exchange participants: Estimates from syringe tracking and testing data. *JAIDS & Human Retrovirol,* 7(2):182-189, 1994.

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[6]Kaplan, EH, & Heimer, R. HIV incidence among New Haven needle exchange participants: Updated estimates from syringe tracking and testing data. *JAIDS & Human Retrovirol,* 10(2):175-176,1995.
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4. Evidence Comparing HIV Treatment Regimen Compliance Among IV Drug Users vs. Non-IV Drug Users.

HIV-infected drug abusers can achieve positive health outcomes if they have access to and adhere to treatment with antiretroviral drugs (ART). Studies have also demonstrated the importance of ongoing interventions to reduce drug abuse and associated risk behaviors in order to maximize the health benefits of ART. However, there is cause for concern that health outcomes in drug abusers infected with HIV may be inferior to non-drug users. The often chaotic lifestyles of drug abusers combined with their increased likelihood of co-occurring medical and psychiatric conditions can complicate their treatment and prevent their achieving the same health outcomes as non-drug users. Access to medical care is another crucial factor. Individuals who receive HIV treatment later in the course of their disease are more likely to have viral rebound associated with development of resistance to ART than those who receive early treatment.[1] Finally, preclinical or basic research studies indicate that some drugs of abuse affect the immune system, the target of HIV infection, which may also impact vulnerability to infection and course of illness.

Factors associated with treatment compliance in drug abusing populations are discussed below.

Adherence to HIV treatment among drug users

The cumulative research indicates that non-adherence to antiretroviral therapy (ART) occurs in both drug users and non-drug users, reflecting the difficulty of adhering to complex regimens which require high accuracy in dosing schedule and compliance with dietary instructions. Estimates are that about 40 percent of patients receiving ART have significant problems with adherence.[2] A study of adherence among non-drug-using patients found 53.1% reported taking all medication on time according to dietary instructions, i.e., were fully adherent.[3] It is important to recognize that not only do treatment outcomes depend upon adherence to medication regimens, but also the risk of developing resistant HIV strains may be related to the level of sustained treatment adherence.[1]

A number of predictors of poor ART treatment adherence have been demonstrated in research studies. These include illicit drug use, as well as depression, alcohol use, poor self-efficacy, and certain health beliefs. However, the evidence from individual studies is not consistent-in some cases no differences are found between drug users, former drug users and non-drug users, and in other cases clear evidence of poorer adherence and lower HIV viral suppression is found in active drug users. Examples of this research follow:

- In one study, the strongest predictor of poor ART adherence in drug users was active cocaine use (27% in abstinent users vs. 68% in active users). Other factors included female gender, being unmarried, screening positive for depression and use of alcohol.[4]
- In a cohort of HIV infected women adherence was found not to be stable over time, with factors such as active drug/alcohol use, more frequent antiretroviral dosing, younger age, and lower initial CD4 lymphocyte count predicting poor ART adherence.[5]
- Lucas, et al,[6] identified the effects of substance abuse status on utilization of highly active anti-retroviral therapy (HAART), medication adherence, and virologic and immunologic responses to therapy in a cohort of HIV-1 - infected patients attending an urban HIV clinic. Active drug use was strongly associated with underutilization of HAART, non-adherence,

and inferior virologic and immunologic responses to therapy. Former drug users and non-drug users were similar in. all outcomes

- Another study by this group[7] indicated that switching from non-use to substance abuse was strongly associated with worsening ART use and adherence, and less frequent HIV-1 RNA suppression, compared to remaining free of substance abuse. Conversely, switching from substance abuse to non-use was strongly associated with improvements in ART use, adherence and treatment outcomes.

- Not all studies support an association between drug abusers and poor adherence. A study of factors relating to adherence to antiretroviral therapy among pregnant women indicated that adherence to antiretroviral therapy was not significantly associated with use of illicit drugs. Analyses were based on pharmacy claims data in a sample of 549 HIV-infected women who were prescribed antiretroviral therapy and who delivered live infants.[8]

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5. The Use of Harm Reduction Strategies in Areas Other Than HIV and Drugs, Such as Speed Limits, Seat-Belt Laws, Minimum Age of Alcohol Consumption, and Public Education and Peer Outreach Concerning Smoking.

The reduction of risk for injury and death has been the focus of research in a number of fields. In traffic safety, reduced speed limits[1] and seat-belt laws[2] have reduced the likelihood of crashes and the severity of injuries sustained in those crashes. The Insurance Institute for Highway Safety has published a selection of findings on the prevention and consequences of increased speed limits in several editions of *Status Report* including, "Seven straight years: deaths higher after 65 mph speed limits than before" in 1994 and "Faster travel and the price we pay" in 2003. More information is available on the Insurance Institute for Highway Safety's website at http://www.highwaysafety.org. The Centers for Disease Control and Prevention's (CDC) National Center for Injury Prevention and Control houses a Task Force on Community Preventive Services which has published findings on seat-belt use interventions and the effectiveness of safety belt use laws. CDC's reports have been featured in publications including numerous issues of the *Morbidity and Mortality Weekly Report* (MMWR) and Volume 21 of the *American Journal of Preventive Medicine* (AJPM).[3] More information is available on the National Center for Injury Prevention and Control's website at hm://www.cdc.gov/ncipc/.

Research in the alcohol field has shown that crashes and injuries have been reduced by raising the drinking age,[4,5] reducing the allowable blood alcohol concentration (BAC) for drivers, [6] and enacting zero tolerance laws for younger drivers. [7,8] Research has also shown that providing a brief intervention to reduce a person's drinking lowers the probability of making a subsequent visit to an emergency room. [9]

Education aimed at better informing the public on smoking and health issues are an important part of tobacco control and prevention efforts.[10] It is vital that the public understand that, to date, the only proven way to reduce the enormous burden of disease and death due to tobacco use is to prevent youth from beginning to smoke, and to help smokers, both youth and adults to quit.[11] Today, we have much to offer people who smoke and want to quit, including effective behavioral treatments and medications. [12]The evidence strongly suggests that people who keep trying to quit do succeed, although many will require numerous attempts before being successful.[13]

Recently, a number of new tobacco products with claims purported to reduce health risk have entered the market.[14-16] Unlike smoking cessation products, tobacco products do not undergo rigorous, objective scrutiny either for their constituents or for the accuracy of their health claims. A greater science base is required before we will know what effect these new products will have on the health of the public. [17-19]

To be effective, education, and outreach efforts must take into account the knowledge, attitudes, and behaviors - among other factors - of the intended audience .[20] To understand these and related issues, the National Cancer Institute (NCI) has developed and implemented the Health Information National Trends Survey (HINTS), which collects nationally representative data about the American public's use of cancer-related information and perception of cancer risks. HINTS contains questions about tobacco product use, including tobacco products purported to reduce health risk. These data will be useful to help shape future public education efforts.[21]

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Honorable Elias A. Zerhouni, M.D.
Director
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9000 Rockville Pike
Bethesda, Maryland 20892

Dear Dr. Zerhouni:

I write as an NIH funded researcher whose work since 1990 has focused in part on the evaluation of syringe exchange as a public health mechanism for the prevention of HIV and other blood borne diseases.

By now, I presume, you have begun to receive what will no doubt be a flood of letters from experienced researchers, public health officials, and front-line AIDS prevention workers in response to the letter condemning syringe exchange sent to you by Mark E. Souder, Chairman, Subcommittee on Criminal Justice, Drug Policy and Human Resources. From the opening sentence until the end, Mr. Souder's letter significantly mistakenly reports the scientific findings on syringe exchange. Contrary to the thrust of the letter, the consistent pattern in syringe exchange research, as well as the multiple reviews of the syringe exchange scientific literature by six different federal institutions is that syringe exchange is a successful, cost-effective public health mechanism for preventing the spread of HIV among drug injectors.

In one of my studies, funded by the National Institutes on Drug Abuse (NIDA #R01 DA1256), for example, we compared the city of New Haven, CT, which has had syringe exchange since 1992, to Springfield, MA, which still does not have syringe exchange. City-level data on AIDS cases collected during 1999-2000 revealed that the number of new AIDS cases reported were 276 in Springfield and 166 in New Haven and that approximately 55% of the Springfield cases, but only 43% of the New Haven cases, were attributable to drug injection. Converting the figures to cases per 100,000 population to improve the basis for comparison of the numbers, there were 175.8 and 127.2 AIDS cases per 100,000, in Springfield and New Haven, respectively.

Furthermore, there were 96.7 and 54.7 injection-related new AIDS cases per 100,000 in Springfield and New Haven, respectively, a 43% lower rate for New Haven. If New Haven had not expanded syringe access through a syringe exchange program and continued to experience new AIDS cases at the same rate as Springfield, there would have been 123 AIDS cases attributable to injection drug use over the past two years. Instead, only 71 were reported, a difference of 52 fewer AIDS cases over the past two years. If Springfield had experienced new AIDS cases at the same rate as New Haven, we would have expected a total 87 new cases. Instead we observed a total of 152 cases, or an excess of 65 new AIDS cases for a two year period.

From an economic perspective, if we use as a standard figure the cost benefit of averting one AIDS case is about $180,000 in medical costs, a total of $9,340,000 was saved for the estimated 52 cases averted in New Haven because of syringe exchange. Moreover, we

estimate that the excess cost for unprevented AIDS cases in Springfield has cost $11,690,965.

Additionally, the lack of access to syringe exchange in Springfield was associated with unsafe disposal of used syringes. We found that syringe exchange programs were used for safe disposal by 50% of injection drug users in Hartford, CT (which was also included in the study) and 25% of injection drug users in New Haven, whereas no injectors in Springfield reported using a a syringe exchange for the safe disposal of their syringes. By contrast, injectors in Springfield were much more likely to throw their used syringes into an alley or an open sewer, or stash them in a public place for later use. Unsafe disposal, combined with relative syringe scarcity, were reflected in the ninefold higher rate in the use of discarded syringes in Springfield versus Hartford or New Haven.

As findings from just this one study alone make clear--although similar findings on the public health effectiveness of syringe exchange exists from dozens of studies now, syringe exchange is an effective, cost-efficient strategy for preventing the spread of HIV. Syringe exchange, further, has not been found to spread drug use. It is noteworthy that Mr. Souder ignores all of the data from the U.S. on syringe exchange and instead turns to the Canadian findings to try and make his case. But, as the Canadian researchers involved in those studies will tell you, Mr. Souder has systematically distorted the presentation of the Canadian data, picking and choosing what to report and ignoring that which doesn't fit and effectively contradicts his argument.

Sad as it may be, one is force to wonder if the unending attack on syringe exchange, a systematic campaign that consistently distorts the scientific record, continues not because it syringe exchange is a failure but because syringe exchange is a success in preventing the spread of a deadly virus in a population -- drug injectors - that are often blamed for many of our urban social ills.

In responding to Mr. Souder, I urge you to affirm the real findings on syringe exchange because the preponderance of the data is overwhelming supportive of this approach to the prevention of HIV.

Sincerely,

Merrill Singer, Ph.D.
Director, Center for Community Health Research

Honorable Elias A. Zerhouni, M.D.
Director,
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9000 Rockville Pike
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Dear Dr Zerhouni,

We are writing to respond to a letter by Mr. Mark Souder sent to your office on April 28, 2004 criticizing the role of needle exchange programs in reducing the risk of HIV and blood borne infections. Indeed, in our opinion Mr. Souder's views do a grave disservice to the community in attempting to refute international research that supports the effectiveness of needle exchange programs in reducing the risk of blood borne diseases.

As investigators of the ALIVE and needle exchange evaluation studies in Baltimore, MD, our group has published numerous reports that showed that the Baltimore needle exchange program (NEP) is associated with lower HIV incidence over time, reduced frequency of drug injection, less needle sharing, greater admissions to drug abuse treatment programs and fewer discarded needles on the street. In examining potential negative effects of the program, NEP was not associated with increases in crime, permissive attitudes towards drugs among youth or new needle sharing networks (references below).

Mr. Souder refers to one of our studies that showed that sexual transmission among injection drug users was independently associated with HIV seroconversion. He states that "needle exchanges focus almost exclusively upon a single mode of transmission", an intervention that he deems ineffective. However, many NEPs provide on-site STD testing, diagnosis and even treatment, provided that funds are available to support these services. A study by Paone and colleagues reported that U.S. NEPs that operate in an environment where they are considered illegal are significantly less likely to be able to offer crucial ancillary services such as screening for STDs and referrals to drug treatment. As needle sharing declines in a community, sexual risks may become more important; NEPs can therefore place greater emphasis on established and effective approaches to reduce risk of sexual transmission among injection drug users and their sex partners. Based on our findings, we feel that NEPs are the ideal venue for offering these services and should be supported as a cornerstone of HIV prevention and linkages to primary care among drug using populations.

Further, no single intervention can prevent an HIV epidemic 100% of the time in all circumstances. Yet in at least 8 reviews of the literature of which we are aware, it has been clearly and consistently shown that cities with NEPs have lower HIV infection rates than those without NEPs. For example, New York City and Amsterdam have witnessed a declining HIV epidemic and a shrinking of the IDU population which has been attributed in large part to expanded access to sterile syringes, including NEPs.

We also note that Mr. Souder cited two Canadian studies (of which one of us is a co-author), but failed to note that both studies have been updated and the recent reports conclude that needle exchange attendence was not associated with higher rates of HIV infection. It seems apparent, therefore, that Mr. Souder has drawn his conclusions in the absence of a complete review of the peer-reviewed literature.

Given that the intertwining epidemics of HIV and drug abuse disproportionately affect communities of color in the United States, to further reduce the availability of services that have been proven effective seems to contradict the recent emphasis to reduce disparities. We would be happy to assist your office about any questions you may have about the science and evaluation of needle exchange programs.

Sincerely,

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April 30, 2004

Honorable Elias A. Zerhouni, M.D.
Director
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9000 Rockville Pike
Bethesda, Maryland 20892

Dear Dr. Zerhouni:

We are in receipt of a letter sent to you by Mark E. Souder, Chairman, Subcommittee on Criminal Justice, Drug Policy and Human Resources. In this letter, Mr. Souder refers to data regarding needle exchange and HIV infection derived from the Vancouver Injection Drug User Study. His letter unfortunately contains a number of misinterpretations of these data. As two of the lead investigators of the study [1], we are writing to provide you with a clarification.

Regarding our investigation, Mr. Souder writes "the study found that HIV-positive IDUs were more likely to have attended NEP and to attend NEP on a more regular basis compared with HIV-negative IDUs". Unfortunately, there are ways to misinterpret data such as these. The simplest misinterpretation is as follows: If a greater proportion of those who visit the NEP frequently have HIV than those who visit less frequently, then the NEP must be responsible for causing HIV infection among its attendees. Under the circumstances, NEP should be considered harmful. This interpretation is simple, direct and straightforward. Unfortunately, it is incorrect.

Perhaps the simplest way to illustrate the error in logic is with an analogy. Consider hospitals and their patients. It is clearly the case that people who are admitted to hospitals have higher death rates than people who are not admitted. Should one conclude that hospitals are responsible for killing the patients it admits? If so, the logical policy recommendation would be to close hospitals down.

A moment's reflection should bring the misinterpretation into clear relief. The reason why people who are admitted to hospitals have higher death rates than people not admitted, is that people requiring hospital admission are inherently sicker. Indeed, that is presumably the reason they are in the hospital. The hospital is not responsible for its higher death rates; they occur because the hospital is coping with a population in far worse health than those who remain out in the community.

Is the needle exchange program in Vancouver responsible for the higher prevalence rates of HIV among its frequent attendees? Or is it simply the case that those injection drug users who most use the services of the NEP are the very ones whose behaviors put them at greater risk of contracting HIV?

To answer this, we subsequently conducted a comparison of the HIV behavioral risk factors in frequent versus infrequent NEP attendees within our study [2]. And as expected, we found very different risk profiles in the two groups. With regard to virtually every risk factor we know of that puts IDUs in our study at higher risk for contracting HIV, the frequent attendees had greater evidence of each. Specifically, when compared to infrequent attendees of the NEP, frequent attendees were younger, more likely to have poor housing situations, more likely to inject in so-called "shooting galleries", more likely to inject cocaine on a daily basis, more likely to be involved in prostitution, more likely to have been incarcerated in the prior 6 months, and finally, less likely to be in methadone treatment for addiction. Is it any wonder that they have higher rates of HIV than infrequent attendees? In fact, we went on to show that the excess in HIV rates among frequent attendees was precisely what one would expect based on their higher risk profiles. What this article showed is that the NEP was reaching precisely the target population it sought to reach, and provided clean syringes to those most capable of transmitting the disease. This second article [2] was not cited by Mr. Souder.

It is certainly the case that Vancouver experienced an explosive outbreak of HIV among IDUs in the period around 1996-97. We have analyzed this and have shown that it was primarily due to a major switch in drug use from heroin to injection cocaine in the middle of the decade. Indeed, we have published an article showing the outbreak in Vancouver was related to cocaine injection in a clear dose-related fashion [3].

That a lone NEP, with a restrictive policy of point-for-point exchange in the face of a massive cocaine injection epidemic in a setting with inadequate treatment and social support programs, failed to curb an HIV outbreak, cannot be used as an indictment of this intervention as a whole. For Mr. Souder to take the Vancouver data out of context, is selective and self-serving. One shudders to think what might have occurred in this setting in the absence of harm reduction programs.

Yours sincerely

Dr. Martin T. Schechter
University of British Columbia

Dr. Stephanie Strathdee
University of California, San Diego

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April 27, 2004
Honorable Elias A. Zerhouni, M.D.
Director
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9000 Rockville Pike
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Dear Dr. Zerhouni,

I refer to a letter addressed to you dated April 27, 2004 from Congressman Mark E. Souder, Chairman, Subcommittee on Criminal Justice, Drug Policy and Human Resources regarding harm reduction. The multiple and serious errors of this letter should not be accepted, whether or not it is an election year in the United States.

I write as the President for the last 8 years of the International Harm Reduction Association. I have also been involved in efforts to control HIV infection among and from injecting drug users for almost twenty years in my own country as well as countries in Asia, South America and the Middle East. I am the principal author of a 16,000 word major international review of the effectiveness, safety and cost effectiveness of needle syringe programmes soon to be published by the World Health Organisation as part of their Evidence for Action series. Allow me to clarify a number of misunderstandings of Congressman Souder.

1 Harm reduction is an evidence based and pragmatic response to public health problems.

Congressman Souder claims that '"harm reduction" is an ideological position that assumes individuals cannot or will not make healthy decisions.'

'Harm reduction' is defined by the International Harm Reduction Association as 'efforts to reduce the health, social and economic costs of mood altering drugs without necessarily reducing drug consumption'. Harm reduction practitioners do not assume that 'individuals cannot or will not make healthy decisions'. We test hypotheses and if the evidence demonstrates that a particular hypothesis can be refuted, we reject that hypothesis. In the case of injecting drug users, the evidence demonstrates consistently that when provided with appropriate and timely information about the risks of HIV, the means to change behaviour and the encouragement to do so, risk behaviour generally declines and HIV incidence and prevalence also decline.

2 Harm reduction is effective, safe and cost effective.

Congressman Souder claims that 'programs driven by this ideological position have not been adequately reviewed with unbiased, scientific rigor'. Perhaps Congressman Souder

is unaware of the seven following reviews of needle syringe programmes carried out by agencies of the US government (or on their behalf):

1 General Accounting Office, G.A., *Needle Exchange Programs: Research Suggests Promise as an AIDS Prevention Strategy.* 1993, US Government Printing Office: Washington DC.
2 National Commission on AIDS, *The Twin Epidemics of Substance Use and HIV.* 1991: Washington DC.
3 Lurie, P., & Reingold, A.L. (Eds). *The public health impact of needle exchange programs in the United States and abroad, vol. 1.* 1993, Centres for Disease Control and Prevention: Atlanta.
4 Office of Technology Assessment of the US Congress, *The Effectiveness of AIDS Prevention Efforts.* 1995, US Government Printing Office: Washington DC.
5 National Institutes of Health Consensus Panel, *Interventions to prevent HIV risk behaviors.* 1997, NIH.
6 Satcher, D., Surgeon General, *Evidence-based findings on the efficacy of syringe exchange programs: an analysis of the scientific research completed since April 1998.* 2000, US Dept of Health & Human Sciences: Washington, DC.
7 Institute of Medicine of the National Academy of Science, *No Time to Lose: Getting More from HIV Prevention.* 2001, National Academies Press: Washington DC.

All of these reviews concluded that: (1) needle syringe programmes are effective in reducing HIV infection among injecting drug users; (2) needle syringe programmes do not increase illicit drug use. Congressman Souder's claim is baseless.

3 Few studies question the value of needle syringe programmes

Congressman Souder quotes studies concluding that needle syringe programmes may increase HIV infection. He does not quote some later studies by the same authors questioning or revising their own findings in earlier papers. The overwhelming majority of papers evaluating needle syringe programmes have found that these programmes reduce HIV infection among injecting drug users. There is no convincing evidence that needle syringe programmes increase HIV.

Congressman Souder appears to be unaware of the findings of the vast majority of studies evaluating needle syringe programmes and large ecological studies in particular. A study commissioned by the Commonwealth Department of Health in Australia (Health Outcomes International Pty Ltd, National Centre for HIV Epidemiology and Clinical Research, Drummond M. Return on Investment in Needle and Syringe Programs in Australia. Commonwealth Department of Health and Ageing. Canberra. 2002.) showed that by 2000 needle syringe programmes cost Australia's governments $A130 million but prevented 25,000 HIV and 21,000 hepatitis C infections and by 2010 prevented 4,500 AIDS deaths. More Australian lives were saved by needle syringe programmes than were tragically lost in New York to terrorism on September 11, 2001. Needle syringe programmes saved governments at least $A2.4 billion or, if the conventional 5% annual

discount for future benefits is not deducted, as much as $A7.7 billion. ($A 1.00 = $US 75.00) This major evaluation was based on a study of data from 103 cities around the world. Cities with needle syringe programmes had an average annual 18.6% decrease in HIV, compared with an average annual 8.1% increase in HIV in cities without such programmes.

The USA rejects harm reduction and consequently needle syringe programmes have to rely on meagre state and city resources. Thus needle syringe programmes in the USA have a fraction of the coverage of their Australian counterparts. In the year 2000, there were almost 15 new AIDS cases for every 100,000 Americans compared to just 1 new AIDS case for every 100,000 Australians. Between one third and one half of all new AIDS cases in the US are attributed to injecting drug use compared to about 5 % in Australia. The USA has today the highest AIDS incidence in the developed world and by a large margin.

In July 2002 President Clinton acknowledged publicly that he had erred in declining an opportunity to introduce Federal funding for needle and syringe programmes in the USA in April 1998. Clinton explained that at the time he had taken political rather than public health advice.

4 Harm reduction is a well established approach in clinical medicine and public health

The WHO Expert Committee on Drug Dependence noted in 1974 a 'concern for preventing and reducing problems rather than just drug use'. As far back as 1926 in the United Kingdom, the Rolleston Report (Ministry of Health, Departmental Committee on Morphine and Heroin Addiction, HMSO) commented that "indefinite administration of morphine or heroin would be permitted for those ... who are 'capable of leading a fairly normal and useful life so long as they take a certain quantity, usually small, of their drug of addiction but not otherwise'" Opponents of harm reduction are often obsessed by the potential for officially approved indefinite administration of morphine or heroin but harm reduction advocates are more interested in the possibility that these same individuals might be assisted to 'lead a fairly normal and useful life'. The debate about the primacy of harm reduction or use reduction has been raging for decades but it is now clear that the use reduction approach has lost this argument

The influential Advisory Committee on the Misuse of Drugs in the United Kingdom commented in 1984 that 'prevention includes both the prevention of drug use and the prevention of drug related harm.' Harm reduction should embrace evidence-based efforts to reduce drug use where these are motivated primarily by a desire to reduce harm rather than a compulsion to eradicate drug use.

Harm reduction is a universal framework which has long been applied to alcohol. In 'Alcohol and Public Policy' (National Academy Press, 1981), the need was recognized to 'make the world safe for drunks' by 'modifying environments so that when drinking or

drunken activities occur, they are less likely to cause or exacerbate damage.' Is this not the very spirit of harm reduction?

Wherever we look, there are examples of harm reduction. Surely, nicotine replacement for cigarette smokers is entirely comparable with providing methadone for heroin injectors. When all efforts have been made to minimize the number of car crashes including those due to alcohol, car safety belts reduce the risk of death or serious injury to the driver and other occupants of the vehicle who might otherwise be ejected from the crashed vehicle. Motorcycle helmets are based on similar principles and recognise that motorcycles cannot be prohibited despite the fact that they are far more dangerous than cars. Authorities attempt to relocate roadside poles where ever possible. Where roadside poles cannot be relocated, they are replaced by frangible poles which give a little on impact, thereby reducing the risk of death or serious injury. Condom promotion to reduce the incidence of sexually transmitted infections and unwanted pregnancy complements efforts to reduce the rate of sexual partner change but accept the reality that some irreducible level of sexual partner change exists. These days, rubber paving is often placed underneath the climbing frames for children in neighbourhood parks.

5 Widespread acceptance of harm reduction

Congressman Souder appears to be unaware that harm reduction is a mainstream and well accepted approach to drug problems around the world. The world has been changed irrevocably by the recognition of HIV/AIDS on 5 June 1981. The Scottish Home and Health Department concluded in September 1986 that 'the gravity of the problem is such that on balance the containment of the spread of the virus [HIV] is a higher priority in management than the prevention of drug misuse ... On balance, the prevention of spread should take priority over any perceived risk of increased drug use.' The Advisory Committee on the Misuse of Drugs in the United Kingdom argued in 1988 that 'The spread of HIV is a greater danger to individual and public health than drug misuse. Accordingly, services that aim to minimise HIV risk behaviour by all available means , should take precedence in development plans.'

The Mullins report of the Home Affairs Select Committee in the United Kingdom noted in 2002 that 'If there is any single lesson from the experience of the last 30 years, it is that policies based wholly or mainly on enforcement are destined to fail' ... therefore ...'harm reduction rather than retribution should be the primary focus of policy towards users of illegal drugs'

Harm reduction is now the mainstream approach to drug problems in all countries in Western Europe (except Sweden) and will soon be the mainstream in Asia. Many United Nations organisations are now declaring unambiguous support for harm reduction. The communiqué of the UNGASS on drugs in 1998 referred to the need for 'a balanced approach' and 'reducing adverse consequences' while the communiqué of the UNGASS on HIV/AIDS in 2001 determined that by 2005 'harm reduction' would be make available' by member states. In 2000, the Director General of WHO declared that 'The key to limiting the spread of HIV lies in harm reduction among intravenous drug users.'

Even the International Narcotics Control Board concluded in 2003 that 'The ultimate aim of the conventions is to reduce harm' (Report of the International Narcotics Control Board for 2003). UNICEF, the World Bank and the International Red Cross-Red Crescent Society are among major organisation to have endorsed harm reduction.

This debate divides participants into those who their base judgments on data from those who base their judgments on other considerations than data. I have confined my response to evidence supporting needle syringe programmes but could just as well have covered the evidence supported methadone treatment programmes.

Congressman Souder's comments on harm reduction should be rejected comprehensively.

Yours sincerely,

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5/7/2004

Honorable Elias A. Zerhouni, M.D.
Director
National Institutes of Health
9000 Rockville Pike
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Dear Dr. Zerhouni:

As you know, the application of public health in the United States is sometimes inhibited by ideological positions that are fashioned by personal belief systems rather than science. Congressman Souder's letter of April 27th regarding the value of harm reduction programs for substance users offers a selective review and distorted interpretation of the wealth of available research on the subject. I would like to address eight inaccurate assertions by Congressman Souder about harm reduction programs and the science evaluating those programs.

1. "...'harm reduction' is an ideological position that assumes individuals cannot or will not make healthy decisions."

The harm reduction model asserts that individuals will make healthy choices if provided with accurate information and with access to tangible resources such as injection equipment, drug treatment and other health services. Harm reduction is not a deficit model.

2. "Advocates of this position hold that dangerous behaviors, such as drug abuse, should be accepted by society and those who choose such lifestyles - or become trapped in them - should be enabled to continue these behaviors in a less harmful manner."

Implicit in the term harm reduction is the belief that drugs can cause real harms. However, these harms are not an inevitable consequence of drug use, and can be prevented or ameliorated through a range of strategies that include but do not invariably require complete cessation from all drug use. Indeed, history suggests that narrowly focusing health promotion and disease prevention efforts on eliminating the use of all psychoactive substances would be neither feasible or effective. Therefore harm reduction posits that reducing damage from consumption of drugs (including alcohol and nicotine) is a more realistic and pragmatic approach. In many cases, reducing drug-related harm entails reduction of drug consumption, through interventions that include prevention of initiating drug use, abstinence, maintenance and substitution therapies, and substance abuse treatment. Harm reduction practice in fact encompasses the promotion of all of these interventions, tailored to meet individual needs and circumstances. Yet the harm reduction model also recognizes that cessation of drug use can be extremely difficult and can take multiple

attempts, with recurring cycles of reduced consumption and relapse. Therefore individuals caught in these cycles need support to stave off unnecessary death and disease and other social harms during periods of active drug use. Congressman Souder mischaracterizes harm reduction practice by constructing a false dichotomy between harm reduction and abstinence-oriented approaches, when in fact these strategies would be more accurately described as overlapping elements within a continuum of care.

3. "These lifestyles are the result of addiction, mental illness of other conditions that should and can be treated rather than accepted as normative, healthy behaviors. Sadly, harm reduction largely ignores these realities..."

On the contrary, harm reduction workers are perhaps the only people effectively addressing these conditions among the majority of drug users not currently receiving treatment. Indeed, harm reduction takes on all the greater urgency for this population given the limited success of alternate strategies in the United States. The harms and risks of addiction and mental illness are too often compounded by policies that respond to drug use through incarceration, expulsion from public housing, exclusion from shelter, discrimination and structural barriers to accessing medical care and social services, permanent removal of children, and denial of public welfare and other benefits and financial assistance programs. Harm reduction practitioners recognize and respond to addiction and mental illness as critical health problems that develop and function within an array of cultural contexts and social forces that cannot be reduced or responded to solely through medical models. Harm reduction attempts to promote and facilitate access to care for addiction and mental illness while recognizing the impact of structural impediments to effective and appropriate treatment.

4. "Sadly, harm reduction largely ignores these realities and programs driven by this ideological position have not been adequately reviewed with unbiased, scientific rigor."

Congressman Souder's contention is insupportable. The most cursory review of research on harm reduction and syringe exchange programs cannot fail to acknowledge the impeccable reputations of leading researchers from world-renowned institutions, the rigorous peer review process of journals publishing their work, and the reviews conducted by various governmental, medical, public health, and research entities over the last fifteen years validating the design and analysis of this research and endorsing conclusions that support the efficacy of needle exchange and harm reduction approaches to disease prevention.

5. "I am concerned that harm reduction programs that sustain continued drug abuse, such as injection rooms and needle distributions, likely weaken drug abusers' defenses against infection, sustain drug abusers' long term risk for disease, and minimize the benefits of the available treatments for HIV disease."

Congressman Souder is conflating the risks and harms of drug use with the effects of participation in harm reduction programs. Harm reduction programs do not sustain drug abuse, but rather engage drug users in a continuum of care from which they would otherwise be excluded. Harm reduction and syringe exchange programs have proven to be excellent pathways into drug treatment and medical care, and much of the work and successes of these programs lies

in their unique ability to help drug users prepare for, access, benefit from, and remain in appropriate health care and substance abuse treatment. The notion that participation in harm reduction programs can "sustain continued drug abuse" is completely unsupported by any evidence. Contrary to Congressman Souder's assertion, harm reduction programs can help maximize the benefits of HIV treatments through education, adherence counseling, and other forms of support.

6. Congressman Souder levels criticism against syringe exchange programs by citing research from Montreal and Vancouver.

It is interesting to note that Congressman Souder could not find any data from the United States questioning the role of syringe exchange programs in HIV prevention. Equally disappointing Congressman Souder's misrepresentation of the findings and conclusions of the Canadian studies, even though lead investigators Strathdee and Schechter have publicly asserted that politicians from the United States have been willfully misinterpreting their research since publication of initial findings in 1997.

By now you will have received letters from prominent researchers in response to Congressman Souder's factual distortions, and these researchers are better placed to defend their field and work.

7. "Needle exchanges focus almost exclusively upon a single mode of transmission among IDUs - sharing of contaminated needles - and largely ignore other important factors such as the individual, the behaviors that cause risk taking, the impact of the substance on the individual and the substance being abused itself."

Virtually all existing syringe exchange programs also address sexual risk among injectors. Syringe exchange programs have helped reduce HIV prevalence among injectors in New York City from 60% to approximately 15% since 1990. This dramatic reduction in HIV rates could not have occurred had programs failed to address sexual transmission in tandem with injection-related risk through education, support, and individual and group counseling. These interventions do not focus solely on injection practices or sexual risk, but rather address the array of conditions jeopardizing the health of drug users, including homelessness, poverty, and lack of adequate health care and access to effective drug treatment.

8. "This scientific and anecdotal evidence appears to indicate that harm reduction programs have failed to provide a prevention panacea for drug abusers against the dangers of HIV, hepatitis and other health risks."

No one has ever suggested that harm reduction or syringe exchange is a prevention panacea for drug users against the dangers of HIV, hepatitis and other health risks. Nor would it be possible to argue that substance abuse treatment or criminal justice policies targeting drug use and drug users have provided such a panacea. Harm reduction and syringe exchange programs provide another tool, alongside drug treatment and drug prevention, in reducing the damage that drug use causes in the lives of individuals.

Congressman Souder does not provide a plan to combat these difficult issues. In the absence of better tools than those provided by harm reduction programs, it is vital to expand upon existing harm reduction services and service modalities. However, I do endorse Congressman Souder's request for a summary of the available scientific data demonstrating: (1) The impact of drug abuse on the body's immune system; (2) Impaired decision making that increases HIV risk as a result of drug intoxication; (3) HIV risk by drug users attributable to risky sexual behavior in exchange for drugs and drug money; (4) Cultural or normative needle sharing behaviors by drug using populations; and (5) Inferior health outcomes among those being treated for HIV infection.

In addition, I am requesting that the NIH compile an authoritative review of all US based, federally funded research demonstrating the impact of syringe exchange programs on: (1) The spread of HIV among injection drug users; (2) The spread of Hepatitis B and Hepatitis C among injection drug users; (3) The frequency of injection among injection drug users; (4) The reuse and sharing of injection equipment among drug injectors; (5) The disinfection of used syringes; (6) The entry into drug treatment via syringe exchange programs and associated treatment outcomes; (7) The number of discarded contaminated syringes in the vicinity of syringe exchange programs; (8) The initiation of non-injectors into injection. I also request that this review also include an evaluation of research examining the community consequence and public health impact upon the closing of a syringe exchange program. This data collectively provides a crucial context for the issues raised by Congressman Souder.

I am requesting that this compilation be not only forwarded to the Subcommittee on Criminal Justice, Drug Policy and Human Resources but also to Health and Human Services Secretary Tommy G. Thompson and also to Surgeon General Richard H. Carmona. If you find the evidence compelling that syringe exchange programs have a significant role to play in reducing HIV and other viral infections among drug injectors, their sexual partners and the wider community, then I also request that you make a very strong recommendation that the current congressional ban on the Federal funding of syringe exchange programs be lifted and that harm reduction and syringe exchange programs be recognized and supported as a vital part of a comprehensive strategy to prevent disease and reduce drug-related harm.

Sound science and good public health demands that public policy be guided by the best available research, and that research be pursued free of ideological constraints. These principles have all too often been discarded in the history of harm reduction and syringe exchange programs in the United States. I trust that your response to Congressman Souder will help to rectify this scandal.

Sincerely,

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Mr. CUMMINGS. Not surprisingly, these comprehensive reviews validate research that has focused on needle exchange in my own city of Baltimore. For more than a decade, Dr. Beilenson has overseen these efforts as Commissioner of the Baltimore City Health Department. I am pleased that he joins us today on the second witness panel and will discuss his research and his experience in detail.

But suffice it to say, Mr. Chairman, the bottom line in Baltimore, as it has been elsewhere, is that needle exchange is a fundamental component of any comprehensive approach to reducing HIV infection. Studies show that needle exchange programs like Baltimore City's reduce the number of contaminated needles in circulation, reduce the likelihood of HIV infection, bring the highest-risk injecting drug users into contact with treatment resources and other critical social resources and do not increase drug use, the number of injecting drug users, or the volume of contaminated needles discarded in the streets.

These programs save lives, and that is why they have the unequivocal support of organizations like the American Medical Association, the U.S. Conference of Mayors, the National Academy of Sciences, the American Academy of Pediatrics, the International Red Cross and UNICEF, to name just a few.

Religious groups and denominations including the Episcopal Church, the Presbyterian Church, United Church of Christ and the Progressive Jewish Alliance, to just name a few, also support making sterile needles available. In States from coasts, Maryland and California included, recognize that needle exchange is not just effective, it is cost effective and even saves taxpayers money, given the fact of the avoided costs of treatment with HIV/AIDS patients.

Those who state categorical arguments against harm reduction seem to overlook the fact that harm reduction is at the root of many mainstream measures to protect public health in areas of activity such as transportation or engagement in an activity involved in the inherent risk of injury or death. Speed limits, seatbelt laws and child safety seats, to cite a few familiar examples, all presuppose that the dangers inherent in vehicular transportation cannot be eliminated, but that the number and severity of injuries can be reduced substantially for drivers, passengers and innocent bystanders alike.

No one in this room disputes the fact that drug abuse is inherently unhealthy behavior. Needle exchange is a proven means of empowering injecting users to take action to protect themselves, their sexual partners and their children from the potentially fatal secondary risk of an infection with HIV and other deadly or debilitating blood-borne diseases. An injecting drug user who takes advantage of a needle exchange program is more likely to need treatment and more likely to obtain treatment than his or her counterpart who is outside the treatment system and not exchanging contaminated needles for sterile ones. Such a user is more likely to reduce the number of injections or to stop injecting altogether and is less likely to become infected or infect someone else with HIV.

The proven benefits of participating in a treatment program include reduced drug consumption, reduced risky health behavior, improved overall health, increased stability in housing and employ-

ment, reduced criminal activity and identification and treatment of mental health problems.

Only a misinterpretation of the scientific literature could lead one to conclude that needle exchange programs are ineffectively reducing HIV or that they recruit new drug users or increase drug use. Strangely enough, however, we have seen this happen with a number of studies that support the efficacy of needle exchange.

The Vancouver Injecting Drug User Study is routinely cited by harm reduction opponents to support the erroneous view that needle exchange is ineffective and actually contributes to increases in drug use and HIV infection. In fact, as that study's authors have been compelled to point out, the Vancouver data confirms the program's effectiveness in reaching addicts most in need of treatment and most at risk for HIV infection.

With unanimous consent, Mr. Chairman, I would like to submit the letters from researchers at the National Institutes of Health refuting congressional misinterpretations of their research on needle exchange.

Mr. Chairman, today's hearing is likely to be one of numerous congressional hearings designed to scrutinize public health programs that fall under the broad umbrella of harm reduction. I hope we can help to demystify that term today and examine these programs from an objective public health point of view, rather than through the often distorted lens of ideology.

I also hope that as the public debate on harm reduction advances, we will be united in our motivation to preserve and protect the health and life of injecting drug users, their sexual partners, their children and the broader community. If we do that, I believe we can build a political consensus of support for needle exchange that mirrors the scientific one, and many more lives may be saved as a result.

With that said, I would like to conclude by closing my opening statement, but not without first alluding to you for your leadership in introducing harm reduction legislation of your own that would make ripamorphine more readily available for the treatment of heroin addiction.

I am proud to say that I was an original cosponsor of the Drug Addiction Treatment Expansion Act in the last Congress, and I look forward to continuing to work with you on that legislation and other important drug policy and public health matters.

I look forward to the testimony of all our witnesses today, and I thank them for being with us. And with that, I yield back.

Mr. SOUDER. I would like to yield to Ms. Norton of the subcommittee for an opening statement.

Ms. NORTON. Thank you, Mr. Chairman.

Mr. Chairman, I find this hearing a little curious, particularly during your first hearing on reentry where there is a major problem in the United States that you focused us on, the entry of many offenders back into the population. This is a Federal hearing on harm reduction strategies that I have not seen advocated in the Congress of the United States. I know of no bill here for needle exchange programs. I do know that many in the States and cities have taken leadership on programs such as needle exchange, even medical marijuana, under the theory of Federal control and respect

for self-government and people's ability to know best what works in their own local communities.

If anything, the people of the District of Columbia deeply resent that we are the only jurisdiction in the United States that has not been able to use its own money to pay for a needle exchange, despite its proven effectiveness, according to the most respected scientific organizations in our country.

I notice a series of witnesses from foreign countries. I have a 3 p.m. appointment. I am going to rush back so that I can see what the relevance is of their experience to our own experience. I caution us all that the American experience in this very affluent country with drug addiction but—may be sui generis, but I would be glad to hear whether or not this experience is, in fact—can teach us something.

Mr. Chairman, I would like to take some exception with your memo and say, if you are going to include under harm reduction things like needle exchange, and then say, those who hold it are of the view that drug abuse therefore simply must be accepted by society and those who choose such lifestyles—and I am quoting from your memo and statement.

I just wish to take serious objection to the notion that to people, like the people on this panel, for example, who favor certain kinds of approaches—"harm reduction" is not a term with which I'm very familiar—accept the position that those who might use these approaches, choose these lifestyles, want these lifestyles; and we must accept the fact that we believe that we can do nothing with them.

And you go on to talk about, that they are incapable of changing and so forth. And that language is very, very objectionable and very, very misconstrued in this country—if you are going to write such stuff in black and white, that you say who it is that believes those things. Because by putting us all under the same rubric, it seems to me you do offense to the position of many of us.

For example, I am deeply opposed to heroin maintenance, marijuana maintenance. I'm not going to go back to the people in my district, left without any economy except the drug economy and say, I'll tell you what, I've got a good thing for you; we are going to maintain you on heroin, and this problem will be all over.

I don't know anybody in my community who is for needle exchange who would be for heroin maintenance or legalization of drugs. And I don't enjoy of being put in a barrel with the people, whoever they are, you are talking about.

We are not for harm reduction. We, in the District of Columbia, we in places like Baltimore and the great cities of the United States, like death reduction.

Needle exchange, to take the most prominent example, is a fairly new approach in our communities. When I was a kid growing up in the District of Columbia, there were people on heroin. They were small in number and in small sections of the city; and then it spread to other sections.

You say we should do all we can to break the bonds of addiction. What do you think we have been doing for decades now? And who is incapable of leaving addiction? Not the people who are addicted, but the government that has been incapable of finding the strate-

gies that could help people like the people I represent. And we ought to admit we have been incapable of it.

And when we find a strategy that reduces death in our community, and the best scientific minds in the United States—not in some developing country, in the United States—tell us this works, you betcha that's exactly what we ought to do. And when everybody from the CDC and NIH to the AMA and the Pharmaceutical Association of America tell me that, according to their studies, approaches like needle exchange reduce death in our country, that is who I am going to listen to.

If you have people from foreign countries that are on the level of these people in their scientific background and information, I will be very pleased to hear from them. But I thought we had the best science in the United States.

Finally, let me say, Mr. Chairman, we are—whatever people may think of addicts themselves, we are seriously concerned that women and children who have nothing to do with addiction are increasingly the victims of addiction because not only do we not put up the funds, do we not have the strategy to stop addiction in this rich country full of the best science in the world, but we have not even employed strategies to keep diseases like HIV/AIDS, Hepatitis B, Hepatitis C from being spread to parts of the community who had nothing to do with those—with that addiction.

Therefore, I think we've got to work together to save lives, and not put us all under some big rubric as if we all had our positions on these issues funneled in from across the seas or as if we could not in this country get ourselves together and figure how to prevent addiction and, two, how to keep addiction from spreading among the most vulnerable populations.

And if I may say so, Mr. Chairman, those populations tend to be disproportionately people of color, who very much resent being told that they belong with some strategy where people believe they are incapable of getting out of the lifestyle that they now find themselves in. They are not incapable; it is the government that has been incapable.

Mr. SOUDER. I would like to just—for committee order, we have had two straight statements that were more than double the length, and we need to make sure our statements are within reason. I am very generous, unlike most committees, in allowing everybody to do statements, but we have to stick tighter to the timeframe.

Mr. Waxman, thank you for coming. Did you want to make a statement? Mr. Waxman.

Mr. WAXMAN. Thank you very much, Mr. Chairman. The starting point for today's hearing is a critical public health problem, the harm substance abuse causes to our citizens, society and the world. In every American city and town, all across the world, illegal drug use destroys lives, tears families apart and undermines communities. Among the most lethal addictions is addiction to opiates. Heroin users can die from overdoses, die from overwhelming infections at injectionsites and die from heart damage. Many also die from infectious diseases.

A hearing to focus attention on the best public health strategy to fight this enormous toll of suffering would serve a very useful

purpose, but this does not appear to be that kind of hearing. Instead, this hearing appears designed to discredit needle exchange programs which exist in many U.S. cities and around the world.

This is not a tactic that will strengthen our Nation's substance abuse policy or improve our Nation's health. Needle exchange programs are well supported by scientific evidence and serve a number of important roles.

Mr. Chairman, you stated in your memo and in your opening statement that those who have that point of view are being ideological. I don't know who is being ideological. Let's be pragmatic and figure out what works, and the best way to figure out what works is to look at the evidence and look at the science and listen to the experts.

If you could show me these programs didn't work, then I would say that no one should want to continue them. But if we hear from experts that they do work, you should want to do whatever works. According to the scientific evidence, these programs don't just provide access to clean needles, they also educate drug users about the danger of sharing needles. And according to the National Institutes of Health, needle exchange is associated with reductions in the incidence of HIV, Hepatitis B and Hepatitis C in the drug-using population. Certainly that's an important objective.

One major study cited by NIH found that in 52 cities without needle exchange programs, HIV rates were increased. But where they had needle exchange, HIV rates dropped. I think that's an important pragmatic conclusion in countries like Russia where three-quarters of HIV transmission occurs through intravenous drug use.

Needle exchange programs can be one of the most effective interventions to stop the spread of this deadly disease. So if we see that using needle exchange stops the spread of disease like HIV/AIDS and Hepatitis, that's a good goal.

The second benefit of needle exchange programs is the access they provide to drug users themselves. Needle exchange programs can be the stepping stone to substance abuse treatment and ending drug use altogether. Mr. Chairman, your point of view seems to say that's what we want and using needle exchanges is preventing that from happening.

Well, what we are hearing from some of the people who are most familiar with the drug abuse program, exactly the opposite is the case. If they come in for a needle exchange program, that gives an opportunity for the health programs—health community to reach out to them to stop using drugs completely.

I am strongly opposed to drug use, but there is no evidence that needle exchange programs encourage drug use. To the contrary, the National Institutes of Health has stated, "A number of studies conducted in the United States have shown that syringe exchange programs do not increase drug use among participants or surrounding community members." I would be concerned if it increased drug use. But the experts who are looking at the operation of the programs in the real world tell us the opposite is true.

So this committee has a fundamental choice to make. Are we for using science to improve public health or are we for ignoring the science, ignoring the evidence and then stating we are going to fol-

low a course of action no matter what the costs may be? If that's the choice we make, that, to me, is putting ideology over science.

The issues at stake could not be more serious. HIV/AIDS kills 3 million people every year. Other infectious diseases, such as Hepatitis B and C, cause pain and suffering to millions more. We can approach these enormous health problems by asking our best public health experts what works and following an evidence-based approach. I think this is an important choice. We all come down on the side of health and we should see what could advance that goal.

I think it's worth listening to the witnesses on all sides and whatever they have to say. I'm not going to prejudge a witness before they even have something to say at a hearing and say that their views show them not to be credible. Let's hear what they have to say and cross-examine them.

One final point I want to make. I saw a copy of a letter sent by Chairmen Davis and Souder to Secretary of State Condoleezza Rice and USAID Director Andrew Natsios. These letters are a direct attack on needle exchange programs and they literally ask for every document in the State Department related to these programs. As their primary evidence for the dangers of needle exchange, they cite the March 2004, report of the International Narcotics Control Board, the drug agency of the U.N. They characterize this report as having sharply criticized needle exchange programs because such policies encourage drug use.

I read the U.N. report that Chairmen Souder and Davis cite, and I ask unanimous consent to insert them in the record. These letters mischaracterized them. In fact, regarding needle exchange, the report states that in a number of countries, governments have introduced since the end of the 1980's programs for the exchange or distribution of needles and syringes for drug addicts with the aim of limiting the spread of HIV/AIDS. The board maintains the position, the position expressed by it already in 1987, that governments need to adopt measures that may decrease the sharing of hypodermic needles among injecting drug abusers in order to limit the spread of HIV/AIDS. Rather than simply sharply criticizing the needle exchange programs, this explains that such an effort can save lives.

So I would point out that the report does not state, as the letter alleges, that needle exchanges encouraged drug use, nor does the report state, as the letter also alleges, that needle exchange programs violate international agreements. The United Nations, CDC and NIH, and all public health experts, recognize the vital role of needle exchange programs; and I think we should give a lot of attention to what they have to say.

I thank all the witnesses for coming today, and I look forward to their testimony.

Mr. SOUDER. Before proceeding, I would like to take care of a couple of procedural matters.

First, I ask unanimous consent that all Members have 5 legislative days to submit written statements and questions for the hearing record, and that any answers to written questions provided by the witnesses also be included in the record.

Without objection, so ordered.

Mr. WAXMAN. I had made a unanimous consent request to put in——

Mr. SOUDER. That's my second one. I ask unanimous consent that all exhibits, documents and other materials referred to by Members and witnesses may be included in the hearing record, including those already asked by Mr. Waxman and Mr. Cummings; and that the witnesses may be—and all these be included in the hearing record—in addition to the Members, anything the witnesses may refer to; and all Members be permitted to revise and extend their remarks.

Without objection, it is so ordered.

[The information referred to follows:]

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CHAIRMAN

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February 11, 2005

The Hon. Andrew Natsios
Administrator
United States Agency for International Development
Ronald Reagan Building
1300 Pennsylvania Avenue, N.W.
Washington, D.C. 20523-1000

Dear Mr. Natsios:

On January 5, 2005, staff of the Subcommittee on Criminal Justice, Drug Policy, and Human Resources requested documents related to USAID financing of the Open Society Institute/Kazakhstan as part of an ongoing investigation of the international "harm reduction/ drug legalization movement.

On the afternoon of February 8, 2005, Subcommittee staff participated in an interagency conference call with your staff and that of the State Department reiterating the urgency of providing these documents to the Subcommittee so that members and staff may be better prepared for a hearing scheduled for February 16, 2005.

On the morning of February 10, 2005, your staff notified Subcommittee staff by e-mail that no documents would be forthcoming with respect to the document requests initiated on January 5, unless the request were made in writing.

Consequently, we have decided to invite you to testify at an investigative hearing entitled, "Harm Reduction or Harm Maintenance: Is There Such a Thing as Safe Drug Abuse?" This hearing will be conducted by the Government Reform Subcommittee on Criminal Justice, Drug Policy, and Human Resources, on Wednesday, February 16, 2005 at 2:30 p.m. in Room 2154 of the Rayburn House Office Building.

"Harm reduction" is an ideological position that assumes certain individuals are incapable of making healthy decisions. Advocates of this position hold that dangerous behaviors, such as drug abuse, therefore simply must be accepted by society and those who choose such lifestyles -- or become trapped in them -- should be enabled to continue these behaviors in a less "harmful" manner. Often, however, these lifestyles are the result of addiction, mental illness of other conditions that

should and can be treated rather than accepted as normative, healthy behaviors.

To undermine drug laws, the drug legalization movement often acts in the guise of promoting the alleged public health benefits of "harm reduction."

But not everyone is fooled.

In its annual report released March 2, 2004, the International Narcotics Control Board -- the United Nations' drug agency -- sharply criticized "harm reduction" measures such as needle exchange programs and so-called "safe injecting rooms," because such policies encourage drug use and violate "article 4 of the 1961 Convention [which] obliges State parties to ensure that the production, manufacture, import, export, distribution of, trade in, use and possession of drugs is to be limited exclusively to medical and scientific purposes. Therefore, from a legal point of view, such facilities violate the international drug control conventions."

What troubles us is that at the same time that the International Narcotics Control Board was warning parties to the *Single Convention on Narcotic Drugs* (1961), the *Convention on Psychotropic Substances* (1971), and the *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* (1988) that government financing of "harm reduction" schemes may be in violation of those accords, it appears that USAID was financing a "harm reduction" agenda of its own.

On the afternoon of February 10th (after your staff declined to produce any documents until this letter was sent to you), White House Office of National Drug Control Policy Director John Walters testified before the Subcommittee on Criminal Justice, Drug Policy, and Human Resources. He was asked about USAID's involvement in two questionable projects. The first project was the 14th International Conference on Reduction of Drug Related Harm held in Chiang Mai, Thailand from April 6-10, 2003. In an e-mail invitation to the conference, it was promoted as having a "special emphasis on harm reduction advocacy... Harm reduction has to fight hard to get a hearing in the midst of all this and to challenge the new social order campaigns." The conference was sponsored by the International Harm Reduction Association, the Asian Harm Reduction Network, and cosponsored by the Centre for Harm Reduction and USAID.

The second project was the Asian Harm Reduction Network's 350-page, second-edition *Manual for Reducing Drug Related Harm in Asia* (which bears a USAID logo). USAID's role in the production of the manual is acknowledged inside the cover: "This publication was made possible through support provided by the Office of Strategic Planning, Operations, and Technical Support, Bureau for Asia and the Near East, U.S. Agency for International Development..." Included in the second chapter of the manual, "Rationale for Harm Reduction," are sections on "needle and syringe programs," "sales and purchasing of injecting equipment," and "removing barriers." In the fifth chapter, "Injecting Safely," are sections devoted to "sharing of injecting equipment," and "safe injecting."

ONDCP Director Walters responded that he was not aware of the "harm reduction" publication financed by USAID nor did he attend the USAID-cosponsored 14th International Conference on Reduction of Drug Related Harm. He added, however, that he has been aggressive in rebuking international organizations which promote "harm reduction." He pledged to look into this regrettable matter and report back to the Subcommittee.

This raises a serious question which we are asking you to answer: Before USAID started underwriting "harm reduction" programs, did anyone on your staff attempt to seek advice from White House Office of National Drug Control Policy Director John Walters, former Attorney General John Ashcroft, or anyone else in the President's cabinet?

We also request that USAID provide the Subcommittee on Criminal Justice, Drug Policy, and Human Resources all documents related to any USAID financing or any other support of "harm reduction" or drug legalization. We also request all documents related in any way to USAID involvement in, financing of, or support for programs also participated in by the Soros Foundation, Open Society Institute, Open Health Institute, International Harm Reduction Association, Asian Harm Reduction Network, Centre for Harm Reduction, and Harm Reduction Coalition. We also request that all documents related to USAID-financed "harm reduction" programs identified in the electronic file created by the office of Senator Sam Brownback (and which was provided to your staff earlier this week) be given priority for their production and transmittal to the Subcommittee on Criminal Justice, Drug Policy, and Human Resources. For your reference, an index of the Brownback document is attached.

Given the brevity of time before the February 16 hearing, and given the large volume of documents we expect USAID to provide the Subcommittee prior to that date relating to USAID-financing of the international "harm reduction"/drug legalization movement, we request that these documents be hand-delivered to the Subcommittee by your staff on CD-ROM in an electronically searchable text format that employs Microsoft Word or Adobe Acrobat.

The Subcommittee will make recommendations concerning potential legislation based upon the testimony and supporting documents given.

At the hearing, you will be afforded an opportunity to verbally summarize your prepared statement. Your written statement for the record may be of any length, but please limit oral testimony to no more than five (5) minutes to afford substantial time to member questions.

In accordance with this Subcommittee's procedure, please send the written testimony via electronic mail to malia.holst@mail.house.gov by 3:00 pm on February 15, 2005. You are also required to provide one hundred (100) copies of the prepared statement at the hearing.

Thank you for your contribution to this important Congressional hearing. We look forward to your valuable insights. If you have any questions, please contact the clerk of the Subcommittee, Malia Holst, at (202) 225-2577, fax 225-1154.

Sincerely,

Tom Davis
Chairman
Committee on Government Reform

Mark E. Souder
Chairman
Subcommittee on Criminal Justice,
Drug Policy and Human Resources

cc: The Hon. Condoleezza Rice

Attachments: Definitions
Brownback index

ATTACHMENT

1. The term "documents" is to be construed in the broadest sense and shall mean any written or graphic material, however produced or reproduced, of any kind or description, consisting of the original and any non-identical copy (whether different from the original because of notes made on or attached to such copy or otherwise) and drafts and both sides thereof, whether printed or recorded electronically or magnetically or stored in any type of data bank, including, but not limited to, the following: correspondence, memoranda, records, summaries of personal conversations or interviews, minutes or records of meetings or conferences, opinions or reports of consultants, projections, statistical statements, drafts, contracts, agreements, purchase orders, invoices, confirmations, telegraphs, telexes, agendas, books, notes, pamphlets, periodicals, reports, studies, evaluations, opinions, logs, diaries, desk calendars, appointment books, tape recordings, video recordings, e-mails, voice mails, computer tapes, or other computer stored matter, magnetic tapes, microfilm, microfiche, punch cards, all other records kept by electronic, photographic, or mechanical means, charts, photographs, notebooks, drawings, plans, inter-office communications, intra-office and intra-departmental communications, transcripts, checks and canceled checks, bank statements, ledgers, books, records or statements of accounts, and papers and things similar to any of the foregoing, however denominated.

2. The term "supporting" means anything that constitutes, contains, embodies, identifies, deals with, or is in any manner whatsoever pertinent to that subject, including but not limited to records concerning the preparation of other records.

HARM REDUCTION SUPPORT BY USG AGENCIES

- Tab 1 contains an announcement from the Asian Harm Reduction Network's web site that announces USAID support for the *2nd edition Manual for Reducing Drug Related Harm in Asia*. It acknowledges that the manual was made possible through support provided by the Office of Strategic Planning, Operations, and Technical Support, Bureau of Asia and the Near East, USAID.

  - The 350 + page manual contains chapters such as *Rationale for Harm Reduction* (covering needle and syringe programs, drug substitution programs, and sales purchasing of injecting equipment); *Injecting Safely* (covering supply of sterile equipment, safer injecting, etc.); and *Drug Use and Substitution* (covering drug substitution).

  - Tab 1 also contains an article from Allan Clear of the Harm Reduction Coalition which boldly announces "the U.S. government finally funds a harm reduction manual" and "USAID partially paid for the manual and then bought some."

- Tab 2 contains an announcement for the *14th International Conference on Reduction of Drug Related Harm* in Chiang Mai, Thailand from April 6-10, 2003. It lists USAID, Asian Harm Reduction Network, and International Harm Reduction Association among conference sponsors.

- Tab 3 contains web site listings for USAID support of harm reduction initiatives throughout Eastern Europe. One listing notes that the *Central and Eastern European Harm Reduction News Digests* are funded via USAID contracts.

- Tab 4 contains an announcement on the web site of Population Services International (PSI) of a five-year $4.3 million contract for a demand reduction program in Central Asia.

  - In addition to PSI, the list of demand reduction consortium partners includes the Open Society Institute in New York and the Soros sister foundations in Kazakhstan, Uzbekistan, and Tajikistan.

- PSI notes that harm reduction will remain a key component of the Central Asia portfolio.

- **Tab 5** contains a presentation by the USAID Director of the Office of Health and Population (USAID Regional Mission for Central Asia) on the Drug Situation in Central Asia and USAID Response to Drug-Related HIV/AIDS Epidemic.

  - The presentation notes that USAID has "established an integral regional program which includes support for harm reduction and ancillary services."

  - The presentation also notes that USAID "has also supported two study tours for governmental officials from CAR to model harm reduction and outreach activities."

- **Tab 6** contains selected pages from the *USAID/CAR Strategy on HIV/AIDS Prevention in Central Asia (2002 - 2004)*. The strategy contains many sections supportive of harm reduction and needle exchange programs, giving much credit to the Soros Networks and their Sites of Excellence.

  - Page 16 notes that "an important role is played in the region's HIV/AIDS prevention efforts by the Soros Foundation/Open Society Institute, which supports harm reduction programs at needle exchange sites."

  - On page 16, USAID states that "it is important to mention controversial aspects of needle exchange programs due to the belief among prominent U.S. lawmakers that needle exchange programs may encourage drug use. For instance, because of such controversy, USAID is prohibited from providing direct support for such programs."

  - USAID does not indicate anywhere in their strategy document that they support this U.S. policy restriction. Instead, USAID attributes the policy to "prominent U.S. lawmakers" and label the policy as "controversial." This gives the reader an impression that USAID does not support the current U.S. policy.

- USAID goes on to say (page 17) that "despite such controversy the overall effectiveness of harm reduction programs is well established." They cite other organizations (including USG agencies national Institutes of Health and CDC) that advocate "needle exchange and substitute treatment for opiate addiction."

- Furthermore, on page 17 USAID states that "existing needle exchange sites offer an important opportunity to supplement harm reduction programs with other public health initiatives."

- **Tab 7** contains selected pages from the USAID document entitled *USAID/CAR Expanding Efforts on HIV/AIDS Prevention in Central Asia*. This document (like the one in Tab 6) contains many sections supportive of harm reduction and needle exchange programs.

  - Page 9 mentions that USAID sponsored a *CAR/Vilnius Harm Reduction Study Tour* in April 2001. This study tour exposed government officials of 5 CAR region countries to model harm reduction activities being implemented in Vilnius, Lithuania.

  - On page 22, USAID notes that the situation in Central Asia "has necessitated the development of a creative blend of educational and alternative therapeutic approaches, including the removal of restrictions on the purchase of needles and syringes, needle and syringe exchange programs, proper use of bleach for disinfecting drug injection equipment." This statement indicates that USAID was supportive of Central Asian countries changing their drug policies (which were consistent with U.S. policies) to accommodate needle exchange and other harm reduction programs not recognized by U.S. policy.

- **Tab 8** contains articles from the *International Harm Reduction Network Fall 2002 Newsletter* that address the USAID Central Asian project addressed in Tabs 6-7. Tab 8 also contains selected pages from a power point presentation by an USAID officer in Central Asia that documents USAID support of needle exchange programs for vulnerable youth as young as 15 years old.

- The newsletter notes that USAID and the Open Society Institute (OSI) launched a joint prevention program in the CAS region with the project secretariat established under the umbrella of the Soros Foundation in Kazakhstan.

- The newsletter also notes that "before the partnership, OSI implemented 18 harm reduction projects in Central Asia and now, with support from USAID and other partners, the total number of interventions should reach 34-38 by the end of 2003."

- The power point presentation outlines support for needle exchange programs for vulnerable youth and the comparative advantage of Soro's Network in "harm reduction through needle exchange programs."

- **Tab 9** contains information from The Centre for Harm Reduction and Asian Harm Reduction Network web sites that outline USAID support for harm reduction programs in Indonesia. The AHRN web site notes that a local network of NGOs through USAID support is able "to create an enabling environment to the implementation of harm reduction programs."

  - Tab 9 also contains a statement from the Indonesian Minister of Health at the 3rd Biregional Partners' Meeting on Harm Reduction among Injecting Drug Users. He notes that Indonesia has been "fortunate to have close technical guidance from very strong partners such as USAID, the Center for Harm Reduction, and the Asian Harm Reduction Network." Among the programs initiated with their joint technical and financial support are needle and syringe programs.

- Tab 10 contains a USAID country profile from their Hanoi, Vietnam office that outlines USAID support "for the development of improved rehabilitation and harm reduction policies for injecting drug users." It also notes that USAID established a regional HIV/AIDS office in Bangkok, from which future HIV/AIDS efforts in the region will be conducted.

- Tab 10 also contains sections from the 2004 INCSR reporting cable from Vietnam that highlights USAID's role in fostering harm reduction and needle exchange in Vietnam. Paragraph 96 of the cable notes that Vietnam's *National Strategy on HIV/AIDS Prevention and Control* "gives a green light to harm reduction and supports expansion of clean needle and syringe programs and condom promotion." Paragraph 103 notes that USAID provided assistance to Vietnam on the development of this policy/strategy and its ordinance review.

- **Tab 11** contains a project outline from USAID contractor, PSI, on their USAID-funded HIV/AIDS project in Yunnan Province, China. The document notes that the project encompasses core services aimed at harm reduction such as "needle and syringe safety and hygiene programs."

  - Tab 11 also contains an article from the April 2004 Asian Harm Reduction newsletter that outlines USAID support for "needle and syringe safety and hygiene programs" in Yunnan.

- **Tab 12** contains project summaries from USAID contractor, PSI, on their USAID-funded HIV/AIDS projects in Russia, the Balkans, and Central Asia. Even though the document notes that clean needles will be *independently funded*, the message conveyed by these project descriptions is clear: that needle exchange programs are positive examples of harm reduction options for HIV/AIDS programs.

- **Tab 13** contains a letter from the NIDA Director to the International Harm Reduction Association (published on IHRA's web site) that appears to indicate NIDA support for needle exchange.

- **Tab 14** contains an article from the Narco News Bulletin that summarizes a November 15, 2004 article in the leading Sao Paulo, Brazil newspaper. It notes that President Lula will sign a decree to "decriminalize drug use and to open 250 safe drug use centers across the country in 2005." The Health Ministry "will be charged with supporting the centers and make harm reduction the Law of the Land." The decree will also "create the role of *Harm Reduction agent*, a health professional responsible for providing sterilized syringes.

- Tab 15 contains an Activity Data Sheet from USAID that summarizes a Brazil HIV harm reduction project from 1998-2003. It states that USAID has "aimed to strengthen local institutional capacity to plan, implement and evaluate STD/HIV programs." The project provides USAID-funded technical assistance and workshops on "harm reduction for injecting drug users" to the Ministry of Health, in addition to state and municipal health secretariats.

  - USAID notes that it implements these activities through PVOs that include Family Health International (FHI) and Population Services International (PSI), two organizations identified in previous tabs as implementing numerous harm reduction projects for USAID worldwide.

  - USAID also notes that it implements these Brazilian activities through Pathfinder International.

- Tab 16 contains Fact Sheets from Pathfinder International that summarize its USAID-funded work in Brazil (e.g., intervention with drug users). They note collaboration with the *Brazilian Association of Harm Reduction Agents (ABORDA)* and the *National Association for Harm Reduction (REDUC)*.

  - Pathfinder notes that it is "currently supporting ABORDA and REDUC in the definition and implementation of their respective strategic plans." Activities include "training community harm reduction agents in counseling."

  - From the information provided in Tabs 15-16 it appears that USAID helped lay the groundwork for the Brazilian Ministry of Health and its state and municipal counterparts to lobby and advocate for radical harm reduction initiatives that counteract the UN conventions.

- Tab 17 contains a paper by the Canadian HIV/AIDS Legal Network presented at a satellite AIDS conference in Bangkok in July 2004. Both the paper and conference received funding from USAID. The paper, entitled "Regime Change?: Drug Control, Users' Human Rights and Harm Reduction in the Age of AIDS," contains negative criticism of the current U.S.-sanctioned global drug policy and provides recommendations for over-turning policies and positions advocated by the USG, UNODC, and INCB.

  - Pages 6, 15, 16 and 30 criticize the "prohibitionist" approaches and "ideology" of the INCB, UNODC, and major donor countries such as the United States, Italy, Sweden and Japan.

  - Page 32 calls for "Regime Change" and proposes ideas and strategies to reform the three UN drug conventions at the 2008 UN General Assembly. (Note: The current USG policy and position is to support and maintain these conventions. End Note)

  - Page 36 provides options for advancing harm reduction approaches, while resolving obstacles posed by "the global drug prohibition regime." It recommends several mechanisms for implementing harm reduction measures that are "either in contravention of a drug control treaty or are not politically feasible." One such measure advocates "denounce (i.e., withdraw from) one or more treaties."

  - Page 37 contains the following criticism of the United States: "Then there is the USA, the principal force promoting a global prohibitionist regime, which has a zero tolerance position rooted in Christian fundamentalism and an aspiration to world leadership, leading it to blur the drugs issue with other foreign policy and security agendas."

  - Page 38 addresses the potential repercussions of the denunciation mechanism of withdrawing from one or more conventions. It states that the U.S. and its allies would provide "political and economic Sanctions" to a potential "rogue" nation contemplating the denunciation mechanism. In addition, it states the nation "would have to be prepared to face not only US-

UN condemnation but also the threat of application of some form of U.S. sanctions."

- Page 39 advocates governments from like-minded countries "speaking out and joining forces with UN bodies that lie outside the core UNDCP-UNODC-INCB triangle." (Note: This "triangle" supports the U.S. agenda at CND and UN General Assembly meetings. End Note.)

- Page 44 recommends the UNODC, UNAIDS and WHO to "submit a report to the 2005 session of the CND that includes strong support for harm reduction measures." (Note: This is not the official USG position. End Note.)

- **Tab 18** contains a reporting cable from U.S. embassy Tashkent that describes the USAID NGO outreach program for HIV/AIDS in Uzbekistan. The cable highlights the USAID-funded Condom Social Marketing Campaign, including events such as "Disco Condom Night" and stage skits such as "Romeo and Juliet" where the topics of contraceptives, HIV/AIDS, and the importance of clean needles are raised in an entertaining way.

  - These programs directly conflict with the "abstinence-based prevention education" approach advocated by the President at the swearing-in ceremony for the Global AIDS Coordinator on July 2, 2003 (see Tab 18) and Federal prohibitions against needle exchange.

Mr. SOUDER. I also would like to insert into the record the International Narcotics Control Board section on measures to reduce harm that Mr. Waxman just referred to, the section on HIV. There it said they regretted that the discussion on harm reduction has diverted attention from primary prevention and abstinence treatment. They also, in there, said it should not be carried out at the expense of other important activities—reduce the demand.

It also criticizes those who opt in favor of drug substitution and maintenance. It says facilities have been established where injecting drug abusers can inject drugs that they have acquired illicitly. The Board has stated on a number of occasions, including its recent annual report, that the operation of such facilities remains a source of grave concern; reiterates that they violate the provisions of international drug control conventions. It also says, in conclusion of this section, that harm reduction measures and their demand reduction strategies carefully analyze the overall impact of such measures which may sometimes be positive for an individual or for a local community while having far-reaching negative consequences at national and international levels.

So there are multiple methods of interpretation of different sections, but as it relates to harm reduction, that report was pretty clear. And I know—because of our tremendous respect for each other, we have been going back and forth with letters, and I know we have a deep difference of opinion, but we need to be careful about how we mischaracterize each other's letters. And I believe that was a mischaracterization of our interpretation of the letter. We disagree on a number of the scientific facts and backgrounds on these reports, but I don't think anybody is deliberately trying to distort a report, as was implied in there.

Mr. WAXMAN. I just want to point out that I don't think that report stands for the characterization that you and Chairman Davis made from that report. And we will let the documents speak for themselves.

I am not suggesting that you did anything intentionally wrong, but I think you were certainly mistaken in your interpretation of it. I think many U.N. reports and statements support needle exchange as part of a comprehensive approach to drug abuse, and I think putting it in that context is that clarification.

Mr. SOUDER. If the witnesses on the first panel would come forward. We moved Dr. Peter Bensinger to the first panel because we got such a late start, and with our long opening statements. If you could come forward and remain standing, it is the tradition of this committee, as an oversight committee, it is our standard practice that all witnesses testify under oath.

If you each raise your right hand.

[Witnesses sworn.]

Mr. SOUDER. Let the record show that each of the witnesses responded in the affirmative.

And you can go ahead and take a seat. We appreciate that. I will introduce you each as your turn comes up, and we will go left to right. And Dr. Peter Bensinger is president and CEO of Bensinger, Dupont & Associates. Thank you for coming today.

STATEMENT OF PETER BENSINGER, PRESIDENT AND CEO, BENSINGER, DUPONT & ASSOCIATES

Mr. BENSINGER. Thank you very much, Mr. Chairman, members of this committee, some of whom I had the opportunity of appearing before almost 25 years ago when I served as the Administrator of the U.S. Drug Enforcement Administration under Presidents Ford, Carter and Reagan. And I commend the Chair and the Members for shedding light and hearing evidence and testimony and, in my case, both personal impressions and anecdotal situations dealing with harm reduction.

The theory that accepting illegal drug use, by accepting that the injection of heroin is preferable to discouraging such use by sanctions, by education, by prevention, by treatment, by law enforcement, I think is a mistake. I felt it was a mistake when I served in the role as Administrator.

I went to Zurich, Switzerland. I saw the needle exchange park. It was a disaster. It increased crimes around the site, increased addiction, increased the problems of health.

The Vancouver study was referenced, and I'm not an epidemiologist or research scientist, but the data of 2003 indicates that HIV prevalence was 35 percent, that the incidence of injection use for Hepatitis C was 82 percent among users, and that the rates went up since the needle exchange program got started.

I'm sympathetic, and Congressman Waxman and I have exchanged views over the decades, and I respect his long-time experience in the health care field and the legislation which he has promulgated. But I don't agree with him, and I say so respectfully, and truly with respect, that the needle exchange is not going to prevent diseases.

See, I think heroin addiction—I believe this is a disease, the addiction itself. And what's happening is, the needle exchange programs are enabling people to continue on with unhealthy, illegal and, in some cases, deadly behavior.

I don't think the message of harm reduction and needle exchange is as effective as having consequences for that use, having treatment for that use, having deterrence for that use, having education for that use. Any behavior that is destructive to health and safety must be discouraged with consequences, Mr. Chairman, not enabled without them.

I also have worked with the International Control Board for many years. Clearly, the INCB and the psychotropic conventions on drugs establishes that the possession and purchase of drugs for non-medical use represents a criminal offense. That hasn't changed. We haven't amended that treaty, and I would doubt if the International Control Board would like to sanction needle exchange rooms any more than they sanctioned opium dens back when these laws went on the books.

In terms of my own personal experience—and I will complete my testimony because there are other witnesses to give their own point of view. But in the 1970's when I took on the assignment at DEA, we had 2,000 heroin overdose deaths a year. The white paper on drug abuse in 1975, which President Ford, Nelson Rockefeller and Congress adopted, put this as our No. 1 priority. Heroin overdose deaths went down to 800 a year from 2,000 in 4 years—without

needle exchanges, but with the high priority of law enforcement and treatment and cooperation with Mexico.

In the 1980's, Nancy Reagan, with the help of Congress and the American public and parent group movements, embraced the "Just Say No" policy. And the cocaine use, which in the mid-80's was 4.8 to 4.9 million regular users, every–30-day users, of cocaine and crack went down to less than 2 million today. And that wasn't through making a conversion pipe from crack to a safer form of cocaine; that was by establishing clear sanctions and enforcing the law and providing a lot of good education and the benefit of the parent group movements that did want their kids to stop.

I used to be director of corrections and started the first drug abuse treatment program in the State penitentiary system in Illinois back in 1970. And I'm sympathetic to wanting to get people who have drug abuse into treatment and off heroin, methadone, whatever type of addiction and drug they're used to.

But in Sweden, they took a clear approach; they said, "We are going to enforce the laws." In Australia, they took an approach that said, "We are going to decriminalize marijuana and adopt harm reduction." And my written testimony, offered for the record, describes the comparative findings of lifetime drug use.

In Sweden, 16 to 29-year-olds were 29 percent; Australia 52 percent. Use in the previous year: 1 out of 50 in Sweden; 1 out of 3 in Australia. Heroin users, under age 20: Sweden, 1½ percent, Australia, five times that amount. Drug deaths per million: Sweden, 23; Australia, 48. Drug offenses per million: Sweden was three times the number of Australia because they did arrest people.

But the result in terms of the health consequences would reflect that Sweden was more successful in curbing the adverse effects of drug abuse by confronting it head on.

I would conclude my testimony with a sense of perspective, I guess gained over 35 to almost 40 years in public service from the Youth Commission to Corrections to Interpol and to the DEA under three different administrations. I don't think there is anything wrong with treatment, education and prevention. I don't think we have done enough of it. But I don't think the answer is to say, "Continue use and abuse, continue to be addicted; here are some needles to break the law."

Thank you, Mr. Chairman and members of the committee.

[The prepared statement of Mr. Bensinger follows:]

Testimony by Peter B. Bensinger
"Harm Reduction or Harm Maintenance: Is There a Such Thing as Safe Drug Abuse?"
February 16, 2005
Subcommittee on Criminal Justice, Drug Policy and Human Resources

As a former Administrator of the U.S. Drug Enforcement Administration, my views on the issue of so called "Harm Reduction" are based on first hand experience leading the nation's leading drug law enforcement agency under three different Administrations (Presidents Ford, Carter, and Reagan), as Director of Corrections for the State of Illinois, as Chair of The Criminal Justice Information Authority in Illinois, and as CEO of a company Dr. Robert DuPont and I formed dealing with the issue of drugs in the work place. Most recently, our company has been involved in Risk Monitoring Programs for prescription drug abuse and diversion.

The theory that by accepting drug use that is illegal and unhealthy, is preferable to discouraging such use by sanctions, prevention, education, and treatment is a proposal that is without science, without proven results, in violation of international treaties, and simply invokes the wrong message with the wrong tactics. It has been tried in Australia with disastrous results and in Vancouver Canada with a heroin abusing population that has skyrocketed. When sanctioned needle exchanges took place, the expectation was that HIV would drop, the opposite has occurred. The Vancouver drug epidemiology report of July 2003 indicated a 35% HIV prevalence "with one of the highest incident rates reported worldwide." The HIV prevalence before this program in the late 1980's was 1-2%. The Vancouver Drug User Injection Study (VIDUS) has an 82% prevalence of Hepatitis C. Both HIV and Hepatitis C rates have increased in Vancouver since the establishment of the Needle Exchange Program. The data on this program clearly indicates that needles were re-used, that infection rates went up, that heroin dependency went up ... this was true in Montreal, in Seattle and in Glasgow. Sweden took a different approach and the results of drug use there and in Australia are worth studying. Australia decriminalized cannabis and in the 1990's embraced harm reduction. Sweden took a different approach...here are some comparative findings: lifetime prevalence of drug use for 16-29 year olds ...Sweden-9%, Australia-52% ... use in the previous year ... Sweden-2%, Australia-33%. The estimated dependent heroin users of ages under 20...Sweden-1.5%...Australia-8.2%. Drug related deaths per million population ... Sweden-23, Australia-48 ... drug offenses per million, Sweden-3100, Australia -1000. Average months in prison, Sweden -20, Australia-5. AIDS cases per million, Sweden-150, Australia-330. Australia in the late 1990's and early 2000's was taking its nation in the wrong direction...more deaths, more dependency, more AIDS, more drug use. Sweden was more successful in curbing the adverse effects of drug abuse by confronting it head on.

Harm reduction is not a science-based movement ... it is political. Demand reduction, law enforcement, and treatment do work. The "Just Say No" program in the mid-1980's saw drug use decline from 22 million regular users to 17 million while our population was rising. A major enforcement effort aimed at Mexican heroin in the mid-1970's saw heroin overdose deaths decrease from 2000 per year to 800 by 1980. Recognition of the severe hazards of crack and cocaine use saw cocaine and crack use decrease dramatically in the past 20 years from 5 million users to less than 2 million regular users.

The message of harm reduction is irresponsible ... increasing help is far more effective than decreasing harm. Research - not rhetoric is needed. The notion that reducing consequences of harmful, unhealthy behavior is more effective than deterring it is like saying its better to enable students to smoke pot or crack than trying to prevent them from doing that. Our country, parents and students, teachers and coaches need clear signals ... behavior that is destructive to health, safety and others should and must be discouraged with consequences ... not enabled without them.

Mr. WAXMAN. Mr. Chairman——

Mr. MCHENRY [presiding]. We are actually holding off with questions.

Mr. WAXMAN. I have to leave and I wanted to say, Mr. Bensinger—with all due respect, he characterized what he thought were my views.

I wasn't giving my views. I was giving the views of the NIH and CDC and other agencies, and I put those views out. I stand to listen and see what works, and I wanted to put that out and to express my regrets that I have a conflict in my schedule.

Mr. MCHENRY. The Chair thanks the ranking member of the full committee. And as a freshman Member, I make sure I thank my senior Members because I would like to be here again.

Thank you, sir, for your testimony.

Mr. Bahari.

STATEMENT OF ZAINUDDIN BAHARI, CEO, HUMANE TREATMENT HOME, MALAYSIA

Mr. BAHARI. Thank you, Mr. Chairman. Unlike my esteemed fellow panelists, this is the first time that I'm giving testimony to this committee. I thank you for this opportunity to inform the committee on my program and my views on harm reduction.

I'm from Malaysia. I once was in the Civil Service, and I headed my country's agency that is responsible for managing and reducing the drug abuse problem. In that capacity, I was also involved in planning and implementing various action programs dealing with prevention, treatment and rehabilitation. I'm now retired and am running my own facility for the treatment of drug dependence.

I'm also involved in some of the training programs being organized by the Drug Advisory Programme of the Colombo Plan for the South and East Asia region. In this capacity, I'm presently involved in organizing and implementing faith-based programs for both prevention as well as treatment of drug dependence.

I'm a Muslim, and Islam is a major religion in South and East Asia. From an Islamic perspective, drugs are a form of intoxicants and all intoxicants are forbidden to all Muslims. This observation is also a mandatory requirement to all the other major religions in South and East Asia. In cognizance of this, harm reduction programs, which implies the continued consumption of drugs, is unacceptable. Treatment programs must be directed toward the goal of complete abstinence.

Needle exchange, safe injectionsites and heroin maintenance programs are delusions which cannot bring about the results that they are supposed to. A drug addict is an undisciplined person who observes no rule or regulations. His own life is regulated by the need to satisfy his craving, and in attempting to achieve this, he breaks all norms of civilized behavior.

Can we realistically expect him to bring his old needle to exchange for a new one? He will be going to the needle exchange site only to get new needles. And who is to regulate and supervise to ensure that the needle is not shared in his intoxicated state? Can we seriously believe that he would be worried about contaminated needles?

I have heard statements to the effect that needle exchange is effective as part of a comprehensive approach to drug abuse. Now, this implies that in an environment where the approach is not comprehensive, needle exchange will be a failure. There are very few countries that I have come across that have such a comprehensive approach to drug abuse. They will take it in parcels and needle exchange as part of a program without having a comprehensive approach in terms of controlling and maintaining drug abuse.

The same applies to the methadone maintenance program. Free heroin is not ultimately translated into non-heroin use. Addicts who have been in a methadone maintenance program admitted to continued heroin use. Methadone maintenance programs can only be successful in a fully controlled environment. This implies indefinite incarceration of the addict and renders the whole exercise futile.

Admittedly, there are NGO's in South and East Asia that appear to be supportive of harm reduction programs. This is only because they receive financial support from certain interests in return for which we have to support the program.

Sweeping statements have been made by advocates of harm reduction on the failure of drug treatment programs. On closer examination, one finds that most of such statements came from non-practitioners. While it is true that some treatment programs have been failures, it is only because those programs are structurally weak.

Many facilities with sound and pragmatic programs show significant successes in the treatment programs. Structurally weak programs can be strengthened through further training. There is no reason to abandon existing treatment programs.

Let me conclude my testimony by reiterating that treatment works albeit not without some difficulties. Harm reduction, whether it be needle exchange, methadone maintenance or injectionsites, encourages an addict to continue with a lifestyle that ultimately brings no benefit to either himself or to society.

Thank you.

[The prepared statement of Mr. Bahari follows:]

Statement to the House Government Reform Committees Subcommittee on Criminal Justice, Drug Policy and Human Resources on Harm Reduction

By

Zainuddeen Bin Abdul Bahari
Chief Executive Officer
Humane Treatment Home
February 16, 2005

Mr. Chairman, thank you for this opportunity to inform the Committee on my program and my views on harm reduction.

My name is Zainuddeen Abdul Bahari of Malaysia. I once headed my country's anti-narcotics agency which was responsible for the formulation of policies on reducing and managing the drug abuse problem. I was also involved in planning and implementation of programmes for both prevention, treatment and rehabilitation of drug dependants.

I am now retired and am running a facility for the treatment of drug dependants. I am also involved in some of the training programmes organized by the Drug Advisory Programme of the Colombo Plan for the South and East Asia region.

We are presently involved in organizing and implementing faith-based programmes for both prevention and treatment. I am a Muslim and Islam is a major religion in South and East Asia. From an Islamic perspective, drugs are a form of intoxicant and all intoxicants are forbidden to all Muslims. This observation is also a mandatory requirement to all the other major religions in South and East Asia.

In cognizant of this, harm reduction programmes, which implies the continued consumption of drugs, is unacceptable. Treatment programmes must be directed towards the goal of complete abstinence.

Needle exchange, safe injection sites and heroin maintenance programmes are delusions which cannot bring about the results that they are supposed to.

A drug addict is an undisciplined person who observes no rule or regulations. His whole life is regulated by the need to satisfy his craving and in attempting to achieve this he breaks all norms of civilized behaviour.

Can we realistically expect him to bring along his old needle to exchange for a new one. He would be going to the needle exchange site only to get new needles and who is to regulate and supervise to ensure that the needle is not shared. In his intoxicated state would he be worried about contaminated needles?

The same applies to the methadone maintenance programme. Free heroin is not automatically translated into non-heroin use. Addicts who have been in methadone maintenance programme admitted to continued heroin use. Methadone maintenance programmes can only be successful in a fully controlled environment. This implies indefinite incarceration of the addict and renders the whole exercise futile.

Admittedly there are NGO's in South and East Asia that appear to be supportive of harm reduction programmes. This is only because they receive financial support from certain interests in return for which they have to support the programme.

Sweeping statements have been made by advocates of harm reduction on the failure of drug treatment programmes. On closer examination one finds that most of such statements come from non-practitioners.

While it is true that some treatment programmes have been failures, it is only because those programmes are structurally weak. Many facilities with sound and pragmatic programmes show significant successes in their treatment programmes. Structurally weak programmes can be strengthened through further training; there is no reason to abandon existing treatment programmes.

Treatment works albeit not without some difficulties.

Mr. SOUDER [presiding]. Thank you. And thank you again for coming so far to give testimony. And anything you heard in my opening guidelines to the committee, if you want to give us any additional documents and materials for the record on what your program does and how successful it has been, I would appreciate that.

I am sure we're going to mispronounce names. So as I say your name, when you start, you can say it correctly so I can get it right the second time.

Tay Bian How is director of the Drug Advisory Programme of the Colombo Plan Secretariat in Sri Lanka.

STATEMENT OF TAY BIAN HOW, DIRECTOR, DRUG ADVISORY PROGRAMME, THE COLOMBO PLAN SECRETARIAT, SRI LANKA

Mr. HOW. Thank you, Mr. Chairman, for the opportunity to address the committee on harm reduction.

First, allow me to introduce myself and the organization that I represent. My name is Tay Bian How, the director of the Drug Advisory Programme of the Colombo Plan.

The Colombo Plan Drug Advisory Programme was established in 1973 as the first regional intergovernmental organization to address the issue of drugs in Asia and the Pacific region. The mandate was the task of consulting member countries on the economic and social implication of drug abuse, particularly encouraging member countries to establish national drug secretariates, advising member countries, adopting some policies, strategies and programs to control the problems relating to drug abuse and organize training activities to enhance the human resource development in member countries to tackle the drug problem. Currently, we have 25 member-countries spanning the whole of Central Asia, South Asia, Southeast Asia, East Asia and the Pacific.

The funding of the Colombo Plan comes from voluntary contributions of member countries. Since its inception, the Drug Advisory Programme has implemented more than 200 international, regional, and national conferences, seminars and training programs. More than 6,500 officers from both governments and NGO's from all member countries have been trained in the field of supply reduction, law enforcement, legislation, crime prevention, treatment and rehabilitation.

Among the numerous achievements of the Colombo Plan, particularly in relation to harm reduction, we are particularly proud of our work for the past 2 years in Afghanistan, Pakistan and other predominantly Muslim communities in the region. We have been supporting Muslim-based antidrug programs, civil society organizations in Central Asia and South/Southeast Asia to reduce drug consumption that provides funding for terrorist organizations and reduce the recruitment base of terrorist organizations.

The Colombo Plan developed a series of faith-based demand reduction seminars. In March 2002, in Malaysia, more than 400 Muslim faith-based antidrug programs from Asia and the Middle East have attended this initial seminar. Since then, the funding from the U.S. Government has continued the seminar series throughout Southeast Asia.

As a result of one of these seminars, the Afghan mullahs, particularly led by the Deputy Minister of Hajj and Agwaf, the Min-

istry of Religious Affairs, requested that the Colombo Plan train all the mullahs in the country. We planned to train about 500 to 800 of their fellow mullahs in Afghanistan this coming May.

At the second regional seminar just last December, particularly in Malaysia, also funded by the Malaysian prime minister's economic department, once again the representative from the Ministry of Hajj and Augaf requested for the training and also assistance with establishing drug treatment outreach centers in their mosques throughout Afghanistan.

Likewise, leading Indonesia mullahs also attended training, and there are plans to collaborate on providing drug prevention and outreach services to our mosques and madrassahs in the country.

The Colombo Plan is also establishing singular outreach centers in Muslim regions of southern Philippines, southern Thailand, Malaysia and Pakistan.

With regards to harm reduction, we are very concerned about these efforts that we are working over the years that certainly will undermine the achievements of the Colombo Plan. Harm reduction will undermine the root efforts of the Colombo Plan over the years.

First, harm reduction, particularly needle exchange programs are against the national policies of Asian countries. Many Asian countries are not endorsing harm reductions. In addition there are not many injecting drug users in the region. Of all the drug users, they either are doing chasing or not needle exchange.

For example, in Afghanistan, we introduce a country having predominantly an opium-smoking problem.

The needle exchange program is introduced and will certainly increase the incidence of injecting drug abusers rather than eliminating it. Furthermore, it is against their religion and is culturally inappropriate.

Due to the constraints of funding it, as has been said by my colleague, it is sad to see many NGO's are influenced by this harm reduction movement to embark on such an initiative. They are influenced by the flow of funds, not the means of such an initiative in the region. With funding from the harm reduction movement, the message is disseminated by these NGO's, actually destroying the very fabric of the Asian society as the message is not crime and prevention, but actually legalizing the use of drugs.

In conclusion, no country in the region has actually proven the incidence of drug use has been reduced with the harm reduction program and policy. What is actually needed is more reduction efforts providing prevention and abstinence and treatment in all our programs in the region, such as the Asian recovery symposiums, global prevention conferences and Asian Youth Congresses. None support harm reduction initiatives such as needle exchange program.

Mr. SOUDER. Thank you very much for our testimony.

[The prepared statement of Mr. How follows:]

Statement to the House Government Reform Committees Subcommittee on Criminal Justice, Drug Policy and Human Resources on Harm Reduction
By

Tay Bian How
Director, Drug Advisory Program
Colombo Plan
February 16, 2005

Mr. Chairman, thank you for this opportunity to address the Committee on harm reduction.

I would like to first introduce my organization and myself. I am Tay Bian How, Director of the Drug Advisory Program, Colombo Plan. The Colombo Plan Drug Advisory Program was formed in 1973 and was the first regional-intergovernmental organization to address the issue of drugs in the Asia Pacific region. It was mandated with the task of consulting with member governments on economic and social implications of drug abuse, encouraging member governments to introduce measures to deal with the drug problem, assist member governments with adopting sound policies and programs to control the problems associated with drugs and organize all training activities to enhance the human resource development in member countries to tackle the drug problem. Currently there are 25 member countries located in Southeast and Southwest Asia (United States is the only non-Asian country). Funding comes from voluntary contributions of the member countries. Since its inception the Drug Advisory Program has organized more than 200 national, regional and international seminars, conferences and training programs. Over 6,500 officers from all member countries have been trained in the fields of law enforcement, legislation, primary prevention, treatment and rehabilitation.

I am particularly proud of our work the past two years in Afghanistan, Pakistan and other predominantly Muslim communities in my region of the world. With INL's financial assistance we have been supporting Muslim-based anti-drug programs/civil society organizations in the Central Asia and South/Southeast Asia to reduce drug consumption that provides funding of terrorist organizations, and reduce the recruitment base of terrorist organizations.

The Colombo Plan developed a series of faith-based demand reduction seminars in March 2002 in Malaysia. Over 400 Muslim faith-based anti-drug programs from Asia and the Middle East attended this initial seminar. Since then with funding from the U.S. government, the Colombo Plan has continued the seminar series throughout Southwest and Southeast Asia.

As a result of one of these seminars, the Afghan Mullahs led by their Deputy Minister of Hajj and Agwaf (Ministry of Religious Affairs) requested the Colombo Plan to train all the mullahs in the country. We planned to train 500-800 of their fellow mullahs in Afghanistan this Spring. At the second regional seminar in Malaysia that was organized in collaboration with the Malaysian Prime Minister's Department and INL, once again the representative of the Ministry of Hajj and Augaf requested for the training and assistance with establishing drug treatment outreach centers in their mosques throughout Afghanistan.

Likewise, leading Indonesian mullahs developed plans to collaborate with the United States on providing drug prevention and outreach services through mosques and madrassahs in their country. The Colombo Plan is also establishing similar outreach centers in Muslim regions of southern Philippines, southern Thailand, Malaysia and Pakistan.

With regards to harm reduction, we are very concerned about these efforts that certainly undermine the achievements of the Colombo Plan. Firstly, harm reduction, particularly needle exchange programs, are against the national policies of Asian countries, and also the religions of Asians, particularly Islam, Buddhism, Hinduism, etc. In addition, there are not many injecting drug users in the region. For example in Afghanistan which has a predominantly opium smoking problem, if needle exchange program is introduced it will certainly increase the incidence of injecting drug users rather than eliminating it. Furthermore, it is against their religion and is culturally inappropriate.

However, due to the constraints of funding, it is sad to see many NGOs are influenced by this Harm Reduction Movement to embark on such initiative. They are influenced by the flow of funds and not the need of such initiative in the region. With funding from the Harm Reduction Movement, the messages disseminated by these NGOs are destroying the very fabric of the Asian society, as the message is not primary prevention but actually legalizing the use of drugs.

Conclusion

No country has proven that the incidence of drug use has been reduced with a harm reduction program and policy. What is needed is more demand reduction efforts providing primary prevention and abstinence based treatment and rehabilitation services. In all our programs in the region, such as the Asian recovery symposiums, global prevention conferences, and Asian Youth Congresses, none support harm reduction initiatives such as needle exchange programs.

Mr. SOUDER. Our next witness is Dr. Chris Beyrer of Johns Hopkins Bloomberg School of Public Health.

STATEMENT OF CHRIS BEYRER, M.D., M.P.H, JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH

Dr. BEYRER. Thank you very much, Chairman Souder, Ranking Member Cummings and other members of the committee.

I want to thank members of the committee for the opportunity to speak to you today on an important issue, the prevention of HIV/AIDS and other blood-borne pathogens, spread through unsafe, licit and illicit injections. I would like to thank the members of this subcommittee for their leadership in bringing attention to the issues before us, including the large and increasing heroin production in Central Asia, specifically Afghanistan, and for Chairman Souder's support for democracy in Burma.

I would also like to ask permission to submit revised testimony after this hearing. I am an infectious disease epidemiologist at the Johns Hopkins School of Public Health in International Health and in epidemiology, working primarily in international HIV prevention.

I think there's broad agreement that global HIV/AIDS prevention and control is an important human health and security concern for our country, the Congress and the Bush administration. While sexual maternal-infant transmission are the most important modes in Africa, unsafe injection practices, primarily of opiates, are the primary risks driving HIV epidemics across the Russian Federation, Ukraine, Belarus, northwest and southwest China, northeast India, Vietnam, Indonesia, Iran, Tajikistan, Uzbekistan, Moldova and several other states in eastern Europe and the former Soviet Union today. HIV spread among injecting drug users is an important component of the global pandemic accounting for an estimated 10 percent of all new infections in 2003, but 30 percent of all infections outside of Africa.

I want to draw attention to some of the shared features of these epidemics. First, they have tended to be explosive. HIV prevalence rose in Bangkok injectors from 2 percent to 40 percent in just 6 months, and we have seen these kind of explosive epidemics repeated again and again.

They have been transnational. Both China and India have their highest prevalent zones along their borders with Burma. That would be Yunnan and Manipur states, respectively. They have often, but not always, led to further spread among non-injecting populations, particularly sex partners of IDU, which is what Eleanor Holmes Norton was referring to, and this has been documented in Asia and Thailand, India and China.

They have also proven difficult to control, given government policies toward injection drug use and the very limited basic HIV prevention measures targeting injectors in developing countries.

The scientific evidence is compelling that reducing unsafe injections among drug users has been shown to decrease spread of HIV, Hepatitis B and Hepatitis C. Research has also demonstrated that syringe exchange programs do not increase drug use among participants or their communities. Opitate substitution therapy with methadone, in addition, has been extensively documented as effec-

tive in reducing opitate use, needle sharing and reducing HIV prevalence and incidence.

Yet these and other basic measures to prevent HIV spread and reduce substance use, including humane and medically sound treatment programs, peer outreach, HIV voluntarily counseling and testing services and sexual health services, including condoms, have been limited in their use, reach and coverage. If we look at the global HIV epidemic today, it's clear that we are losing the battle to prevent HIV among drug users internationally. We must ask why.

One reason is that while implementation of basic prevention services of drug users has lagged, world heroin availability has increased, largely due to rising production in Afghanistan—and some of this information I got off the Web site for this subcommittee. The U.N. Office of Drugs and Crime reports a 64 percent increase from 2003 to 2004 in poppy cultivation across Afghanistan, an increase to approximately 4,200 metric tons of opium based last year, that's the UNODC estimate, which would generate between 400 and 450 metric tons of heroin.

This growing Afghan heroin production has led to widespread availability and use of heroin across central Asia and the former Soviet Union. Culturally and economically diverse communities, where increased heroin availability has occurred, have all seen increases in uptick, dependence and subsequent transitions to injection. This has happened among the Kachin Baathists of Northern Burma, the Uighur Muslims of Xinjiang China, urban youth of St. Petersburg, the Tajik people, the Iranians and in the Ukraine.

While the Karzai government in Afghanistan has made real commitments to poppy eradication, the history of successful programs like Thailand's, suggest that poppy eradication and the cultural development needed for successful substitution programs takes years to decades and requires sustained development dollars in technical input.

The bottom line here is that the Afghanistan poppy economy and its heroin tonnages will be with us for some years if not decades. Why, then, have we have been so unable to implement basic prevention for drug users internationally. In the major opitate production zones and wider affected regions, treatment and prevention programs for drug use were limited or non-existent before HIV began spreading in these regions, and this remains largely the case.

Indeed across the whole of Asia, the only place where evidence-based heroin treatment, methadone maintenance are available on demand and to sufficient scale to drug users is Hong Kong. This is tragic, given the large and growing international evidence base for success and prevention of HIV infection and in the middle of this expanding global pandemic.

While the majority of published reports on the efficacy of these programs have been from the developed world, primarily western Europe, Australia, North America, there have been increasing reports of successful programs in Asia, including Thailand, Nepal, India, Iran, Indonesia and Vietnam. Much of this work has focused on harm reduction and needle and syringe exchange, the most

basic tools of some of these interventions. Yet, political problems remain in many countries.

A review of the literature suggests that one of the areas that has limited this have been the political unpopularity beyond the prevention community of these prevention efforts.

In sum, given the growing HIV pandemic and the hard truths we have to face about increasing heroin availability, it's clear that what is needed is the rapid implementation of any HIV prevention measures with evidence of efficacy for this population.

These include increased drug treatment services, methadone and potentially Buprenorphine, and needle and syringe exchanges. Needle exchange, in particular, is not incompatible with abstinence, and can serve as a first key entry point into other services, including abstinence-based ones. Now is not the time to limit effective prevention strategies. We need to implement the basics before moving ahead with discussions of more politically sensitive approaches, including safe injectionsites or other forms of substitution or maintenance therapy. Thank you.

Mr. SOUDER. Thank you for your testimony.

[The prepared statement of Dr. Beyrer follows:]

Harm Reduction or Harm Maintenance: Is There Such as Safe Drug Abuse?"
Committee on Government Reform
Subcommittee on Criminal Justice, Drug Policy, and Human Resources
United States House of Representatives
February 16, 2005

Testimony of Chris Beyrer MD, MPH
Director, Johns Hopkins Fogarty AIDS International Training and Research Program

I. Introduction

Good afternoon. I would like to thank the Committee for the opportunity to speak to you on the important issue of harm reduction programs for the prevention of HIV/AIDS and other blood-borne pathogens spread through unsafe licit and illicit injections in international settings. I would also like to thank the members of this committee for their leadership in bringing attention to the issues before us, including the large and increasing heroin production in Central Asia, specifically Afghanistan.

II. HIV Epidemics in IDU: A Global Problem

There is a growing body of evidence that epidemic spread of HIV infection occurs in tight and complex relationship to heroin trafficking routes.[1,2,3] These relationships are most clearly understood along routes from the two primary illicit opium poppy growing and heroin manufacturing regions of the world: the Golden Triangle of Southeast Asia, and the Golden Crescent of Central Asia. The mechanisms which lead to these HIV outbreaks are just beginning to be understood, as are the special vulnerabilities of communities in trafficking zones to HIV spread. The principal Golden Triangle heroin producers are Burma and Laos, those in the Golden Crescent, Afghanistan and Pakistan. Together, these states account for over 90% of world heroin supplies in 2004.[4] While these top 4 producers generate most of the world's heroin, the HIV epidemics resulting from unsafe injection practices of their product have largely been seen in their neighbors, or in destination markets further afield. For the Golden Triangle, this has meant well documented HIV spread in Burma itself, Thailand, China, India, Malaysia, Vietnam, and, more recently, Indonesia.[5,6,7,8,9,10] For the Golden Crescent, where the data are only now emerging, and where the HIV epidemics are much newer, epidemic spread of HIV and/or hepatitis C appears to be underway in Pakistan, India, Iran, Tajikistan, Uzbekistan, Russia, Ukraine, Belarus, and several states in Eastern Europe.[7,11,12,13,14,15] In virtually all studies that have investigated HIV in IDU in these regions, Hepatitis C, (HCV) if also investigated, is far commoner. HCV prevalence among IDU generally reaches 90% prevalence or higher—a function of the very high transmissibility of this agent through parenteral exposure.

Several consistent features have characterized these Eurasian HIV outbreaks among IDU. *They have been explosive:* HIV prevalence among Bangkok IDU went from 2 to 40% in 6 months in 1989: *They have been transnational;* both China and India have had their highest prevalence zones along their borders with Burma (Yunnan and Manipur States, respectively): they have led to further spread among non-injecting populations, initially sex partners of IDU, as has been documented in Thailand, India, and China: *They have been proven difficult to control;* given government policies toward injection drug use, the status of drug treatment in the affected States, and the limited HIV prevention measures targeted toward IDU.

The third important illicit growing area for poppy is centered in the New World—in Mexico, Columbia, and Peru, and while important for the Americas market, is considerably less well understood in terms of trafficking and HIV spread interactions in the production zones and will not be discussed in detail here, though these areas have clear relevance to the U.S. domestic market in heroin, and in cocaine, and important and commonly injected drug in the Americas.

Licit poppy cultivation for pharmaceutical opiate derivates including morphine, codeine, demerol, and many others, is centered in Tasmania, Australia (about 50% of all licit world production—almost entirely for the analgesic codeine), and in India and Turkey, and has not been associated with heroin production, trafficking, or blood borne infection spread. Opiate derivatives remain an important class of analgesics, and are widely, and generally safely used, with minimal public health effects. What has lead to the "fearful symmetry" of heroin trafficking and HIV spread is the illicit nature of criminal production and distribution, and the rapid uptake of heroin use, injection, and unsafe equipment use by young people in vulnerable communities along trafficking routes and in destination markets further afield.

How compelling are the existing data on the relationships between heroin trafficking and HIV? What do we know about the mechanisms of spread? What tools are available to policy makers, governments, clinicians, and others to understand these relationships, and to respond to them? And finally, why have societies from Ukraine to Vietnam been so vulnerable to these interactions--and what can be done to reduce the growing harm?

III. Heroin Economies

The Golden Crescent: HIV infection rates and Central Asian heroin

We know considerably less about both heroin and HIV epidemics in the Golden Crescent than we do about South and Southeast Asia. For most states affected by Afghani and Pakistani heroin, HIV spread is a more recent event, and many states have little data or research capacity. Still, what we do now know suggests another region of fearful symmetry.

Poppy production can be measured with several tools, arguably the most accurate is Landsat satellite technology, which measures crop densities.[4] US intelligence agencies have used Landsat to assess poppy cultivation, estimate opium base harvests, and to calculate heroin yields (ten kilos of opium base gives roughly one of refined heroin). In 1996, after the establishment of Taliban rule in Afghanistan, the estimated yields were 200 tons from Afghanistan.[4] By 1999, Afghanistan was producing 450 metric tons of heroin per year, and had become the world's largest single producer in a multi-billion dollar industry. Poppy growing appeared to cease in 2000 with the edict of then leader Mullah Muhammed Omar, but stockpiled heroin reserves held by producers and traffickers apparently insured that actual supply was maintained despite the growing ban. In 2002, the new Kabul administration and its allies acknowledged that reducing poppy cultivation will require a long term process of agricultural reform and development, as well as the extension of government control across the vast rural areas of the country. For the short to medium term at least, the Afghanistan will remain a significant producer. In the 2003-2004 period, Afghan poppy cultivation and heroin production have substantially increased, with a 64% estimated increase in acreage under cultivation, and a 900 ton increase, to 4200 metric tons, in output, according to the UNODC.

The second largest grower in the region, Pakistan, producers about 20 metric tons of heroin a year, roughly on the level of Laos, and mostly in the remote tribal zones along in Afghan border in Pakistan's Northwest Frontier Provinces.[4] These areas are only marginally under federal control, very underdeveloped, and likely to remain dependent of poppy cultivation for some years.

The HIV outcomes of heroin exports from Afghanistan and Pakistan are only beginning to be understood, and are rapidly changing as nascent HIV epidemics take hold in a region which has appeared to be relatively spared from HIV, and for which data have been sparse. Pakistan and Iran appear to be two of the major overland routes for trafficking of Afghani heroin.[7] While both are low HIV prevalence states, Pakistan had an estimated 3 million heroin addicts in 2000, and has suffered great social harms as a consequence.[11] Iran led the world in 1999 in narcotics seizures by volume.[4] And Iran also and has an

enormous epidemic of heroin use among its young people.[7] The Teheran regime is deeply concerned about this, and it was a primary source of tension and border conflict with the previous Taliban regime. A nascent epidemic of HIV among Iranian IDUs appears to have begun in 2000-2001, with recent reports of very high rates of HIV infection among incarcerated IDU in Teheran, up to 67% in one facility.[7]

No countries appear to have been more affected, however, than Russia and its two former Republics, Ukraine and Belarus.[12, 14] UNAIDS in its year 2004 Report on the Global Pandemic identified the these three states as having the fastest growing HIV epidemics worldwide; and more than 75% of all infections in Russia and its neighbors in 2000 were due to injecting drug use.[12, 13, 26] The Russian Far East has been particularly affected. The Irkutsk region, around Lake Biakal in Siberia, has the highest HIV infection in the Russian Federation (Moscow is first) and again, more than 80% of reported HIV infections in Irkutsk have been among IDU.[27] Kazakhstan too, has seen a recent outbreak of drug use and HIV infection, although whether the trafficking route comes from China to the East or Afghanistan to the south is unclear.

Poppy Cultivation and Politics:

While the HIV epidemic represents a new challenge to Russia, the Golden Crescent trafficking connections are not new. This situation also prevailed during the long Afghan war with the then USSR, when poppy cultivation by the Mujahadeen was tolerated by the West, and the US, recognizing that the anti-Soviet forces had no other exports of comparable value and ease of transport to heroin.[28] High rates of heroin use and addiction among Soviet forces in the Afghan conflict were a predictable outcome, and helped (as in the U.S. conflict in Vietnam) undermine support for the war among troops, their families, and Soviet citizens.

Afghanistan's poppy farmers then and now are largely subsistence farmers, selling opium as a cash crop to supplement minimal incomes. As prevails in the Golden triangle region, the real profits of heroin are not in farming, but in trafficking, and it is the trafficking networks where real revenues accrue.[28] But part of the legacy of war has been local expertise in poppy growing, narcotics production and sales. The Afghan war, which the Soviets lost, appears to have brought heroin first to dispirited troops, and then to Moscow, such that trafficking links too, may be a legacy of the long struggle of the Afghani people although this, for now, must remain speculation.

Further west, China is currently undergoing another heroin-related epidemic. The Xinjiang Uighur's People's Autonomous Region is China's only Muslim majority region. Xinjiang shares borders with Afghanistan, Kazakhstan, Russian Siberia, Tibet, and internal borders linking it by the Silk Road to China Proper. It also has China's second highest rate of HIV infection by province, after Yunnan in the far south.[20] And more than 78% of infections in Xinjiang have been due to injection drug use involving heroin. Tragically, more than 90% of injections in the two largest cities in Xinjiang are ethnic Uighurs—and so HIV infections in this large province are largely among young Muslims.[9]

China, Russia, Ukraine, Belarus, Kazakhstan, Pakistan, and Iran, are all experiencing heroin use outbreaks among their young people, and all now appear to have HIV epidemics related to this use. Heroin exports from the Golden Crescent are at the root of these complex new problems. These are regional challenges—but they point to a global problem which ties the Crescent to the Triangle—illicit heroin revenues. On paper, Afghanistan was the world's poorest state in 2000; Burma, a UN "Least Developed Country." Afghanistan is almost entirely dependent on donor aid in 2004, and has essentially no foreign reserves, a bankrupt treasury, and limited licit exports. We do not know the details economics of the trafficking networks based in the Golden Crescent—but we do know that taxes on poppy farmers and protection money from traffickers were among the main sources of revenue for both Taliban and the Northern Alliance before the current regime came to power. In both Burma and Afghanistan, heroin has allowed for black market weapons purchases to fund militias, insurgencies, and crime.[4] Afghanistan has the potential to grow other crops, including grain and orchard production, but these require irrigation systems, which have

largely been destroyed, and access to markets, which remains a huge challenge for much of the country. Burma's growing regions have been at war with the Central Government roughly since the departure of the British after WWII.[29] Reducing the opium supply from these regions will require establishing viable alternative economies for the rural poor—and that will take time, sustained donor investment, and the growth of stable functioning civil societies. Should Afghanistan descend again in civil strife and warlordism, heroin production will likely rise again. Indeed, as in Burma, it is in the interests of the narcotics cartels and the corrupt leaders they have supported that civil society fail—a chilling reality given the wealth, power, and weapons, heroin revenues have already generated.

Mechanisms on the ground

Before considering policy responses to the interactions of heroin and HIV, there are some mechanisms of these interactions which bear on HIV spread and how best to curtail it. One obvious feature shared by all of the primary trafficking zones out of the Triangle and the Crescent is geographic: overland heroin is moved almost exclusively across remote border regions; generally mountain and forest zones adjacent to the hills where poppy will grow. The illegal and clandestine nature of this industry demands such remote areas. Indeed, as former UNDCP Director Pino Arlacci has pointed out, there are very few regions remote and lawless enough to support a major heroin industry. It is surely no coincidence that secretive, closed and junta-run Burma; isolated Laos under its Communist Party; Afghanistan in its decades of strife, and the tribal zones of Pakistan, should be the world's leaders in heroin production. Absent a few other states, these are among the only places in the world closed enough to sustain the heroin industry.

A second shared feature is ethnicity. These areas generally have in common populations who are ethnic minorities and/or tribal groups.[29] In Southeast Asia they are virtually all dwellers of the hills, where the majority populations, the Thais, Laos, Burmans, and Vietnamese are lowlanders and rice cultivators.[29] An especially important factor is these groups tend to straddle national borders. So in Yunnan, both sides of the China-Burma border lands are farmed by ethnic Kachin and Wa—not Han Chinese or Burmans, and family, language, and trade links long predate heroin trafficking. Another example is the ethnic Manipuris of Manipur, who are Tibeto-Burmans, as are the Burmese, and are not ethnic Indians, and who can move easily into Burma to access the heroin markets in Mandalay.[30]

For HIV to spread along trafficking routes, local people have to use the drugs. Qualitative work in China, India, Burma, and Vietnam has suggested a direct mechanism for the "exchange" of HIV-1 subtypes (known as clades or strains). This mechanisms relies on the fact that many petty traders in the region are also users, who support their own habits by purchasing and selling small amounts of heroin. In at least 4 states, we know that these petty traders typically self-test heroin purity by injecting themselves. Since travelling across these zones with injecting equipment is an obvious sign of intent to use, they virtually never have their own equipment. On the China—Vietnam border, for example, traders typically cross the mountains from China, stay the night with their contacts in Vietnam, and share drugs and equipment before making purchases. The very low genetic diversity of strains in this region suggests rapid spread of only viral subtype, a molecular feature favored by this kind of direct spread. Major traffickers moving heroin by the hundreds of kilos or more have very different ways to move product, including trucking, sea, and air routes. But it is likely that HIV spread in overland regions is a more local person-to-person event, albeit one with wide consequences. A recent report from Yunnan, indeed, found that 75.9% of a large series of IDU in southeastern Yunnan were Han Chinese ethnicity.[31] The authors concluded that "...the epidemic in Yunnan is no longer confined to non-Han ethnic minorities."

A fourth mechanism is likely to important as well, though somewhat variable. Along at least some of the major trafficking routes, overland trucking routes have led to the development of services for truckers. In addition to fuel, food, and lodging, these often include sex services. In Southeast Asia these sex services are generally roadside brothels, karaoke parlors, bars and the like. In Central Asia they may be less

apparent, but still available, or may have young male sex workers, as in the Pakistani trucking industry. These border zone sex service venues can overlap with drug trafficking, and provide another mechanism by which HIV could spread where heroin, and other contraband are moved. On the Burma—Thai and Burma—China borders, women and girls are trafficked on the same routes, and indeed by some of the same trafficking networks, as heroin.[32]

The interaction of heroin trafficking and sex industry related HIV risks can also be found in the special economic zone of Pingxiang City on the highway and train crossing from Vietnam to China.[1] Pingxiang was one of the first Chinese cities to experience a rapid HIV epidemic among IDUs, and molecular work has confirmed the cross-border nature of this epidemic.[5] But Pingxiang also has a booming sex trade on the Chinese side of the zone. We enumerated 19 separate brothels in a four street radius in the trucking zone in Pingxiang in 2000, each with 10-30 women and girls working. HIV rates have remained low among these women until 2001, though there now appears to be increasing prevalence.[33] In settings like Pingxiang, sex workers and their clients in border and trafficking zones may be key "bridge" populations from IDU to wider networks of people at sexual risk.

Policy Responses

Why have IDU outbreaks associated with heroin trafficking proven so difficult to prevent or control? In the major production zones, and in the wider affected regions, treatment and prevention programs for drug use were limited before HIV spread.[34] This remains largely the case—across the whole of Asia the only place where evidence based heroin treatment and methadone maintenance are available on demand to drug users in Hong Kong. This is tragic, given that there is a large and growing international evidence base for success in prevention of HIV infection and other blood-borne diseases among IDU.[36] While the majority of published reports have been from the developed world, principally Western Europe, Australia and North America, there have been several reports of pilot projects and/or successful programs in Asia; including reports from Thailand, Nepal, India, and Vietnam. Much of this work has focused on harm reduction, and needle and syringe exchange programs, the basic tools of most reported interventions. The Journal of Substance Use and Misuse published its "Bibliography on Syringe-Exchange References" in 1998—which includes several hundred published reports on these interventions and the debates which they have generated.[37]

Well-described and successful needle exchange programs (NEP) include those in the Netherlands, Australia and the UK. In the largest analysis published HIV incidence increased by about 6%/year in 52 cities without NEPs, and decreased by 5.8%/year in 29 studied cities with NEPs.[38] The New York City NEPs have been studied in prospective cohorts: lower rates of incident HIV infection were documented among IDU using NEPs (1.4-1.6%/year) than among those who did not attend NEPs (5.3%/year, 95% confidence interval: 2.4-11.5)[39] Long term methadone maintenance therapy (MMT) has been shown to reduce HIV risk behaviors, particularly needle-use, and there is strong evidence that MMT prevents HIV infection among IDU.

Where harm reduction and MMT are available, as they were to many US IDU in the HIVNET vaccine preparedness studies (VPS), sero-incidence can be low.[40] In this study HIV incidence among gay and bisexual men from 1995-1997 was measured at 1.55/100PY, while among male IDU, the rate was 0.38/100PY.

The Thai Epidemiology Working Group has recently published projected scenarios for the Thai epidemic.[41] They found that a decline in needle sharing from 20% to 10% among Thai IDU (a 50% reduction in these behaviors) would avert 21,774 new infections by 2006, and 81,761 infections by 2020. This would constitute the single largest number of infections averted for any one intervention strategy. By 2006, roughly 3,800 of the expected 22,000 infections nationwide would be averted by this intervention alone.

Vietnam has reported on the feasibility of NEPs and on pilot NEPs in Hanoi and Ho Chi Minh cities.[42] While they did not measure impact, they were able to conclude that NEPs were feasible, but that they required community acceptance, and acceptance from the police, to be sustained. NEPs have also been implemented in India, notably in New Delhi and Manipur State, where high rates of IDU behavior are common.

Taken together, these studies all support that harm reduction and NEPs are effective prevention tools, and that they might have an impact in heroin related epidemics in trafficking zones. Why then, have these approaches been so little used in the fight against HIV/AIDS?
It is difficult to imagine a public health tool with reasonable evidence of efficacy which has generated as much debate as have prevention programs for IDU. A review of the literature suggests 3 principal problems with the implementation of harm reduction approaches and NEPs.[43, 44] First, they have repeatedly been seen as condoning or facilitating injection drug use, making them politically unpopular beyond the prevention community. Second, they have faced legal, security, and policy challenges since they require "safe" domains of interaction with active IDU. A third challenge, where NEPs have been implemented, is coverage rates of NEP for IDU populations, largely driven by limited resources.

Conclusions

Individual, communities, and countries which have the misfortune to be on major heroin trafficking routes face multiple epidemics in 2005. These epidemics begin with heroin use, heroin injection, and then HIV infections. While a clear long-term goal for all these states is to be free of drug trafficking, the realities of the current political and development situations of the major producers, most notably Burma and Afghanistan, suggest that narcotics-based economies will be with the world for some time. In the short to mid term, a public health based approach would be to minimize the health impacts of heroin trafficking, specifically through working with affected communities. Such approaches could include reducing heroin addiction through improved treatment and support for IDU, and reducing HIV spread among those who continue to inject through expanding harm reduction and needle and exchange programs. The prevention of spread beyond IDU alone suggests that this may be critically important to the prevention of wider epidemics of HIV/AIDS. A clear priority for further research and programs are the frontline Central Asian states in the Golden Crescent: Iran, Tajikistan, Kazakhstan, Pakistan, and others. These must be considered very high risk states for explosive spread of HIV in the coming years, and could benefit from the programmatic and research experience that have elucidated the heroin and HIV interactions of the Golden Triangle. These Central Asian States currently have the greatest discrepancy between HIV vulnerability (extremely high) and prevention preparedness among IDU (very low). Without substantial donor support for HIV Prevention and drug treatment for drug users, Central Asia will likely face a devastating epidemic of HIV/AIDS in the coming years. Now is not the time to limit any known prevention approach for this crucial region.

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Mr. SOUDER. Next is Yunus Pathi, who is the president of the Pengasih Treatment Program in Malaysia. Thank you for coming today.

STATEMENT OF MOHD YUNUS PATHI

Mr. PATHI. Mr. Chairman, thank you for this opportunity to testify before the committee on harm reduction and demand reduction programs.

I am the president of the Pengasih Treatment Program, the largest NGO treatment organization in Malaysia. The Pengasih program consists of several projects, which I will describe below are Rumah Pengasih project, primary treatment services. Rumah Pengasih is a private treatment and rehabilitation center that is recognized by the government of Malaysia.

Since its establishment in 1993, RP runs its rehabilitation services based on the peer support system, which stimulates rectification of belief systems, management of emotions and confidence building, behavior shaping, building of survival skills and spiritual guidance.

Residents are admitted on a voluntary basis to undergo the treatment program for a duration of between 6 to 12 months. Program activities are organized around an intensive schedule. Upon achieving a certain level of readiness, residents will undergo the reintegration program and following this step in recovery, they are encouraged to enroll with after care self-help groups. Basically, the RP program is based on the therapeutic community model of treatment and rehabilitation.

We have also a Sinar Kasih re-entry program. This program is an extension of the primary treatment given at RP. This program plays an important role in the personal recovery of former drug users. It is conducted in a safe environment with minimum supervision and involves various social activities.

The focus of this project is on the reintegration into society. The issues stressed are relationships, work ethics, time and money management, as well as personal security. Here clients will have an opportunity for job placements or vocational training.

We have also a drop-in center in Malaysia, which we call Bakti Kasih, that distributes information on substance abuse and HIV/AIDS to groups still affected by drug addictions, as well as those living in the vicinities.

Drop-in centers are located at places near drug dens and busy streets. To encourage drug users to drop in, we prepare amenities such as food, drinks, bathroom, newspapers, rest area and discussion areas. This gives us the opportunity to chat with them and give advice on how to break away from the destructive cycle of drug abuse.

The main focus of Bakti Kasih is to reach drug users infected with HIV. We would like to see them change their perception toward life and practice healthier lifestyles. They are encouraged to accept their life with stride and be more responsible toward others by not spreading the disease.

Bakti Kasih will also approach and help prepare families to accept their kin who are HIV positive. Staff members are also in-

volved in awareness campaigns against drug abuse and HIV/AIDS to all communities throughout Malaysia.

Bakti Kasih provides the following services: a drop-in center, an HIV/AIDS information center, peer support group, family support group, social and vocational training, hygiene and health advisory, referral services, outreach activities, anonymous help line and counseling. We have also cooperation international bodies such as the Colombo Plan, U.S. State Department, United Nations Office on Drugs and Crime, World Federation of Therapeutic Committees, Japan International Cooperation Agency, the Global Drug Prevention Network, as well as for government narcotics bureaus.

In the past years, Pengasih has transferred knowledge to scores of foreign nationals, mainly from Indonesia, Maldives, Bangladesh, India, Pakistan, Afghanistan, Pakistan, Sri Lanka, South Africa, Japan, Korea and some European nations. This training and assistance focuses on drug treatment and rehabilitation techniques, spirituality in treatment programs, drop-in and after care centers, and fear/family support groups.

Sidang Kasih project. This service involves the establishment of self-help groups for family members and anyone affected by substance abuse. These self-help groups are important as they provide the arena for social learning through active participation and by listening to the experiences from members of the group.

The key point of self-help groups is the concept of role models. Group members are not only trained to follow the examples of others, but also to become role models. The family spirit of these groups is not only restricted to the duration of the session, but also extends into their real lives.

Muara hospice provides services to Pengasih members or former drug users living with HIV/AIDS by assisting them in receiving proper health care for various ailments.

Clients are provided with a comprehensive range of care and support services which cover their personal welfare, diet and medical needs.

Programs, such as group sessions, are organized to provide counseling and motivation to people living with HIV/AIDS to accept the terms of their lives and to continue their struggle.

Seruan Kasih Project. This service involves outreach activities to various target groups, including inmates of Pusat Serenti, prisoners, students, government servants and other community members.

Members of Pengasih are often invited to give lectures, present working papers at seminars, participate in panels, forums or discussions, and referred to or asked for opinions on issues related to drug abuse in Malaysia and in other nations.

Needle exchange programs. Pengasih is totally opposed to harm reduction, needle exchange programs and drug legalization. We believe that these programs reduce the perception of the risks and costs of using drugs, increase the availability and access to harmful drugs and weakens the laws our governments have against drug trafficking and use.

Needle exchange programs are of particular concern to Pengasih because of our work with HIV/AIDS clients. The logic of distributing needles or syringes to drug addicts is very questionable. I have

treated thousands of drug addicts over the years, and am myself a recovering person. Drug addicts have very irresponsible life-styles and are not accountable. Once given a needle, an addict will readily share that needle with another addict. They do not care whether the needle is given to them by a needle exchange program or another addict.

Based on what I have personally observed in Asian countries, needle exchange supporters give away needles for the sake of giving away needles. They have no idea of the medical and drug using history of the majority of people to whom they provide needles. Most of the narcotics addicts in Asia smoke heroin and opium, they do not inject the drug. Giving out free needles will only increase the amount of people who inject drugs, in addition to encouraging further drug use.

Harm reduction and drug treatment. Harm reduction and drug legalization supporters like to claim that the fight against drugs has not been won and cannot be won. They often state that people still take drugs, drugs are widely available, and that changing that fact is a lost cause. They like to question the effectiveness of drug treatment programs, claiming that there are some addicts for whom treatment will never work.

Harm reduction supporters have repeatedly made these claims in Asia. What is disturbing is that several well-meaning countries are taken in by this rhetoric, accepting it at face value when they have never undertaken an assessment of the effectiveness of demand reduction programs in their own countries.

This means that many well-meaning countries are making key policy and program decisions without the necessary scientific research to back their decisions.

Several evaluation and research studies in my region around the world, southeast and south Asia, question the harm reduction myth that treatment is not effective. For instance, 70 percent of all clients successfully complete the full treatment continuum at my Pengasih program. This study was conducted in 2002 by the Malaysian Psychological Association and verified by Danya International, a U.S. research company.

This outstanding success rate has also been documented in similar programs throughout Asia. At the Pertapis Halfway House in Singapore, over 70 percent of all clients also successfully complete the full treatment continuum. The Mithuru-Mithoro treatment program, run by a Buddhist monk in Sri Lanka, has evidenced even higher success rates, with 89 percent of all clients successfully completing the full treatment continuum.

Many Asian NGO's receive their budget from the EU without knowing the consequences of what they are doing. From my observations and that of my colleagues in the Asian Federation of Therapeutic Communities, of which I am the vice president, we have an increase in the number of people using drugs as a result of the free needles. AFTC is the largest federation of drug treatment and rehabilitation programs in Asia.

I need a clarification of U.S. policy.

In Asia, there is some confusion about U.S. Government drug policy. We in Pengasih agree with the demand reduction approach that is taught by INL and ONDCP in their demand reduction semi-

nars in Asia. Pengasih has also trained on the same Colombo Plan team with Dr. Andrea Barthwell, former deputy for demand reduction at ONDCP, who is testifying here today. We hear that the Bush administration does not support needle exchange programs. In our training with INL, Colombo Plan, and Dr. Barthwell, we do not support needle exchange programs. But, some of our colleagues in Asia tell us that needle exchange is a U.S. Government policy. We tell them that INL and ONDCP say no, but they tell us that USAID supports and funds needle exchange programs in their countries. This is causing great confusion in my region as many people look to the U.S. Government for guidance on drug issues. As you can see, there is a need for clarification on U.S. drug policy.

In conclusion, I hope my testimony has been helpful for this committee. I thank you for the courtesy of inviting me to participate in this hearing.

Mr. SOUDER. Thank you for your testimony.

[The prepared statement of Mr. Pathi follows:]

Statement to the House Government Reform Committees Subcommittee on Criminal Justice, Drug Policy and Human Resources on Harm Reduction
By

Mohd Yunus Pathi
President
Pengasih Treatment Program
Kuala Lumpur, Malaysia
February 16, 2005

Mr. Chairman, thank you for this opportunity to testify before the Committee on Harm Reduction and demand reduction programs.

I am the President of the Pengasih Treatment Program, the largest NGO treatment organization in Malaysia. The Pengasih program consists of several projects, which I will describe below:

RUMAH PENGASIH PROJECT
(Primary Treatment Services)

Rumah PENGASIH (RP) is a private Treatment and Rehabilitation Center that is recognized by the government of Malaysia.

Since its establishment in 1993, RP runs its rehabilitation services based on the "Peer Support" system, which stimulates rectification of belief systems, management of emotions and confidence building, behavior shaping, building of survival skills and spiritual guidance.

Residents are admitted on a voluntary basis to undergo the treatment program for a duration of between 6 to 12 months. Program activities are organized around an intensive schedule. Upon achieving a certain level of readiness, residents will undergo the Reintegration Program and following this step in recovery, they are encouraged to enroll with Aftercare Self-help Groups. Basically, the RP program is based on the Therapeutic Community (TC) model of treatment and rehabilitation.

SINAR KASIH PROJECT
(Re-Integration Program Services)

The Sinar Kasih "Re-entry" program is an extension of the Primary Treatment given at RP. This program plays an important role in the personal recovery of former drug users. It is conducted in a safe environment with minimum supervision and involves various social activities.

The focus of this project is on the reintegration into society. The issues stressed are relationships, work ethics, time and money management, as well as personal security. Here, clients will have an opportunity for job placements or vocational training.

BAKTI KASIH PROJECT
(Caring Service Project)

Bakti Kasih is a Drop-in Center that distributes information on substance abuse and HIV/AIDS to groups still affected by drug addictions, as well as those living in the vicinities.

Drop-in Centers are located at places near drug dens and busy streets. To encourage drug users to drop-in, we prepare amenities such as food, drinks, bathroom, newspapers, rest area and discussion areas. This gives us the opportunity to chat with them and give advice on how to break-away from the destructive cycle of drug abuse.

The main focus of Bakti Kasih is to reach drug users infected with HIV. We would like to see them change their perception towards life and practice healthier lifestyles. They are encouraged to accept their life with stride and be more responsible towards others by not spreading the disease.

Bakti Kasih will also approach and help prepare families to accept their kin who are HIV positive. Staff members are also involved in awareness campaigns against drug abuse and HIV/AIDS to all communities throughout Malaysia.

Bakti Kasih provides the following services: drop-in center, HIV/AIDS information center, peer support group, family support group, social and vocational training, hygiene and health advisory, referral services, outreach activities, anonymous help-line, and counseling.

LAUTAN KASIH PROJECT
(International Collaboration)

Pengasih works very closely with international bodies such as the Colombo Plan (Drug Advisory Program), United States State Department (INL), United Nations Office on Drugs and Crime, World Federation of Therapeutic Communities, Japan International Cooperation Agency, the Global Drug Prevention Network, as well as foreign government narcotics bureaus.

In the past years, PENGASIH has transferred knowledge to scores of foreign nationals mainly from Indonesia, Maldives, Bangladesh, India, Pakistan, Afghanistan, Iran, Sri Lanka, South Africa, Japan, Korea, and some European nations. This training and assistance focuses on drug treatment and rehabilitation techniques, spirituality in treatment programs, drop-in and aftercare centers, and peer/family support groups

SIDANG KASIH PROJECT
(Support Group Services)

This service involves the establishment of self-help groups for family members and anyone affected by substance abuse. These self-help groups are important as they provide the arena for social learning through active participation and by listening to the experiences from members of the group.

The key point of self-help groups is the concept of role models. Group members are not only trained to follow the examples of others, but to also become role models. The family spirit of these groups Is not only restricted to the duration of the session, but also extends into their real lives.

MUARA KASIH PROJECT
(Mini Hospice)

Muara Hospice provides services to PENGASIH members or former drug users living with HIV/AIDS by assisting them in receiving proper health care for various ailments.

Clients are provided with a comprehensive range of care and support services which cover their personal welfare, diet and medical needs.

Programs, such as group sessions, are organized to provide counseling and motivation to People Living with HIV/AIDS (PLWHA) to accept the terms of their lives and to continue their struggle.

SERUAN KASIH PROJECT
(Outreach Services)

This service involves outreach activities to various target groups including inmates of Pusat Serenti, prisoners, students, government servants, and other community members.

Members of PENGASIH are often invited to give lectures, present working papers at seminars, participate in panels, forums or discussions, and referred to or asked for opinions on issues related to drug abuse in Malaysia and in other nations.

HARM REDUCTION

Needle Exchange Programs

PENGASIH is totally opposed to harm reduction, needle exchange programs, and drug legalization. We believe that these programs reduce the perception of the risks and costs of using drugs, increase the availability and access to harmful drugs, and weakens the laws our governments have against drug trafficking and use.

Needle Exchange programs are of particular concern to PENGASIH because of our work with HIV/AIDS clients. The logic of distributing needles or syringes to drug addicts is very questionable. I have treated thousands of drug addicts over the years and am myself a recovering person. Drug addicts have very irresponsible lifestyles and are not accountable. Once given a needle, an addict will readily share that needle with another addict. They do not care whether the needle is given to them by a needle exchange program or another addict.

Based on what I have personally observed in Asian countries, needle exchange supporters give away needles for the sake of giving away needles. They have no idea of the medical and drug using history of the majority of people to whom they provide needles. Most of the narcotics addicts in Asia smoke heroin and opium, they do not inject the drug. Giving out free needles

will only increase the amount of people who inject drugs, in addition to encouraging further drug use.

Harm Reduction and Drug Treatment

Harm reduction and drug legalization supporters like to claim that the fight against drugs has not been won and cannot be won. They often state that people still take drugs, drugs are widely available, and that changing that fact is a lost cause. They like to question the effectiveness of drug treatment programs, claiming that there are some addicts for whom treatment will never work.

Harm reduction supporters have repeatedly made these claims in Asia. What is disturbing is that several well-meaning countries are taken-in by this rhetoric, accepting it at face value when they have never undertaken an assessment of the effectiveness of demand reduction programs in their own countries.

This means that many well-meaning countries are making key policy and program decisions without the necessary scientific research to back their decisions.

Several evaluation and research studies in my region of the world, Southeast and South Asia, question the harm reduction myth that treatment is not effective. For instance, 70 percent of all clients successfully complete the full treatment continuum at my PENGASIH program. This study was conducted in 2002 by the Malaysian Psychological Association and verified by Danya International, a U.S. research company.

This outstanding success rate has also been documented in similar programs throughout Asia. At the Pertapis Halfway House in Singapore, over 70 percent of all clients also successfully complete the full treatment continuum. The Mithuru-Mithoro treatment program, run by a Buddhist monk in Sri Lanka, has evidenced even higher success rates, with 89 percent of all clients successfully completing the full treatment continuum.

Many Asian NGOs receive their budget from the EU without knowing the consequences of what they are doing. From my observations and that of my colleagues in the Asian Federation of Therapeutic Communities (AFTC), of which I am the Vice President, we have an increase in the number of people

using drugs as a result of free needles. AFTC is the largest federation of drug treatment and rehabilitation programs in Asia.

Need for a Clarification of U.S. Policy

In Asia, there is some confusion about U.S. government drug policy. We in PENGASIH agree with the demand reduction approach that is taught by INL and ONDCP in their demand reduction seminars in Asia. PENGASIH has also trained on the same Colombo Plan team with Dr. Andrea Barthwell, former Deputy for Demand Reduction at ONDCP, who is testifying here today. We hear that the Bush Administration does not support needle exchange programs. In our trainings with INL, Colombo Plan, and Dr. Barthwell, we do not support needle exchange programs. But, some of our colleagues in Asia tell us that needle exchange is U.S. government policy. We tell them that INL and ONDCP say no, but they tell us that USAID supports and funds needle exchange programs in their countries. This is causing great confusion in my region as many people look to the U.S. government for guidance on drug issues. As you can see, there is a need for clarification on U.S. drug policy.

Conclusion

In conclusion, I hope my testimony has been helpful to this committee. I thank you for the courtesy of inviting me to participate in this hearing.

Mr. SOUDER. Our next witness is Dr. Robert Newman, director for International Center for Advancement of Addiction Treament, Continuum Health Partners, Incorporated.

STATEMENT OF ROBERT G. NEWMAN, M.D.

Dr. NEWMAN. Thank you very much, Mr. Chairman, it's a privilege to be asked to testify before this committee, and let me say as a health care professional who has devoted his entire career to enhancing, extending and providing addiction treatment, I am particularly appreciative of the role that you have played in advancing the treament with Buprenorphine of opitate addiction and the role that other fellow members of the committee have played in other forms of addiction treatment and harm reduction measures in general.

Let me, at the very outset, answer the question unequivocally that is posed in the title of this hearing, and that is that, no, I do not believe there is any such thing as safe drug abuse. I would hasten to add that safe addiction, safe drug use, is not, to my knowledge, has never been, the intent behind any harm reduction efforts in this country or elsewhere.

The intention of harm reduction efforts is very, very straightforward. It is to lessen suffering, it is to lessen illness and it is to lessen deaths. And I would hasten to add that this is not just an aim of reducing the harm, frequently the fatal harm, among the users themselves, but also among people in the general community, because everybody is affected crime wise, healthwise, by the problem of drug abuse and everybody deserves to have the risk reduced.

My personal views with regard to harm reduction reflect my first-hand experience with, first of all, the positive results of harm reduction in a number of places in the world. First, beginning at home in New York City in the early 1970's, I experienced and took part in a massive expansion of addiction treatment. We had within 2 years an increase of over 50,000 spaces in treatment with methadone and also with drug-free modalities. And the result was dramatic, in terms of a sharp decrease in crime, a dramatic decrease in Hepatitis, and a marked decrease in overdose deaths.

Just a few years later in the mid 1970's, I had the privilege of being consultant to the government of Hong Kong, which made a very simple commitment, which I hope some day will be made by this government as well. And that is that every single heroin addict in Hong Kong, who was willing to accept treatment, would get it and get it at once.

Hong Kong achieved the seemingly radical-to-many impossible goal within a period of 2 years and enrolled over 10,000 people in their methadone program.

As was true in New York a few years earlier, they experienced a sharp decline in Hepatitis, in crime, and they have continued for the past almost 30 years to have treatment on request a reality to every single person in Hong Kong, and they publicize—and I have never seen anything similar in this country in any city in this country—the government of Hong Kong publicizes that if you or a friend or a loved one has a problem with heroin addiction, help is available immediately. That must be the goal.

As a consequence, I am convinced of this success in having treatment available on request for all who want it and all who need it. Hong Kong is in the almost unique position of having virtually no HIV/AIDS transmitted by heroin users, and that is truly a remarkable achievement.

Finally, back again to the Western World in France in the mid-1990's, I experienced a commitment also to radically increase the number of people receiving addiction, treatment, primarily with Buprenorphine, also with methadone, within just 2 or 3 years they had over 80,000, 80,000 people in France receiving treatment, who had not received any treatment before, and they experienced an 80 percent, 80 percent decline in the overdose rate in the country, which is a remarkable achievement.

Finally, as a physician, as a public health clinician, but also somebody trained in clinical medicine, I would like to express that despite all the controversy over harm reduction, harm reduction is part and parcel of the concept and the practice of medicine. It has been for millennia.

Harm reduction, as opposed to cure, is what medicine overwhelmingly strives for. It strives for this in physical diseases like diabetes, like arthritis, like hypertension, like cardiac disease and it strives for harm reduction in primarily neurological or mental illnesses as well.

There is nothing exceptional in aiming for harm reduction. What could be more self-evident than reducing suffering illness and deaths among people who have a chronic medical illness. We know it can be done, because it's been done in this country and elsewhere, knowing it can be done gives all of us an obligation the pursue that goal, and I certainly hope that will be the agenda of this Government.

Thank you very much.

[The prepared statement of Dr. Newman follows:]

House Government Reform Subcommittee on Criminal Justice, Drug Policy, and Human Resources, U.S. House of Representatives

Hearing on "Harm Reduction or Harm Maintenance: Is There Such a Thing As Safe Drug Abuse?" February 16, 2005

Respectfully submitted,

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INTRODUCTION

Chairman Souder, Co-Chair Cummings, and members of the Subcommittee. It is a privilege to submit testimony to the Committee about "harm reduction" as it relates to intravenous drug use and the related scourges of HIV-AIDS, hepatitis, crime, etc. The following testimony reflects my experience of the past 35 years as a physician deeply involved clinically, academically and administratively in addiction treatment, particularly with methadone and, more recently, buprenorphine maintenance treatments.

Allow me at the outset, however, to make certain acknowledgements that I believe are richly deserved and bear directly on the important issue being considered by the Committee. First, I acknowledge with the most sincere appreciation the efforts of Chairman Souder to remove the current inflexible limit of 30 patients that can be prescribed the medication Buprenorphine by any group of physicians, regardless how large and experienced. Buprenorphine has been hailed as an additional medicine that has utility in the treatment of addiction, and removal of the limit on patients served by groups is essential if it is to be made available to more of those who now have no treatment options. ***Treatment with Buprenorphine reduces the harm associated with narcotic addiction.***

Secondly, I note the public support that has been given by Co-Chair Cummings to the medication methadone, which has been utilized with great effectiveness for many hundreds of thousands of patients in America and throughout the world. This year marks the 40th anniversary of the pioneering studies by Drs. Marie Nyswander and Vincent Dole, introducing this remarkable treatment. The aim of methadone, like the aim of Buprenorphine, ***is the reduction of harm associated with narcotic addiction.***

And finally, I would like to mention the incredibly dedicated and effective work of the organization Mothers Against Drunk Driving (MADD) – an organization that also happens to celebrate in 2005 the anniversary of its founding, 25 years ago this coming September. No group demonstrates or practices more clearly the concept of harm reduction, or implements the concept with greater success; in a recent statement (Jan. 12, 2005) it was estimated that "the organization has helped save nearly 300,000 lives since its founding." Bravo for MADD, and the phenomenal success it has achieved in reducing harm – tragic harm, on an enormous scale - associated with driving under the influence of alcohol!

Additionally, I would respectfully state in this introduction to my testimony today that "legalization" is totally distinct from "harm reduction." One can zealously advocate and practice one and reject the other. I personally have argued consistently and emphatically, in countries throughout the world for over 35 years, that every possible means should be pursued to lessen the harm to addicts and the society at large, but I have never advocated legalization (indeed, I do not even know how to define the term). The same distinction between the two concepts is illustrated by MADD, which has forcefully and effectively fought for reducing the terrible consequences of drunk driving, but has – to my knowledge – never proposed that zero-tolerance to alcohol – i.e., prohibition - be reintroduced in America. Again, these are two very distinct issues.

It is my personal view, based on my long-term active involvement in this field, that addiction is a "chronic medical condition," a rubric applied to a host of illnesses that are treatable, but (as of now) incurable. In the case of addiction, the ability to treat, and treat with great effectiveness, has been proven in countries throughout the world, including our own.

And finally, before proceeding with the substance of my testimony, I would like to answer the question posed by the subtitle of this Hearing: "Is there such a thing as safe drug abuse?" I will not equivocate in responding, and my response is an emphatic "No!" Nor are harm reduction efforts ***intended*** to make drug use "safe;" rather, they seek to lessen the extraordinary suffering, death and dissolution of families and communities with which addiction is associated. These goals are consistent with the fundamental canons of medicine that have guided the profession for millennia – and they are known, unequivocally, to be achievable in the case of addiction. Not to pursue them, to ignore the initiatives that have been shown consistently to improve and save lives, would be incomprehensible – and unconscionable.

BASIC CONCEPTS – AND MISCONCEPTIONS

In an area as complex as addiction, it is essential to recognize – and dispel – certain fundamental misconceptions. Thus, it is commonly (but erroneously) assumed that those who are addicted to illicit drugs are motivated primarily by hedonism – i.e., the desire to experience euphoria. In fact, however, many users (in my experience, the great majority) are driven not by the wish to "get high," but by a physical "craving," or need. This craving may be a result of repeated use of the substance, an inherent (i.e., inherited) predisposition for physical dependence, or – most likely - both.

The admittedly vague notion of a physical "craving" may sound like an attempt to put the drug user beyond reproach by suggesting lack of control over his/her behavior, thereby rejecting the assumption of personal responsibility. However, before dismissing the concept of craving as rationalization, consider that it is a painful, recurrent reality to countless ***smokers*** – but impossible to describe to those who have not experienced the overwhelming compulsion, at any time of day or night, in any weather, at any cost, to obtain cigarettes when the last pack is empty. It may also strike a more concordant note to consider the situation with regard to another addiction which is common in our society – addiction to alcohol. The very definition of alcoholism is a sobering reminder of the complexity of the problem with which we are concerned: "Alcoholism refers to a ***chronic disease*** in which the alcoholic craves and consumes ethanol without satiation. . . . [It] occurs in all socioeconomic classes and cultural groups . . . . [and] although environmental conditions influence drinking, ***many individuals are at risk to develop alcoholism because of genetic factors***" (emphasis added).[1] Whatever constellation of etiological factors is at play, it seems unlikely that alcoholics drink in order to pursue feelings expressed in positive terms such as "euphoria" or "contentment." Surely, no one who has seen an inebriate, unable to control voice, gait, judgment or excretory function, could imagine for a moment that ***these*** are the consequences of drinking sought by the alcoholic.

Related to the misconception that addicts are driven by hedonism is the widespread conviction that they lack motivation for treatment and can only be engaged under legal duress (i.e., under the threat of incarceration). Repeatedly over the past three and a half decades, in countries throughout the world, the motivation of addicts to seek and accept treatment on a voluntary basis

has been demonstrated. Thus, in the early 1970's in New York City, some 50,000 opiate-dependent individuals sought and received treatment in the various drug-free and chemotherapeutic modalities that were made available over a period of just a few years. In Hong Kong shortly thereafter, a network of over 20 methadone-dispensing clinics was established and from one year to the next almost 10,000 patients were admitted. In Australia in the late 1980's, and in Germany and France in the 1990's, many tens of thousands of heroin addicts entered treatment once it became available.

Nor is it true that addicts don't care about their health, and that of others with whom they have contact. Even among addicts who reject treatment and/or for whom treatment is not available, harm reduction initiatives are very widely utilized. This applies to bleach, condoms, needle and syringe exchange services, safer injection facilities, HIV testing and counseling, etc. Whatever the arguments might be for withholding such harm reduction services, they definitely do ***not*** include either lack of acceptance by the target population, or ineffectiveness in lowering morbidity and mortality, and slowing the spread of the human immunodeficiency virus.

EFFECTIVENESS: COMPARED TO WHAT?

A major hurdle in gaining endorsement of harm reduction services (including treatment) for addicts is the insistence on outcomes that are unrealistic and unreasonable. Once again, alcoholism is a relevant and revealing study in contrasts. Alcoholics Anonymous (AA) has for many decades been acclaimed throughout the world, and its twelve-step program is highly respected as a way to help those afflicted stop – or at least lessen – their consumption of alcohol. A popular slogan proclaims that "alcoholism is a treatable disease." It is important to understand the disparity between near-universal ***acceptance*** of this underpinning of AA, and the equally widespread ***rejection*** of harm reduction and therapeutic approaches to other drug dependencies.

The reason for the diametrically different views would appear to rest in the disparate ***expectations regarding outcomes*** associated with the care afforded the respective conditions. In the case of alcoholism, the standard used to measure effectiveness, as expressed so succinctly and eloquently by AA, is "one day at a time." It is acknowledged that today's "success" in achieving sobriety may well be followed by tomorrow's relapse; however, when relapse occurs (and more often than not it does), it does not denigrate in the slightest the value of the help that has been provided, nor lessen the zeal of service providers in encouraging drinkers to return to AA or another program of their choice. Furthermore, and equally critical, is the uncompromising conviction of AA devotees that ***the alcoholic can never, ever, be cured***.

This orientation to alcoholism, of course, mirrors precisely that which governs the treatment of the great majority of other medical conditions, both those that are primarily physical (diabetes, epilepsy, hypertension, arthritis, etc.), and those commonly labeled "mental" (e.g., schizophrenia and depression). In all these examples it is recognized, expected and accepted that the disease can be treated, often with great efficacy, even though cure is unattainable. The ever-present, generally life-long, possibility of recurrence and even progression of signs and symptoms is simply a frustrating reality and a therapeutic challenge, and ***not*** justification for nihilistic abandonment of those afflicted. "Cure" is not the aim in the management of any of these innumerable medical conditions, and it most certainly is not ***demanded*** as a *sine qua non* of "effectiveness." And yet, the pragmatism, realism and common sense evident with respect to

alcohol dependence and other chronic medical conditions are inexplicably lacking when the dependence involves substances that have been defined by legislative *fiat* as "illegal".

The fact is that addiction – whether to alcohol, opiates or any other substance - is indeed a chronic medical condition like any other, and its treatment must be guided by similar objectives and parameters of effectiveness. Sadly, this is rarely the case. A striking illustration is "substitution treatment" (methadone in particular), whose extraordinary, worldwide success still tends to be dismissed with the comment, "Yes, but how many can be 'cured'?" In essence, the utility of methadone is commonly measured by what happens after it is discontinued. Such an orientation would be unthinkable if applied to anti-hypertensive or anti-epileptic agents; or to insulin for the diabetic; or Levodopa –"the single most effective agent in the treatment of Parkinson's disease"[2]; or anti-inflammatory medications prescribed for chronic arthritis; etc. etc. *ad infinitum.*

With regard to other forms of "harm reduction" – e.g., needle exchange – criticism also focuses on the undeniable limits of success; they do not ***eliminate*** drug addiction or its consequences, but they certainly do reduce – markedly – its terrible consequences. Their goal is to ***lessen*** risks associated with injection, and the extent to which this goal is achieved is a true blessing for the addicted and for the entire community.

In seeking to understand the unprecedented tendency to make "the best" the enemy of "the good" when it comes to assessing responses to addiction, it is easier to ***exclude*** explanations that seem, superficially, to bring logic to an otherwise incomprehensible deviation from the norm but on closer inspection do not hold water. Specifically, the explanation can ***not*** lie in the fact that addiction is a self-inflicted condition, since this is equally true of a host of other diseases to which physicians and the public at large respond supportively, with measures clearly acknowledged to be aimed at reducing rather than eliminating harm. To the extent the heroin addict is to be blamed for his/her addiction, the same criticism would have to be leveled at the alcoholic; and yet, those who drink to excess, whether from need or desire, usually elicit more sympathy than approbation. Furthermore, it is not only the alcoholic who escapes the contempt and hostility of society for "culpability" in causing the disease. The majority of insulin-dependent adult-onset diabetics could live healthy and medication-free lives ***if*** they controlled their diet, exercised, stopped drinking, reduced stress, etc. The same constellation of common-sense behaviors would eliminate (often without reliance on medication) signs and symptoms of hypertension and various cardiological conditions. And then, of course, there is the chronic smoker - who generally does not face the hostility of the medical community, nor encounter barriers to treatment of emphysema, heart disease, cancer or the many other sequelae of nicotine addiction; the smoker is also not reviled or ridiculed because s/he smokes brands with lower nicotine content, or takes "replacement nicotine" in the form of gum or skin patches, for the express purpose of harm reduction.

In fact, "harm reduction," which has evoked so much controversy and outright damnation in the area of addiction, applies to – and governs – the approach to virtually all medical conditions that challenge physicians and society at large. Only very rarely is there a realistic hope of ***eliminating*** harm, or the conditions that cause it. The brutal truth is that in the last analysis, the

alternative to harm reduction is abandonment – a policy that is not only inhumane but also antithetical to the interests of the entire society.

THE DOCUMENTED IMPACT OF HARM REDUCTION: PERSONAL EXPERIENCE LEADING TO PERSONAL CONVICTION

I have been privileged to work in many different settings, and observe both the favorable outcome of a strong commitment to harm reduction, and the terrible consequences when harm reduction is rejected by Government decision makers. The massive increase in addiction treatment capacity in New York City in the early 1970's has been mentioned above. The result: a drastic reduction in crime, hepatitis and narcotic-related overdoses. Similarly in Hong Kong in the mid-1970's; there the immediate benefits (e.g., a 70% drop in drug-related arrests!), have been sustained and are today given credit for the fact that there is virtually no intravenous drug use related HIV-AIDS in that city (Hong Kong has publicized for 30 years the message: If you or a loved one have a problem with heroin addiction, immediate treatment is available). At the other extreme, sadly, we have the Russian Federation, which has rejected harm reduction from the outset and affords its estimated four million (!) addicts essentially no treatment options; the result: a massive epidemic of HIV-AIDS, tuberculosis and incarcerations in numbers exceeded only by America! America is in the middle of the spectrum: we've shown what can be accomplished in the early years of the decade of the 70s, but then expansion ceased and the availability of treatment actually dropped. Needle exchange and safer injection sites exist, but with no Federal support or endorsement. Some 80% of all intravenous heroin addicts have no access to treatment. And not surprisingly, our overwhelming focus on the criminal justice system to deal with the problem has caused more Americans to be behind bars than any other nation's population, and drug addiction remains the number one vector for the spreads of HIV-AIDS.

CONCLUSION

What goals should govern the response to addiction? The same as apply to any other chronic medical condition, for the simple reason that addiction ***is*** a chronic medical condition. From the standpoint of society as a whole, denial of harm reduction services is not only inhumane, but suicidal. We know unequivocally that harm due to drug addiction ***can*** be reduced, and with it crime, health problems, suffering and death – and also the burdens in financial and human terms, and in quality of life, for the entire society. We have an opportunity; the opportunity in turn represents a responsibility and obligation. Not to pursue it would be a very grave, unforgivable injustice to all Americans.

Thank you very much for the opportunity to share these views with your Committee.

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Mr. SOUDER. Thank you. And our last witness on this panel is Dr. Syahrizal Syarif. Maybe you can say it more clearly for me, from the Colombo Plan in Indonesia.

STATEMENT OF SYAHRIZAL SYARIF

Mr. SYARIF. Thank you, Mr. Chairman.

First off, I would like to thank you for the opportunity to come and testify in this hearing today. I am Syahrizal Syarif representing Nahdatul Ulama. Nahdatul Ulama is the largest Muslim organization in Indonesia, and might be in the world, with members around 60 million. As I mentioned, I come along with the Colombo Plan group. As a member of the largest religious organization, we are dedicated to support the community in Indonesia to responsibility and harmony.

We are very concerned about drug addiction program. Right now in Indonesia, we have the drug abuse, drug addiction, but also a student in our Islamic boarding school. We have 1,000 Islamic boarding schools around the country. Also affected with this problem.

Right now, we have, we already, with the Colombo Plan, we already are attending the training workshop and then preparing for the program in Ceta Chalice Islamic boarding school in Indonesia.

Regarding harm reduction, I will just give this brief testimony, regarding the harm reduction approach. We are certainly, and base Islamic perspective, that is mentioned very clearly by my colleagues from Malaysia. We cannot accept such an approach.

For us, it is certainly like, we are supporting the use of substance abuse. And in another perspective, also, we consider that the solution to the solution is not certainly is only based on the scientific base, but we have to consider our culture and belief and also the principle of public health, this approach looks like it is against the principal of priority and fairness and equity. You know, in Indonesia, we struggle with communicable disease and also right now we struggle with the recovery and rehabilitation of post tsunami in Aceh.

We would not spend in certainly such an approach. We spend more to prevention program rather than recovery program.

I think that in conclusion, please consider the susceptibility based on that, also consider about cultural and also relief in Indonesia.

Thank you.

Mr. SOUDER. Thank you very much. I know, Dr. Bensinger, you are very close to making your plane. Do you have any closing comment? And then we will excuse you from your panel.

Mr. BENSINGER. Chairman Souder, I was impressed by the testimony that we all heard. I would only encourage the Congress to reflect on the basic obligations that we have to follow the science and follow the law. And Dr. Newman's comments, I thought, as well as those of the colleagues from overseas, are most pertinent. Treatment can work, it does work. The idea of continuing someone's addiction by providing needles is contrary to science, contrary to the opportunity of diverting someone into treatment and contrary to our obligations as a Nation with other nations, to abide by the laws.

Thank you, Mr. Chairman.

Mr. SOUDER. Thank you.

Ms. WATSON. Mr. Chairman.

Mr. SOUDER. Mr. Cummings had a question for Dr. Bensinger.

Mr. CUMMINGS. Doctor, I know you have to go and I just want to get this quick question in. As I listened to Dr. Newman's testimony, what happens, Doctor, when you don't have treatment? Sufficient treatment, when you have a situation where there is not enough money provided for treatment, and, I mean, I am just curious, in light of what Dr. Newman was just talking about.

And he also said something very interesting about how medicine in and of itself depends upon or one of the biggest—one of the things that they base some of their medical decisions on is reduction of harm, and that it's not something that is new. Nobody wants—it is upsetting to think that people want folks to stay addicted. That's the last thing we want. But at the same time, we want to reduce some harm. But we make the assumption, almost, that, you know, the treatment is there, and I am just here to tell you, as Dr. Beilenson will testify a little later on, it's not always there.

Mr. BENSINGER. Congressman, I want to answer your question. But let me correct the reference to doctor, which is one of an honorary title. My doctorate was not earned in a medical school like my colleagues, but bestowed upon me by a couple of foreign governments whose arms were twisted by DEA agents that wanted me to feel good.

But I think you asked the right question, because I think treatment when you need it is what we need. When someone who is addicted can't get it, they are going to have pain, they are going to have suffering. They are going to not be right with themselves or other people. So I think one of the objectives is to have a network that could provide, as Hong Kong did, and some cities can do, but not many, a way for people to get help.

Mr. SOUDER. Ms. Watson, did you have a question for Dr. Bensinger?

Ms. WATSON. I had a question possibly to you about the ongoing panel, because as I read the title of this hearing today, harm reduction or harm maintenance, I found much of the testimony irrevelevant to the situations which we are battling here in this country. I wanted to speak to needle exchange as a public health issue.

So my question to you, Mr. Chair, will we be able to do that with panel two? I don't think much of the testimony from panel one was relevant to the situations that we confront in our respective districts.

Mr. SOUDER. If people disrupt a congressional hearing, they are subject to removal from the room.

Ms. WATSON. Right. To the policies that we will have input on. I don't know if there is a proposal for safe injection facilities in front of this Congress. So can you answer those two questions.

Mr. SOUDER. First——

Ms. WATSON. Will panel two give us more relevant information and relevant to the title of this hearing, and is there such a proposal in front of us?

Mr. SOUDER. First, Doctor, I think you could feel free to head to the airport. You will miss your plane.

Ms. WATSON. I didn't hear.

Mr. SOUDER. I am releasing him to make his plane.

First off, harm reduction and harm maintenance is predominantly at this point an international issue, not a domestic issue, and we are, in fact, doing both.

Ms. WATSON. Excuse me, for the——

Mr. SOUDER. Ma'am. I am the chairman of the subcommittee, and you ask a question. The primary answer to your question is, yes, we are dealing with this some at the domestic level, but we have funding bills in front of us regarding aid internationally and what we are doing to many nations around the world is against their culture. We also have domestic concerns.

Ms. WATSON. That's not an answer to my question.

Mr. SOUDER. And that most of the funding program, most of the programs around the world where we can see whether they work or not are international.

Ms. WATSON. Simple question, and you don't have to spend, you know, your time. Will panel two be able to answer questions about domestic, before——

Mr. SOUDER. Well, obviously, Dr. Newman, who is a minority witness has worked with domestic, and I believe probably Dr. Beyrer has worked both domestic and international. Those who have come all the way from Malaysia and from Sri Lanka and Indonesia obviously don't know domestic. On the second panel, I believe every single witness is domestic.

Ms. WATSON. Thank you, you answered my question.

Now, I am going to start my round of questioning. Yes, you can head out.

Mr. BENSINGER. Are there more questions for me?

Mr. SOUDER. No, I don't believe so. I wanted to first—each of our international participants can answer this question. But with Dr. Syarif, Indonesia is the largest Muslim country in the world, and part of the challenge here is, as we try to communicate a message that drug abuse is wrong, which is not an easy message to communicate, especially in Afghanistan, in the Golden Triangle area, as it spreads to Malaysia and each of the countries here.

And when the American Government comes in with an approach while you are trying to communicate that drug abuse is wrong and trying to handle the treatment question in a way, when our government comes in with a mixed message, as we heard in this hearing, how does this play through in your countries and what is the reaction to our government, in and of itself to our message against narcotics? Kind of give me a reaction of how people from your nations look at us as a Judeo-Christian heritage country, but largely a secular nation, at this point, coming in to a Muslim nation and telling you how to do it.

Dr. SYARIF. Yes. I think—I don't know your impression about that. But as I mentioned 3 months ago, we sent 24 Ulama to attend the training workshop in Malasia. After the workshop, all of the Ulama realized that this is very important, a very important issue, and then realized that Basantan and Ulama have the impor-

tant role to involve and do something in this issue. I think we are all very open with cooperation and the idea of the intervention.

First about harm reduction. You know, it seems to us, we localize the—it is like we localize the—localize the workers, sex workers, something like that, and we cannot accept something like this. We cannot change the good—the big scene with the rest—seeing—without seeing something like that. Based on our belief and our faith, it is certainly not acceptable. But we are open to discussion. I think it is no problem.

Mr. SOUDER. I think, Mr. How, that as you work in your program in Afghanistan, which has seen this huge surge in heroin production, which can't possibly be absorbed in the market, so probably there will be a reduction in production for a couple of years, because this is just something we have never seen before. As this starts to spread into central Asia and into Europe and around the world, how do you see we are going to be able to tackle the mixed message?

Mr. HOW. Mr. Chairman, yes, in Afghanistan, I have seen not just able men being affected by drug abuse, but I have seen woman, even though in the burkas and all covered up, and also young infants as young as babies 1 or 2 years old using opium. The women have to keep them quiet, keep the babies quiet while they are at work earning a living.

The point is, they are all opium smoking, not injecting drug users. They are not IV drug users. They need treatment. Certainly, there are no treatment services around Afghanistan, with the exception of one or two facilities being operated with the help of United Nations and also funded by British here and there. They have one or two, but not enough. That is why the Colombo Plan, with the assistance from the U.S. Government is starting. I mean, we are starting to mobilize.

As you know, the religious leaders, the mullahs, command considerable respect in Afghanistan. They have a say in most of the policies in Afghanistan. They are certainly opposed. When we do training in Colombo recently, they actually treat drug addiction as, like a crime. They don't say it's a disease or it's a grave disease, but after 1 week they accept it. They accept it. We can help them. Drug addicts are not criminal, they are patients, they are sick people, and they are not criminals, and we don't need to give them lashes or whatever, so they can be treated.

What I feel is there should be no more treatment programs going in Afghanistan and mobilizing the religious leaders, where by using spirituality, where by it is very powerful in Afghanistan, to provide those services, either prevention or treatment services. That will be the way to go, not providing them needles. How can a young person, 1 or 2-year-old, without knowing anything, now you have needles going around, and just like saying, doing drugs through needles is OK. I mean, that's not the message. It is certainly very confusing to the young people.

We have also seen one instance, a young person, a youth, distributing needles to another group of youth to say if you are using drugs, don't share needles. That is not the message. You should do primary prevention, primary prevention should be the main strategy as, in your world, strategy as in many strategies of Asia, Asia,

Malaysia, the main strategy is prevention, that is the strategy it should be.

Thank you.

Mr. SOUDER. Let me go to Mr. Cummings for questions.

Mr. CUMMINGS. Yes. Thank you very much, Mr. Chairman. As I was sitting here, I was trying to—I was just listening to the witnesses very carefully and trying to see what threads ran through their testimony to try to get a feel for what might be the basis of their positions.

One seems to be religion. Certainly as a son of two preachers, I have a lot of respect for religion. I am just wondering, Dr. Syarif, I think you and Dr. Bahari talked about the Muslim faith, and how the use of drugs, and I think you just mentioned it, Dr. How, the use of drugs as seen—I guess, as a sin.

Mr. SYARIF. That would be correct.

Mr. CUMMINGS. A little louder for me, please.

Mr. HOW. Yes, as a sin, yes.

Mr. SYARIF. Yes.

Mr. CUMMINGS. So as a respecter of religion, then it would seem as if anything other than getting the person off of the drug so that they can live a sinless life with regard to drugs, that is, it seems to me that would be about the only thing that would be acceptable from a religious standpoint. Does that make sense?

Mr. BAHARI. Yes.

Mr. SYARIF. Yes.

Mr. SOUDER. So that means that you would be against things like this, harm reduction and things like needle exchange because they fly in the opposite direction, the religious teachings and believes; is that right?

Mr. BAHARI. Yes.

Mr. SYARIF. Yes.

Mr. CUMMINGS. Going to you, Dr. Newman, you were talking about how harm reduction is a part of medicine. And I can remember, as Dr. Beilenson, I am sure will remember, there was a time in Baltimore where there was a question as to whether or not you would have clinics for young girls and be providing them with information with regard to contraception.

And the religious community jumped up, they were very upset, and they said that they would be encouraging, encouraging young girls to become involved sexually at an early, young age. We hear that argument all the time. The problem with that is that the young people would come to me and say Congressman, I mean, you can say what you want, we are already doing that.

And so what we need—and, believe me, nobody likes to hear that, as a father of two daughters. I don't want to hear a 14-year-old say that they are already active. But, at the same time, I can either be practical, and watch my teenage pregnancy rates go up—or not to be practical and watch them go down, or I can just base everything on my beliefs and say you are a bad girl and then the next thing you know I have a high teenage pregnancy rate. In Baltimore, I am glad to say that we have seen our rate go down.

Is it somewhat similar, Doctor?

Dr. NEWMAN. Yes, sir, I think you are absolutely right. I think we have to accept the reality that today there are a great many IV

heroin users in virtually every city in America, and despite the best efforts of many Congressmen, including some of the people on this committee, some 80 percent of all the IV heroin users in America have no access to treatment. That is a scandal.

That is a shame, and in the face of this huge proportion without treatment, to say and we are not going to make it more likely that they will survive until someday they can get treatment, I just don't understand that. It's a question of abandonment, abandonment of the roughly 80 percent who have no access to treatment, or saying at least we are going to try to help you survive until we, government hospitals, doctors, get our act together and make treatment available for you.

Mr. CUMMINGS. Do you see the—I think Dr. How was saying that in 1 week, for an addict—if an addict first comes forward, they see it as criminal basically and then after about a week, they see it as a——

Mr. HOW. Disease.

Mr. CUMMINGS. I mean, a health situation. Dr. Beyrer, I mean what have you seen, have you seen it in your studies? You said you had been in quite a few locations. Is that usually the case that you see it, or do you see them treating it as a health situation overseas?

Mr. BEYRER. Well, I would say one or two things. First of all I think that——

Mr. CUMMINGS. Keep your voice up, please.

Mr. BEYRER. Yes, sorry. I think it's true, generally, that there's been a great deal of diversity in approaches to the way addiction has been handled, but we have to be mindful of how recent the epidemics in many of these countries have heroin use, heroin availability and injection drug use.

Many countries are dealing with really newly emergent problems in this area and with newly emergent HIV epidemics, and we have seen a great deal of stigma around both HIV injection and injection drug use that unfortunately has a negative impact both on getting people into treatment and on being able to deal with HIV infection.

Now, I would just give you an example, one of the countries where we have a project under way, Tajikistan, we just did a small collaborative study trying to do some outreach to injectors and get a sense of how serious the problem was, how many injectors there were. We had good support from the government there to do this initial work.

We doubled the reported number of HIV infections just by assessing HIV infection in 500 users, because this is an epidemic that really has not been studied. It is happening as we speak. It may have doubled again in the last couple of months. And folks there.

Mr. CUMMINGS. Wait a minute. I just want to make sure we are clear. When you say you double, you mean you had some numbers that you started with with an assumption, and then you found out that there were a lot more than——

Mr. BEYRER. That's right.

Mr. CUMMINGS. I didn't want that recorded that because of your efforts, you doubled.

Mr. BEYRER. That's not the plan. Thank you for that clarification. I want to make one other point very clear, which is that what is

being exported to Tajikistan from Afghanistan is not opium, it's heroin, and we have heard a lot of discussion here about the fact that opium is what is smoked and opium is what is around.

On the ground in central Asia, what is moving out of Afghanistan and moving through Russia is heroin, and that's why the countries I listed in my testimony are having explosive epidemics of HIV and drug users.

Mr. SOUDER. That's an incorrect statement, by the way. Opium base is moving, heroin base does not move out of Afghanistan.

Mr. CUMMINGS. Can you—I'm sorry, Mr. Chairman, I didn't hear that. You shook your head, you said something, I don't know what you all did.

Mr. SOUDER. Heroin is a process.

Mr. CUMMINGS. Right.

Mr. SOUDER. It is like opium poppy turns to paste and the paste is what is distributed out of Afghanistan. They don't have heroin labs to process heroin. Then when it gets to maybe a city like Bangkok or somewhere along the line, it is being converted to heroin.

Mr. CUMMINGS. Yes. That was interesting.

Mr. SOUDER. That was an incorrect statement.

Mr. CUMMINGS. OK, I just had one last thing. There have been several statements here, and I am sure we will get into this in the second panel, that a person, Dr. Newman, who goes to a needle exchange because they are so desperate for drugs and because their state of mind and because they are an addict, that they might not have the wherewithal or even care about exchanging a clean needle, a dirty needle for a clean one.

I mean, have you seen—I mean, from what you—your knowledge. I don't know whether you have a base of knowledge on that or not.

Dr. NEWMAN. I do, sir, I have always been struck by so many—can't quantify it, but so many IV drug users care so much and that's why they go to needle exchange. If they didn't care, I mean, they don't go there with free coffee. They don't go there to chat with friends. They go there for sterile needles that they know will increase the likelihood that they will survive. They vote with their feet and not to make a service available that we know will improve their chances of survival. I just can't understand that position.

Mr. CUMMINGS. Thank you, Mr. Chairman.

Mr. SOUDER. Mr. McHenry.

Mr. MCHENRY. Thank you, Mr. Chairman, for having this hearing today. I think it's certainly important to bring this to the public's attention. It's certainly been eye-opening for me as a new member of this committee to have such an education. I certainly appreciate the panel for all of you traveling so far to be here today.

I have a couple of questions, general questions, first of all. Harm maintenance. I think Dr. Newman said this is sort of a fundamental tenet of medicine is sort of harm maintenance.

Dr. NEWMAN. No, sir, I most certainly did not. If I gave that impression, I am not sure how. But nobody, nobody in their right mind would advocate maintaining harm. Harm reduction is the antithesis.

Mr. MCHENRY. Harm reduction, certainly, certainly. Harm reduction. OK, my apologies, because we are talking about both harm reduction and harm maintenance. My apologies. Sorry, sir. Certainly, but I do have actually a couple of questions for you about a book that one of your organizations put out that you are on the board of.

This sort of goes hand in hand with this policy. And it's called, "It's Just a Plant." A children's story about marijuana, certainly a nice little book. It's really a shame that Representative Waxman is not here. He has been one of the chief opponents of the tobacco industry in Congress, and really lampooned them, as justly as I believe it is, using cartoon characters to spread smoking in children. Well, this is a whole book geared to children and it explains marijuana to them.

I would not say in discouraging fashion, in fact, rather encouraging, which is absolutely the opposite, I would say, of harm reduction. This would be harm production, I would say.

I would just question your organization. Maybe your defense of this book and what type of message this sends.

Because I think this relates to this overall question of sort of maintaining drug use through needle exchange programs and things of that sort, and I think it's a rather harmful set of circumstances for us to be dealing with. So if you could address that.

Dr. NEWMAN. Sure, I will try. Let me say that I am among the very, very few people I know who can say under oath that he knows absolutely nothing about marijuana.

Maybe it's shameful, but I have never read that book, which is part of the reason why I don't even have any academic knowledge, let alone any first-hand knowledge. So I just can't comment on the book, because I just know nothing about it, either the topic or the particular publication.

Mr. MCHENRY. OK, are you on the Drug Policy Alliance board.

Dr. NEWMAN. Yes, sir, I am.

Mr. MCHENRY. You are, OK, OK. Because as I understand it, this was funded through the generous support of your organization as well as George Soros and many others sort of in the pro-drug community, and I do think it's a rather disturbing book to see distributed widely and to see you on a congressional panel representing, as part of this group, it's just really disturbing to me.

Dr. NEWMAN. Could I just respond to that, just to say that I have a very special area of expertise and interest. I do not pretend to speak for the Drug Policy Alliance. I do not edit the products of that organization or any group that they fund. It's just not something that I have any involvement in whatsoever. I can neither defend nor condemn.

Mr. MCHENRY. So, how long have you been a board member, if you don't mind me asking.

Dr. NEWMAN. According to the chairman's reminding me, apparently since 1997.

Mr. MCHENRY. Well, I would just say that perhaps you might want to look into the organization you are part of. That might be a positive thing, so that when I ask questions like this, you will be able to answer them in the future if you are before another congressional committee.

AUDIENCE MEMBER. Hey, buddy, why don't you go smoke a joint and relax?

Mr. MCHENRY. Well, thank you, sir. Smoke another, buddy.

AUDIENCE MEMBER. Thank you, I will, sir, thank you very much.

Mr. SOUDER. In a congressional hearing, we are supposed to have a decorum, and I am disappointed we are dealing with that today. Now I would like to yield, Mrs. Norton.

Ms. NORTON. Mr. Chairman, I'm sorry I was not here for much of the testimony so I will pass.

Mr. SOUDER. Ms. Watson.

Ms. WATSON. I have no more questions for this panel, but I do have a statement. I was chair of the California Health Committee and the Senate for 17 years, when I was a legislator. And I held hearings up and down the State of California, the largest State in the Union, on public health issues. And one of the things that I learned by being out there in the community is that people indeed were injecting drugs into their systems. And through the injection of drugs, AIDS was spreading when unsuspecting partners had sex. We studied for years to try to see what we could do to increase the harm and the risk from needles being used over and over again.

One of the things we learned from San Francisco is that if you took a dirty drug and gave a clean drug, needle, excuse me, that you would then remove the instrument of contamination out of exchange. You could not get a clean needle unless you gave a used needle.

At that point of contact, you were not given the drugs, you were just given clean works, and, once we identified you, we could then tell you about optional treatment programs that were available to you by the County Health Department. I carried that bill for 8 years before it was passed into law, because our studies in the State of California, and I don't know about all the other countries and their programs, I heard a little bit about them today, what I am interested in learning what works and what doesn't work from a public health standpoint.

I do not promote drug usage. I don't want anyone to speak for me. I can speak for myself. What I am promoting is reducing risk in communities, addressing the problems head on, trying to help people become responsible for their own healthcare and reducing addiction. So, Mr. Chairman, I am looking forward to the next panel who might be able to offer some insight. But I see that I am already late for a very, very important hearing elsewhere. Thank you very much.

Mr. SOUDER. Thank you. Representative Davis.

Mr. DAVIS OF ILLINOIS. Thank you very much, Mr. Chairman, and as a part of my time, I am going to read a letter that I received from a group in my congressional district at Roosevelt University. It says here,

Chairman and members of the subcommittee, it has come to our attention that on February 16th, the House Government Reform Subcommittee on Criminal Justice, Drug Policy, and Human Resources will be holding a hearing entitled, "Harm Reduction or Harm Maintenance: Is There Such a Thing as Safe Drug Abuse?"

The title alone suggests a predetermined judgment about harm reduction practices. Our hope is to demonstrate that harm reduction philosophy by no means advocates drug abuse. Our group, Students for Sensible Drug Policy, strives to achieve sustainable policies that foster civil rights, health and safety. One of our goals is

to support harm reduction activities, ranking from encouraging designated drivers to safe distribution of health-related suppliers.

Some members of the committee may have been presented with a misrepresentation of harm reduction practices. To us, harm reduction means making sure that no one dies in a drunk driving accident because we were afraid to address the harms associated with drinking and driving. To us, it also means that no one should die from blood-borne pathogens just because they suffer from the disease of addiction.

Harm reduction embraces abstinence, but only providing programs that have abstinence as the immediate goal does not acknowledge the cycle of addicted disorders. These disorders nearly always require relapse in order to be abstinent. Harm reduction allows addicted people to be engaged in the recovery process, even if they cannot immediately be abstinent. Abstinence is a long-term goal. Harm reduction is the short-term process.

Mainstream 12-step programs are known for never turning away an addict that wants help but cannot stay clean. We, too, embrace this idea and believe that it is the core of harm reduction. Our belief is based on research, is that there is no single treatment modality that works for everyone. Our hope is that harm reduction will continue to be a choice in a range of treatment options for those who desire treatment.

Sincerely, Students for Sensible Drug Policy, Roosevelt University chapter, 430 South Michigan Avenue, Chicago, Illinois; Students for Sensible Drug Policy, National Office, Washington, DC, and the Midwest Harm Reduction Institute, 4750 North Sheridan Road, Room 500, Chicago, Illinois.

And Mr. Chairman, I would ask unanimous consent that this letter be inserted into the record as a part of the hearings.

[The information referred to follows:]

Submitted by
Congressman Dandy Davis
2-16-05

House of Representatives Committee on Government Reform
Subcommittee on Criminal Justice, Drug Policy, and Human Resources
Rayburn House Office Building
Washington, DC 20515-6143

February 11, 2005

Dear Chairman Souder and Members of the Subcommittee:

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Harm reduction embraces abstinence. But *only* providing programs that have abstinence as the ***immediate*** goal does not acknowledge the cycle of addictive disorders. These disorders nearly always require relapse in order to be abstinent. Harm reduction allows addicted people to be engaged in the recovery process even if they cannot immediately be abstinent. Abstinence is a long-term goal. Harm reduction is the short-term process. Mainstream 12-step programs are known for never turning away an addict that wants help but cannot stay clean. We, too, embrace this idea and believe that it is the core of harm reduction.

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Sincerely,

Students for Sensible Drug Policy
Roosevelt University Chapter
430 S. Michigan Avenue
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Midwest Harm Reduction Institute
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Chicago, IL 60640

Mr. DAVIS OF ILLINOIS. My question is to Dr. Newman.

Dr. Newman, I have been involved in promoting something that we call Drug Treatment on Demand. And we were fortunate to get a referendum put on the November ballot in Cook County, which is the second largest county in the United States of America with more than 5 million people. And we asked the question, should there be drug treatment on demand? 1.2 million people voted in the affirmative in terms of saying yes; 177,000 voted against the referendum. My question is, is there a time when treatment is most effective in terms of drug treatment and its impact and effectiveness of treatment?

Dr. NEWMAN. First, I would say those 1.2 million people were absolutely correct. In response to your specific question, what is the right time, it is any time that one can engage a drug user who wants help. And let me say that you should take heart in the fact that we know it is possible to achieve the goal of treatment on request regardless of the amount of resources available. It has been done in Hong Kong. It was very briefly possible in New York City in the mid-1970's. It has been possible in France. So I encourage you to lead the charge of those 1.2 million and pursue a goal that will save countless lives and suffering.

Mr. SOUDER. Ms. Norton.

Ms. NORTON. Thank you for your indulgence. Just a couple of questions, because I would like to clarify for the record what I think may be some confusion that results in the use of the notion of harm reduction and some confusion between legalization of drugs and those who try approaches designed to lure people off of drugs and to keep people from spreading disease through injection. And I would like to ask just to clarify for the record Dr. Beyrer and Dr. Newman, do you believe in the legalization of drugs? Is that your position or the position of your organizations?

Dr. BEYRER. That is certainly not my position. I think in my comments, I made the point near the end that harm reduction, particularly the outreach education components to drug users have, in fact, been shown to reduce drug use, which certainly is a goal, and that harm reduction is not inconsistent with the goals of abstinence. It doesn't have to be inconsistent with abstinence at all. And I think studies of methadone maintenance show that it has been able to reduce substance abuse. And I would thank you for the opportunity to make clear that legalization of drugs is not a public health position, I don't think in mainstream public health and it certainly isn't a personal opinion of mine.

Dr. NEWMAN. I have been in this field for 35 years, practicing and advocating harm reduction. I have never advocated legalization. Part of the reason for that is, I don't even know how it's defined. I have certainly never been for it. And I'm glad to have the opportunity to clarify.

Ms. NORTON. There are people even in this country who believe, for example, that heroin maintenance for some people is what you have to do, because they've been addicted for so long, and of course, that would condemn whole sections of society to everlasting heroin craving.

One final question, Mr. Chairman. Mr. Chairman, I referred to your remarks, because my impression in working with you has

been that you are careful about overstating. And I want to ask these two witnesses again, because a sentence or two in your remarks go so counter to my own personal experience. For example, with private parties that do needle exchange in the District of Columbia, I'm told that very hard core addicts who have engaged in needles and injection drug use for years are beyond their reach except often by having them come to get a needle where they also get some kind of counseling or the kind that would be totally unavailable to them or they would at least be unavailable to us. And they tell me about instances where finally someone who comes to pick up his needle gets convinced that he should, in fact, go to a drug abuse center that he would have never gone to by himself.

I want to know if you know, of people described by the chairman in his remarks, "harm reduction is an ideological position that assumes certain individuals are incapable of making healthy decisions. Advocates of this position hold a dangerous behavior such as drug abuse therefore simply must be accepted by society, and those who choose such lifestyles or who become trapped in them from being able to continue these behaviors in a manner less harmful to others." I'm searching for the advocates of this position. And perhaps you who are in the field know of advocates of this position, or do you know of advocates of this position?

Dr. NEWMAN. I absolutely do not hold that position, nor in the 35 years that I have been in this field, do I know anybody who has advocated what you have just quoted from that letter.

Dr. BEYRER. I would concur. And I would reiterate that I think one of the issues that we need to remain clear about is when we talk, for example, about needle exchange—and the representative was so clear about the exchange component, about getting dirty needles out of circulation, that what we are trying to do is reach people where they are and reduce the risk of fatal infectious diseases, which are spreading rapidly, globally through this route. But this is a key entry point into treatment, into counseling and into, indeed, getting drug-free and abstinence.

That is one of the real benefits of needle and syringe exchanges is that they are an entry into treatment. And I think as a dual-use, as an entry point into treatment and as an opportunity to prevent the spread of HIV-AIDS that they have important public health functions.

Ms. NORTON. Thank you.

Mr. SOUDER. Dr. Beyrer, do you believe in the decriminalization of marijuana? Yes or no?

Dr. BEYRER. I don't personally have an opinion on that.

Mr. SOUDER. You are not opposed to it.

Dr. Newman, do you believe in the decriminalization?

Dr. NEWMAN. Marijuana is a drug/medication with which I have no experience, and I have no basis for an opinion.

Mr. SOUDER. So on the drug policy lancet on your board, it says one of the primary goals or the major goals of your organization is to end the war on drugs, do you agree with that?

Dr. NEWMAN. I just don't have the knowledge to either agree or disagree. I don't endorse everything that the organization says. And on this particular point, I don't have a position either for it or against it.

Mr. SOUDER. I think that alone speaks volumes, not to have a position. It's one thing to say, I don't believe in legalization. But if you don't believe in any enforcement, that is, in fact, back-door legalization. Now, how we do it and what's the most effective way to do it and whether you support it—and I think your record shows you favor—you focused on the treatment side, the fact is that I believe you have to have it all, prevention, treatment, interdiction and enforcement. And you have legalization. Part of my concern in my statement is that you really are faced with two choices here, in particular Dr. Newman, and that is when you are on the board of organizations that advocate, at the very least, not controlling the drugs aggressively and often advocating for legalization—and Congressman Davis, Students for a Sensible Drug Policy favors legalization.

They have been in front of this committee and have promoted multiple things for drug legalization. And when you affiliate anything with the harm-reduction movement with groups that advocate broader drug agendas, it does call into question which is driving which. And that is what I believe my statement was trying to reflect, not necessarily each individual. But you need to, very carefully, if you want to have credibility on the Hill and with most Americans, disassociate treatment efforts for things that are aimed at treatment.

Let me get back to the title of this hearing: "Harm Reduction and Harm Maintenance: Is There Such a Thing as Safe Drug Abuse?" We have some difference of opinion. I believe that, whether providing heroin and heroin needles in these different programs around the United States and around the world have slightly different mixes with this, but, for example, in Switzerland, which has been the No. 1 international model, they provide the heroin and the needle. That is clearly drug abuse. Whether the goal is for the harm reduction part is for the people who aren't using the heroin, in other words, the argument is, as we maintain them in a controlled environment to go out and work and there is a reduction to the society. It is harm maintenance to the individual. They are still on heroin. They are controlling it.

In Vancouver, which is the biggest international model on needle exchange—I visited there multiple times—it's expanding, and it's evident to the eyes that it's expanding. They have multiple locations around the city. They are now looking going into the suburbs. The argument is that people are coming in from other parts of the country. It is hard to sort the data out in Vancouver. But the bottom line is there aren't swaps for needles. They are coming in because they are free, and it is convenient, and they shoot up right on the spot. And there is no control over that.

And in Holland, as we have looked at the programs there, they haven't worked very successfully. And in Denmark, they are going the other direction, as is Holland gradually. And I would argue that this is, in fact, an accurate title.

We can dispute the HIV component is a very difficult question, because HIV and drug questions are interrelated here, and the problem is interrelated. In trying to address one, do we exacerbate the other. That is part of what the debate is. And as we go international, that is part of our challenge particularly as we hit other

cultures where we are fighting culture. I want to thank all of our visitors.

Ms. NORTON. Mr. Chairman, could I make one remark, because, again, we have a wholesale term here, decriminalization, being used. That also hides a multitude of—since I am leery of any decriminalization, frankly, because small amounts of marijuana in communities that are prone to addiction can become havens for large amounts.

But there is a distinction between people who would like to decriminalize marijuana abuse for very small amounts of marijuana, where someone gets a record as an 18-year-old, from people who are engaged in frequent marijuana use. And they shouldn't all be lumped together as well. And I would like to draw to the attention of the committee that entire States now are using diversion techniques for first-time abusers.

They arrest people for drug abuse. This has proved so counterproductive and weaning people away from drugs has been so costly that entire States—I understand Jersey would like to do it, that California would like to do it, that anybody who gets arrested as a first-time drug abuser is offered treatment and diverted from the criminal justice system. I do think that says something about modern methods of trying to prevent and control the spread of drug abuse.

Mr. CUMMINGS. Mr. Chairman, I think we have to be very careful when talking about harm reduction. You know, because we can put out the word that trying to save a life, as Dr. Newman said, until we can get to a point of treatment, and we can say there is something awfully wrong with that, but are you saving a life or lives? In my church in Baltimore, over 10,000 people, one of our problems has been men who go to prison or have been involved in the drug world. They get clean, and part of getting clean is coming back to the church, coming to a church. They don't tell these young women, who never touched an illegal drug, have not been involved in risky behavior, none of that, next thing we know, that young lady has HIV-AIDS. And so I think, you know, again, we are not living in a perfect world. Perhaps if it were a perfect world, nobody would be on drugs. Even if it was perfect with people on drugs, we would have treatment for everyone that wanted treatment, but we are not there yet.

And God knows, I hope we get there, because I don't think that the people—a lot of the people who find themselves on drugs, wish they never made that first decision, but then they get stuck in a world that they can't get off the merry-go-round.

I want to thank all of our panelists for being with us today, and I do appreciate your testimony.

Mr. SOUDER. I want to finish my statement.

I believe all minority members have spoken multiple times, and I want to finish my statement with this panel. I wanted to clarify something else Dr. Newman said in his testimony. I believe there is a difference between allowing doctors to prescribe legal, controlled medication to reduce pain and/or problems and to try to get people better, and maintaining an illegal narcotic, with which its only benefit is harm and that even drugs that are harmful have components in them that can be isolated.

But to refer to medicinal marijuana or heroin as doing harm reduction, I believe is a totally different thing than when we have an FDA controlled drug, not smoked, no basic risk and the goal is to improve someone's health as opposed to comparing that to methadone or heroin maintenance programs. It's a different ball game. Obviously, there is a middle ground here with pseudoephedrine, a key ingredient in many cold medications, and yet it is the key ingredient in meth production. So we are having to figure out how we balance those two things in our society. We are also having to deal with it in this committee.

The fact is that legal drugs prescribed by doctors are now the No. 1 death from drug abuse in the United States, more than everything else. And that the argument that it should go through a doctor, or it's doing maintenance or that type of stuff is increasingly coming into question even in the controlled limited experiments as we see the destruction that comes from addiction.

I want to conclude with this, on this panel, regarding those who came from overseas, particularly what Mr. Pathi said. You heard that ONDCP has one position, and the DEA, and USAID has been funding other positions. And I want to clarify something for the record. This is democracy. You are seeing it at its best. We don't agree with the Drug Policy Committee, and we don't agree here. But there is a majority in the minority. And what has passed in the U.S. Congress is that government funds can't be used for heroin needles. Government funds can't be used for these types of programs. If USAID is funding these, that is why we have all this data coming in. And there is a disagreement in the United States over whether this should be the case.

We will continue to debate that. There is a disagreement over what private funding can do. But the clear majority in Congress every time we voted has voted against these programs being done with any taxpayer dollars, that it is an extra complicated question. And we are going to deal with that with the second panel, and that is how we deal with this in an international arena where the United States is being seen as a bully. And it is one thing if our policies are to protect ourselves. In other words, I would argue that some of our efforts toward freedom around the world and efforts related to the terrorism groups, many in your country or working with law enforcement or if heroin comes from an area and goes to another area, it's narcoterrorism, yet we have things we have to work with together. But if we are not sensitive to each other's cultures as we do this and if we come ramming in on things that are largely domestic, we have a problem, particularly if we are using taxpayer dollars that the majority of the taxpayers and the majority party in the House and the Senate and the Presidency don't agree with.

Your testimony, though it seemed short, anything you want to send to us is very helpful in clarifying it from an international perspective. Now, at the same time that—and this is where those of us—I'm a fundamentalist Christian in the United States, and I have certain policies. There are public health concerns we have to figure out. And we have to figure out how we deal with this when these two things hit. And I'm not arguing because I don't favor harm reduction programs, but it may not be enough just to say no.

We have to figure out not how to get them involved in drugs, but more creative ways to do that, how to treat the holistic problem that's behind it, how to get people who have treatment programs with it and figure out within our religious faiths a more complicated and comprehensive approach than "Just Say No" as a response, or we are going to get these what seem like a short-term solution but often wind up in the long term undermining our antinarcotics efforts.

Thank you very much.

Mr. CUMMINGS. I have one statement based on what you just said, and I want to be fair to this side and take a little bit of time like you have taken quite a bit of time. Let me be real clear that I think we all agree that appropriate treatment, treatment works.

Mr. How, you said it. You don't have enough treatment. I bet almost everybody on this panel will say there is not enough treatment. So it would be nice, since we are talking about what we agree and disagree on, that we can agree that treatment does work. And in a perfect world, as I said before, we had that treatment, and we spent our money on treatment. I don't think this country—I hope—wants to bully anybody into anything. But one thing we do know, that I'm sure the various countries that you all come from, there are people no matter what their religion may be that would love to have treatment. And maybe we need to redirect some of our efforts into trying to have that treatment so you don't have to go through these hurdles or over these hurdles when you are trying to get people well. Thank you, Mr. Chairman.

Mr. SOUDER. And not a dime of those treatment dollars should be used for needles. It should go for treatment. Thank you very much.

The next panel, if you could come forward. Remain standing, and we will do the oath at the same time.

[Witnesses sworn.]

Mr. SOUDER. Let the record show that each of the witnesses responded in the affirmative.

Thank you for your patience. It has been a long, drawn-out afternoon, and let's go to panel two.

Our first witness is Mr. Robert Peterson from PRIDE International, a youth organization.

STATEMENTS OF ROBERT PETERSON, PRIDE INTERNATIONAL YOUTH ORGANIZATION; REV. EDWIN SANDERS, METROPOLITAN INTERDENOMINATIONAL CHURCH, MEMBER, PRESIDENT'S ADVISORY COMMISSION ON HIV/AIDS; PETER L. BEILENSON, M.D., COMMISSIONER, BALTIMORE CITY DEPARTMENT OF HEALTH; ERIC A. VOTH, M.D., FACP, CHAIRMAN, THE INSTITUTE ON GLOBAL DRUG POLICY; AND ANDREA BARTHWELL, M.D., FORMER DEPUTY DIRECTOR, OFFICE OF NATIONAL DRUG CONTROL POLICY

STATEMENT OF ROBERT E. PETERSON

Mr. PETERSON. Thank you.

You can reduce the harm to me and probably some of my teammates by paying our parking tickets when we leave today.

I have been involved in many different angles; was in charge of funding the treatment, the prevention and the enforcement in the State of Michigan. More recently, I have been working with youth in our Nation and abroad and especially in South America. And as I mentioned in the testimony, the whole question, is there such a thing as safe drug abuse, it underlies confusion and mixed messages.

And some of the confusion that's come up here today, because what we are dealing with, and somebody brought out, is this whole terminology bit and what are we talking about when we use these terms.

A lady from Peru, wonderful woman who works with the street children, she said she showed up at a conference that was dealing with some of these same issues, harm reduction and drug legalization. And the young children in the program said, "Do you mean there are people that want to make drugs legal and available out there?" And the little child said, "And the world really has gone crazy, hasn't it?"

And the truth is, maybe these questions don't come up here about safe drug use, but I can assure you, in Canada, the crack addicts are pushing for safe crack use kits. So those terms are being used, and they are being used by groups that are advocating certain things right here. Each of us looks at the drug problem a little bit.

If you are a treatment provider dealing with addicts on the street, you're going to look at the drug problem one way. If you are a cop on a beat, you are going to look at the drug problem another way. If you are the head of a church or counselor, you look at it another way.

My bias now, my life basically—I have been able to get out of government. I have six children. I have with me here some of my girls basketball team and some of the boys basketball. And the key is, you mentioned the criteria should be what the drug policy impact will be upon youth and families, how is this going to impact youth and families?

If we look at the drug problem, you can see from children's view, it is not the drug laws or policy, it is drug use that causes their problems. Some child in the womb can be damaged by drugs, can be born addicted. In Philadelphia, during the crack epidemic, I was with the attorney general in Pennsylvania. It was estimated 80 percent of child abuse and half of the deaths were caused by a drug-using parent. It was the use of drugs and the impact upon the brain of the parents that—the parents probably otherwise loved their children—caused the problems.

And for younger children, it is the same thing, neglect. For teens, the top cause of death for teenagers in this country is accidents, and that relates back to drug use. For young adults, drug use. You are dealing with date rape, violence, other types of things. Why this is important will come to bear in a little bit.

Now, did those working with children and youth develop a harm reduction concept? Harm reduction as you heard from some of the doctors is an old concept, and we do use it, but it was hijacked, OK? I'm a student of the drug culture and listened to their audiotapes for years of their conferences, and there was a group in the

1980's funded by some American businessmen that got together, and they held whole sessions saying what can we use instead of the L word. What can we use instead of the word legalization that we sell to the public? And the basic conception that they came up with was harm reduction.

Peter McDermott wrote, "as a member of the Liverpool cabal who hijacked the term harm reduction and used it aggressively to advocate change during the 1980's, I'm able to say what we meant when we used the term—Harm reduction implied a break with the old unworkable dogmas—the philosophy that placed a premium on seeking to obtain abstinence."

And he goes on to discuss the need for a legal supply of clean drugs and a supply, not an exchange, of clean needles. What we see is a focus to a civil libertarian, a focus to some of the groups that are funding, whether unknowingly or knowingly or whether the groups are buying into their philosophy, whether the board members are buying into their philosophy, but the groups that primarily fund the major lobbyists for this concept are involved with a viewpoint that drugs should be a Constitutional right, that we have an inherent right to use drugs.

And if you listen to their tapes and listen to the leaders and read some of their papers, they make this very clear. This is not a secret. There is a proverb that where a man's treasure is, there is where his heart lies. Now one of the problems I have with some of these things with George Soros, and these people supposedly show so much compassion is they fund very little of the treatment we are talking about. Money is going into needle exchange. Money is going into political campaigns to liberalize drug laws. Very little is going into, of their money, to actually provide treatment on demand for the addicts. There is a lot of money there that could be going into that, and it is being wasted.

One of the things we talk about when we talked about needles, I believe what we heard and you can straighten me up—and I know, Congressman, you spoke to the groups and coalitions, so I know where your heart is with this to make a difference. But what we heard everybody says, you give needles with treatment, with outreach, with getting people help. And so some of the studies that need to be done—we also know that just giving help and treatment works without the needles. How much is it the needles, and how much is it the treatment and outreach?

There are a lot of programs out there throwing needles out and providing none of these things. Needles are littering the streets. The return rate is not always 100 percent. So you have to differentiate. Is this buying the philosophy of moving away from abstinence, or is it supporting the policy of abstinence? You are saying using needles to get these people, to get them in treatment, to get them help, to get them off drugs. It can be used in the opposite way, that we are going to allow drug use and going to accept it because some of the same groups that are funding here and funding in Europe and the main lobbyists behind this are pushing for heroin maintenance, maintaining people on heroin, and legalization or liberalization of many of the drug laws. This is a public record, and you can read their things. Many of the people who are saying that they support some form of harm reduction——

Mr. SOUDER. Mr. Peterson, we will put your whole statement in the record, but you need to summarize.

Mr. PETERSON. The concept has been bought in, but sometimes people don't know which one they are taking. But the basic philosophy that is being pushed as harm reduction is this philosophy of acceptance and accommodation of drug use. I heard people say again and again, "We can't solve this problem, so we are going to have to accommodate and learn to live with it." And I say, "We can't solve, we haven't solved racism." We haven't solved pollution or a lot of other problems that lasted a lot longer, but we don't give up on them or throw in the towel.

There is ample evidence that treatment, outreach and especially drug prevention can be effective. The major threat to youth of harm reduction, because coming from youth perspective is that this whole ball of wax, this philosophy advocates teaching kids responsible drug use, because if they are going to use drugs anyway, you teach them how to do it responsibly.

There was a book in the 1970's called, "Responsible Drug Use." And what it taught was to clean out the seeds in your pot, to smoke with a friend, to use a roach clip and don't burn yourself. Guess what? We had the highest levels of drug abuse among our youth than any civilization has had in the world back then. That type of teaching and that type of philosophy resulted in 1 in 10 of every high school senior stoned on pot every single day of the week. So we know that doesn't work.

Countries have tried heroin maintenance. They have tried—Britain and the Dutch have done experiments, and it didn't work. And they are going back to it. So I go back to the children, and I go back to the child in Peru and say, yeah, the world has gone crazy, because these drugs are a form of slavery. And we talked about it with some of the churches. And the Vatican issued a statement on drug injectionsites and on some of these very concepts. And what it said is that drug dependence is against life itself. You are taking life away from people. It is not just the physical harms or just the crime and the outside things; it is what it does to the human spirit, because what differentiates us from all the animals is that we have a free will and we have human reason. Drugs strip that away. To say there is a safe way to do that, to strip away the very dignity of a human being, is to take away their free will and freedom.

Any form of harm reduction which says we have to accept some form of drug use, we have to provide drugs, and we have to make drugs more widely available, I believe is disastrous. I talk to youth around the globe, and when they hear some of these things, they are like, how can anybody think that? How can that be humane? It is being promoted, and it's being promoted by the very people who are funding and overseeing a lot of this effort. And they are using some of the things, narrow things, medical marijuana, needles, but they believe it's all part of a much bigger package, even if some of the people involved don't see that.

You can't belong to the board, Drug Policy Alliance, and all the people that support all kinds of things. Some think treatment is nonsense and say, I don't know any of these people. It is ridiculous, and it is a mixed message. And young people just see the message. They see the mixed message. Thank you.

[The prepared statement of Mr. Peterson follows:]

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Government Reform Subcommittee on Criminal Justice, Drug Policy, Human Resources
February 16, 2005

Perspective is Important

Working with youth and drug prevention in our own nation and others, especially in South America, the very question posed by this hearing, "Is there a such thing as safe drug abuse?" underlies the confusion and mixed messages that concepts such as harm reduction promote.

A lady from Peru who runs a tremendous program for street children and orphans said that she explained to the youngsters that she was leaving to attend a conference on how to counter the drug legalization movement. The children asked her what she meant, and when she explained, a young child asked, "You mean there really are people who want to make dangerous drugs available and legal," the child concluded: "then the world really has gone crazy hasn't it?

I will admit my bias right off. I have six children and I work with youth worldwide. I coach girl's basketball. The lens through which I view drug policy puts kids first. I once heard that in a perfect libertarian world, there are no children. Children mean that we are our brothers' keeper and that we have to sacrifice some of our own "rights" in the interest of those more vulnerable. I believe that the chief criteria for any drug policy should be what impact the policy will have upon youth and families.

What is the "drug problem?"

It is important that we all acknowledge our world view. One's definition of the "drug problem" depends on one's perspective. For the pre-born and for infants, parental drug use is the issue. Pre-natal damage, born addiction, child abuse and neglect are all caused by drug abuse. During the crack epidemic in Philadelphia it was estimated that the drug was involved in 80% of child abuse cases and in half of all child abuse fatalities . Less than 3% of the population used the drug regularly.[i]

For younger children, parental drug use is also the issue. Neglect, abuse, and accidents are all caused by drug use. Whether the drugs come to parents through street dealers or government run drug maintenance clinics makes no difference to the young. Intoxicated and doped parents do not make for good caretakers.

For teens the number one cause of death is accidents. Once again drug use, including alcohol, plays a strong role. Those who say cannabis never killed, ignore the number one killer of youth – accidents. A Maryland study of emergency trauma injuries showed as many marijuana positive as alcohol positive and the use of both drugs together was highly evident.[ii] A study of national truck driver fatal accidents provided similar findings.[iii]

For young adults drug use is the main threat that they face. Date rape, violence, accidents, and suicide are all highly correlated with drug use. Ask any group of young ladies if they have ever been harassed by an intoxicated male and see what response you receive. Drug users impact non-users in many negative ways.

For non-drug using parents, drug use is also the primary problem. Parents fear for their children and most desire that their youth avoid drugs and drug intoxicated users.

For all of these groups, drug ***use*** is the drug problem. The chemical make up of drugs and the effect of drugs on the brain do not change. It does not change if drug use is maintained by the government, health workers or street drug dealers. The late Dr. Robert Gilkeson used to say, "You cannot vote for or against the chemical properties of a molecule."

What can change is the amount, acceptance, and the ease of drug use and the identity of who is to be held responsible for the damage. The provider of drugs is an accessory to the risk, death, and damages caused by drug use. No child wants a stoned parent.

The Harm Reduction Origin

Did those working with children and youth develop the harm reduction concept? Obviously not. Let us consider the origins and impact of modern "harm reduction."

Harm reduction is not a new concept, although the terminology was carefully chosen as a marketing ploy. On audio tape, drug legalization groups held entire conference sessions to decide on a term to promote their cause in the 1980's and early 1990's. Leaders clearly stated that they need a term to replace the "L" word. The term "harm reduction" was, to my knowledge, first selected and promoted in 1987 by a group of drug lawyers meeting in Great Britain sponsored by the drug legalization group – the Drug Policy Foundation. This group was later merger into the George Soros backed Drug Policy Alliance. The term "Harm reduction" ran a close second with the term "harm minimization" to avoid the "L" word: "legalization."

Those tied in with legalization groups who take credit for the harm reduction term include Peter McDermott who wrote: *"as a member of the Liverpool cabal who hijacked the term Harm Reduction and used it aggressively to advocate change during the 1980's, I am able to say what we meant when we used the term.....Harm reduction implied a break with the old unworkable dogmas – the philosophy that placed a premium on seeking to obtain abstinence."* He then goes on to discuss the need for a legal supply of clean drugs and injection equipment.[iv]

The most important criteria for measuring drug policy of those who developed the concept of harm reduction and drug maintenance was what impact drug policy will have on the right that they, and other consenting adults, have to use drugs. Timothy Leary, the LSD guru of the sixties who was eulogized by many leaders of the harm reduction movement, wanted a constitutional amendment that read" Congress shall not infringe upon the right to alter one's consciousness."

The founder of the oldest marijuana smokers' lobby, the National Organization to Reform Marijuana Laws (NORML) originally wanted legal cocaine and pot, with no age limits, according to a Playboy interview. At least this group admitted it was a lobby for marijuana users.

To civil libertarians and some drug users the drug issue is centered upon the "rights" that they and other individuals have to use drugs. The leaders on the issue knew that their right to use drugs issue would not sell with the public and appear somewhat selfish. They needed to promote it as being in the interests of others. Smartly, they avoided the issue of children and youth.

The "Black Blessing"

Ethan Nadelmann, the chief architect behind the drug legalization and harm reduction and drug "reform" movement backed by George Soros, identified AIDS as a "black blessing." The AIDS issue could be used to promote the legalizers' agenda and disguise their self interest as compassion for others.

Why do I say this? First of all, the Drug Policy Foundation and NORML audio taped many of their conferences and I have heard the tapes. It is Mr. Nadelmann who used the term "black blessing" and the legalization strategy was widely discussed.

NORML founder Keith Stroup called medical marijuana a "red herring" to get the drug legal. Others talked about medical marijuana and needle exchanges as steps to their true goal of drug legalization. Why is every major international harm reduction lobby supported by those who seek wider drug liberalization and acceptance? For example, the Harm Reduction Coalition had former NORML President Kevin Zeese and Soros funded advocate Marsha Rosenbaum on the board.

There is a proverb "where a man's treasure is, there his heart lies." The major funders and supporters of harm reduction and drug legalization have no history promoting or funding health care, medicinal research, and or treatment for AIDS or drug addiction, other than supporting needle exchanges, drug injection sites, drug maintenance, and marijuana distribution. If compassion for AIDS was really the issue, why isn't their funding going into providing proven medicines and research for new drugs? If care for addicts was the issue, why do these groups not put funding into effective drug treatment? Why do the top treatment providers disagree with their approach?

One thing is certain; the interests of youth and children were not at the core of the harm reduction philosophy.

This does not mean that everyone who now promotes harm reduction is a closet legalizer. Although nearly all of the major international lobby groups promoting harm reduction and needle exchange are funded by George Soros and legalization proponents, many in the health field, and in politics, have been taught that this is a positive public health concept. Some are not aware of these origins and support it because they are compassionate and care.

Making Drug Peace

Harm reduction is based upon two basic presumptions. The first is that the drug problem cannot be solved so we must accommodate and accept drug use, minimize the costs of use, and learn to live with drug use. As the legalizers put it, we must "make drug peace."

This sounds logical given the persistence of the problem over the past 40 years. But what about racism, hate crimes, pollution, AIDS, violence, child and spouse abuse, sex abuse, poverty, and ignorance? These problems persisted for far more than 40 years and we do not give up and accommodate them. Drug use among youth has been cut in half in the U.S. over the past 25 years. Has as much progress been made with these other social problems?

Next, what about the children? If we accept and accommodate drug use for some children, whose children will they be? If we give up on some addicts and maintain their drug slavery, who will the parents and children of those addicts be? Can we give up when there is no place to retreat to?

History Lessons

Third, history demonstrates that drug problems can be solved. The U.S. faced record drug addiction and use rates when marijuana, cocaine, and opiates were legal in the early 1900's. Medical distribution (a form of harm reduction now being promoted) of these drugs failed to curb the epidemic. Instead of harm reduction and drug acceptance, drugs were outlawed in 1914. Public education, prevention aimed at youth, and treatment were implemented and from 1914 to 1940 addiction dropped from 250,000 to 50,000 and crime plummeted.[v] By 1960 drug use was nearly non-existent. Consider other nations success.[vi]

Sweden: Amphetamine epidemic in the late 1970's
Improvement: Student drug use cut in half by 1987
Successful Policy: tougher laws, mandated treatment, drug testing, and public education.

Japan: Amphetamine surge after WWII and a heroin problem in the 1960's
Improvement: Drug use and addiction cut dramatically
Successful Policy: strong enforcement, rehabilitation, and public non-acceptance of drugs.

China: Major national opium addiction problem
Improvement: Opium use and addiction cut to negligible levels
Successful Policy: public education, rehabilitation, and strict law enforcement.

United States II: Drug use rise to world record levels 1965-1979; marijuana epidemic followed by cocaine epidemic and crime rise; heroin problem in 1970's;
Improvement: Youth drug use cut in half since 1979; addiction rate growth halted; steady long term crime drop.
Successful Policy: Prevention and education; treatment; drug testing; enforcement

Is Drug Use, Drug Abuse?

Second, harm reduction presumes that drug use is not always drug abuse and that drug use is not the primary cause of drug related harm. This argument generally is promoted from the perspective of compassion for the drug user and addict.

Is drug use, drug abuse? The United Nations defines illegal drug use as drug abuse. The clinical rationalization for this is that illegal drugs are nearly always used for the purpose of intoxication, unlike tobacco and alcohol. When alcohol is always used to get high or drunk, treatment experts identify the user as an abuser. Marijuana, cocaine, heroin, and other drugs are used to get stoned. Use is abuse. Those who use a substance to get stoned or drunk are more likely to develop addiction and other problems.

Is Drug Use the Problem?

Does drug use cause most drug related harm? Intoxication impairs human reason and physical coordination and ability. Intoxicated persons are a risk to themselves and to others. Drug use is the cause of most drug user harm. The ability and responsibility to engage in safe sexual practices, to decide on whether to share needles or to commit crime, to practice good hygiene and nutrition, to ensure public and personal safety, and to provide good child care are all impaired by drug use.

In Michigan a young baby died ingesting the mother's take home weekend methadone dose, a harm reduction concept. The harm reductionist promotes this as a means to reduce the harm to addict's going out to seek a weekend fix. The baby's interest was not an issue. Mothers high on methadone are not responsible caretakers. The government provided the weekend dose. Who is responsible for the baby's death?

There is no safe illegal drug use. Drug use intoxicates and intoxication impairs reason and increases the risk and/or harm to self and others. Many needles never find their way back to exchanges and there are documented cases of children being pricked by needles left on the street and in parks. Responsible behavior and drug intoxication have an inverse relationship.

Studies show that most HIV among drug users is contracted through unsafe sex, not unclean needles. Drug use is highly correlated with unsafe sex practices, violence, and suicide. Overdose deaths also are caused by the effects of drugs, not the source of the needle used. Young addicts have an 8 fold likelihood of an early death related to drug use, not needle source.[vii]

Drug addiction is a form of slavery regardless of where the needle came from. Drug addicts lose will and impair their reason, the very properties that distinguish human dignity and freedom. To maintain drug addiction is to maintain slavery. The very chemistry of the brain is altered by addiction. For the addict, drug use is the problem, indeed drug use is their life obsession.

If your son or daughter was out of control and slowly poisoning their mind, body, and soul should the government response be to provide a free method to ingest the poison?

What is in the interest of children with drug addicted parents?

True Compassion

True compassion to drug addicts and their families is to provide aggressive outreach for treatment and rehabilitation eventually leading to a life free of drug use and addiction. It is unethical to accept addiction, provide needles, and fail to promote treatment and rehabilitation. The criminal justice system is often the number one source of drug treatment referrals. Legalization will cost addicts their lives. Forced treatment has saved lives as President Clinton's brother testifies. Children want their parents back.

The best studies used to support needle exchange impact combine drug treatment, outreach, and counsel with the exchange program. Treatment and outreach without needle give outs have been equally effective. There is sparse evidence that the needles component is needed or effective. There is ample evidence that treatment and rehabilitation can be effective without needle exchange.[viii]

Does Harm Reduction Benefit the User?

Even if the focus is on the interests of drug addicts and not children, does harm reduction benefit the user? There is no convincing evidence that HIV or hepatitis is reduced by needle exchange and conflicting evidence that HIV and hepatitis and overdose deaths may be increased by such programs. The Swiss needle park experiment, with open drug use and needle exchange resulted in Europe's highest HIV rates and record crime. They park was shut down. I will leave it to the references cited herein to demonstrate the failure of needle exchanges to reduce drug harms.[ix]

Needle exchange and drug maintenance sends a clear message to addicts that their drug slavery is acceptable and supported by society. Implicit is the message that society gives up on them and that they will never be free. The message is "here, take your drugs where it will reduce the harm caused to the rest of us and die addicted."

Does Harm Reduction Cause Harm?

The message to youth is even worse. Drugs are a legitimate choice supported by government and society. After all, would the government and responsible adults legitimize drugs and provide the instruments and substances of addiction if it was wrong?

The history of harm reduction demonstrates that the policy hurts youth, the public, and drug addicts and users.

The U.S. tried medical distribution of cannabis, cocaine, and opiates in the early 1900's and addiction and abuse was not abated. Laws were passed making the drugs illegal and treatment and education efforts were implemented to reverse the epidemic.

In 1979, harm reduction was brought to schools and "responsible" drug use was taught. Thirteen states decriminalized marijuana with White House support. Law enforcement was minimal zed. The result was world record drug use rates among youth with one in ten high school seniors stoned on marijuana every day of the week.

Stricter drug enforcement, prevention, and treatment led to a dramatic drop in youth drug use (cut in half) and halting the addiction growth rate. Youth drug use rates continue to drop in the U.S. as they are rising in Europe and Canada where harm reduction policies are replacing drug prevention.

In Europe, nations implementing harm reduction have worse drug problems that those rejecting such policies. Spain, in 1983 went from having some of the toughest laws to some of the weakest. A spurt in drug use and crime continues to this day. Spain promotes harm reduction and now has the highest cocaine use rates in Europe.

The Netherlands continues as a drug and crime haven for Europe. Drug use among youth climbed as it dropped in the U.S. Drug cafes rose ten fold in a decade. Drug violators make up half the prison population. The junkies union sued to defeat a proposal to tax drugs so no drug revenues are raised and addicts are supported by state welfare. The Dutch tried licensed heroin distribution but scrapped it after a spurt in crime and overdose deaths.

Switzerland and Great Britain also have liberalized drug policy and opted for harm reduction over prevention. Drug use rates among youth and adults are very high in these nations and increasing. Great Britain tried heroin maintenance years ago, and it resulted in a large black market in the substance. The policy was reversed.

Italy rescinded soft heroin laws due to record addiction rates and overdose deaths and has rejected harm reduction. The drug problem is lower there than in other European nations.

Sweden drug use rates are generally low in Europe and harm reduction is rejected there.

Harm Reduction Impact on Drug Prevention

The major threat to youth of harm reduction is its impact on drug prevention. Harm reduction and drug prevention can never be partners. The United Nations drug term definitions clearly states that harm reduction is not prevention. Harm reduction rejects preventing drug use as a primary goal of drug policy and rejects drug abstinence as the primary goal of drug treatment.

Nations that adopt harm reduction as their centerpiece, reject drug prevention as their primary goal even thought the United Nations agreed that drug prevention is an "indispensable pillar" for drug policy. Preventing all drug harms is not the same as reducing drug harms for some. Only prevention can eliminate drug harms.

For 30 years there has been a direct and drug specific inverse correlation between youth drug use and youth perception of drug harm and risk. Every year that perception of rug harm dropped, drug use increased. Harm reduction downplays the risks of drug use, reduces perceived risk of harm, and claims that drug use can be made "safe." In Canada "safe" crack use kits are being demanded by addicts.

Harm reduction organizations promote a return to the failed U.S. policy of the late 1970's that taught "responsible" drug use. Marsha Rosenbaum, a Soros funded West Coast reformer if promoting teaching harm reduction lessons to youth. A leading school book by Ruth Engs in the 1970's, entitled "Responsible Drug and Alcohol Use," told youth to clean out seeds from marijuana so they do not pop and to use a roach clip to avoid burning fingers. Drug use rates were never higher than in 1978-79 when this education peaked.

Pat O'Hare, another member of the original "Liverpool cabal" who "hijacked" the term harm reduction called 12 step drug programs complete crap and asked: "if kids can't have fun with drugs when they're kids, when can they have fun with them?" Another leader, Julian Cohen states that primary prevention ignores the fun, the pleasure, and the benefits of drug use .... Drug use is fun for young people and drug use brings benefits to them."[x]

It is clear that preventing drug use and teaching how to use drugs are not compatible nor complimentary. No nation has ever lowered drug use and drug problems through a harm reduction approach.

From the Mouth of Babes?

Let me return to the subcommittee's original query. Is there a such thing as safe drug use? I believe the child in Peru is right, only if the world has really gone crazy.

Human dignity and liberty is based upon human free will and reason. We cannot act, think, and choose fully as persons when our capacities are impaired. The user and non-user are both endangered by impaired persons. Children and youth often suffer the most dire consequences.

The ability to interact, communicate, and relate to loved ones and others also is impaired. Drug use breaks down the ability to live in community and family. Drugs impair the ability to make safe decisions on child care, driving, sexual and other behavior, and private and public safety.

Accepting drug use and addiction is an accommodation of chemical slavery and impairment. It is not compassion to enable drug use. The Vatican noted in its statement against drug injection rooms and harm reduction that "drug dependence is against life itself."

The young people that I have had the privilege of meeting in the U.S., Brazil, Chile, Argentina, and Uruguay are optimistic and caring. They are reaching out to other youth with a positive message of a drug-free life. Harm reduction undermines their work and their hopes.

Harm reduction is a philosophy of despair communicating a lack of hope for the addict, their loved ones, and society. It is a message of surrender and accommodation.

Prevention is a positive message of hope that is not just against drugs, but for life. History, science, and human experience gives every reason to continue hoping and to continue fighting.

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[i] Philadelphia Inquirer; 12/27/87 p.1-a; Philadlphia Daily News; 3/31/89, p. 19

[ii] Archives of Surgery, vol 123; June 1988; pp.733-37

[iii] National Transportation Safety Board; Fatigue, Alcohol, Drugs and Other Factors in Heavy Truck Crashes, 2/5/90

[iv] Peter Stoker, The History of Harm Reduction; World Conference on Drugs in Sweden; 5/01; on web site at http://www.dpna.org/resources/positions/harmreduction.htm

[v] Musto, David; The American Disease; (Oxford University Press, NY) 1987 pp21-28, 91, 115

[vi] For nations listed see; Robert E. Peterson, Legalisation the Myth Exposed; in Searching for Alternatives; Hoover Institute 1989

[vii] New York Academy of Medicine 8/04; Shooting Up Triples Death Risk, Health Day News, 8/19/04

[viii] European Journal of Public Health; v.13, issue 3, 9/03; pp252-258; Testimony of Attorney David Evans before New Jersey Legislative Committee of Governor's Council on Alcoholism and Drug Abuse, Nov. 7, 2002: An Evidence Based View of Needle Exchange Programs, Dr. Fred Payne, Medical Advisor, Children's AIDS fund at http://www.childrensaidsfund.org/resources/NeedleEx0604.pdf

[ix] Ibid;

[x] Peter Stoker, above citation

Mr. SOUDER. Thank you for your testimony. Our next witness is Reverend Edwin Sanders, Metropolitan Interdenominational Church and member of the President's Advisory Commission on HIV-AIDS.

Thank you for your patience today.

STATEMENT OF REV. EDWIN SANDERS

Rev. SANDERS. I appreciate the opportunity to be able to testify today. Let me do one thing before I begin, and that is to make a more clear and accurate response of who I am. I'm Reverend Edwin Sanders II. I'm the senior servant at Metropolitan Interdenominational Church. To have my reference to being a member of the President's council is really a misnomer and should not be there. I don't represent the President's council. It is a very vast and complex group of people, 30-some of us, who represent many different diverse perspectives with regard to issues. And I do not speak for the council nor could any of us individually.

I am, though, the director of an organization called Religious Leaders for a More Just and Compassionate Drug Policy. And that would be a more accurate way to identify my relationship to this. And I thank you. I am especially concerned about the conversation, and it is not important for me to say what I had in my notes. It is clear that much of what I would have said has already been said. But let me say two or three things that I think are very important.

One is, I want to say at least two things about the way we have categorized and framed the debate. I hope we do not spend a lot of time dealing with demonization of people who happen to have alternative positions, and I will tell you why I'm especially sensitive to that. I spend a lot of my time dealing with demonization because I'm a member of the Republican Party and I am a black man. And it is amazing the way which people come to me and talk to me about the Republican Party being a hiding place for white supremacists and talking about the ways in which it ends up being anti-the people that I am most directly connected to. I think that is a misrepresentation. That is the kind of demonization that hurts what I stand for and represent.

The same thing is true in terms of the Drug Policy Alliance. I don't think I identify with everything that ends up being a part of all the individuals that are part of that body, but I know what it's like to be in a situation when someone holds up a book like the one that was held up a while ago, which I hope—and I don't know the content of it completely myself—which I hope is a piece that deals with accurate information sharing with regard to what marijuana is. I hope that's what it is.

But it occurs to me what happens around sex education. I could see a sex education book that has the title to it, it is a God-given gift and has to be understood in that way. Well, I think no one is talking about promoting early debut, premature debut to sex. And I'm sure that there is no one that I'm aware of on the Drug Policy Alliance who is advocating drug and marijuana use with children. I would be appalled by that. I would have spoken out aggressively against it.

And then the whole question of criminalization, decriminalization and legalization, I must admit, it is semantics in terms of how we

use the language. I am definitely not an advocate of legalization. Let me tell you the reason why, and it sounds like what Representative Norton said in terms of the whole issue of how criminalization plays into it. I am an African-American, and I do serve a community that ends up being disproportionately impacted by this horror. And one of the things I have come to realize is that the criminalization of drugs has translated into an even expanded horror. You look at the fact we are 10 percent of the population, and we end up representing 37 percent of the persons who are arrested for drugs. And let me note the fact that, in terms of drug use, most analysis shows it is really white Americans that use somewhere between 70-plus percent of all the drugs in this country, but we end up representing 37 percent of those who are arrested. We end up representing 46 percent of those who are prosecuted. We end up representing 59 percent of those who are convicted and 64 percent of those who go to prison.

Criminalization is a horror in our community because of some of the historical horrors that we still struggle with in this country. I am not advocating for legalization, but I'm advocating for a system that creates the avenue to treatment for all on an equal basis, and that does not happen. So I want that to be understood.

Let me tell you about Metropolitan Church to some degree and, more than the church, just my experience. It was around 1990 that I had my first experience dealing with this whole issue of harm reduction. It was a situation where I was in a public housing project on a Saturday afternoon, part of a group called Minority AIDS Outreach, doing a demonstration of how to clean a needle with bleach, which was the way things were done in those days. Why was I doing that? A cameraman came up and threw a camera in my face and said, Reverend, how could you, a man of God—and I am from Nashville, TN. I don't just live in the Bible Belt; I live in the buckle of the Bible Belt. And I fully understand and appreciate what it means to be an evangelical fundamentalist Christian. And those are people I relate to everyday in terms of the work that I do.

The guy who threw a camera in my face said, how can a man of God be here doing this and showing people how to clean their needles? And I guess my response was the same I have to this day. My business has something to offer to people who are alive. In the early 1990's, there were no triple combination therapies. There were no anti-viral drugs. People were dying. It was a short one at that point. And I was concerned with the fact that the disease was shifting; people were still thinking about the disease as being primarily gay white men. I was seeing everyday that, in our community, the disease was starting to spread. And it had to do with a lot of injection drug use. And I started believing in this whole idea of clean syringes, just on the basis of how I keep alive—because I'm trying to offer them salvation and a relationship to a God who is redemptive, loving. That's the only reason why I'm involved in it. And I appreciate the science that supports it. But that is the reason why, because I need live people to offer what I have in the work that I do.

I see the time is up, and I will try to wind this up and say it is important to me for you to understand that every one of our objectives is built around what we call a bridge to treatment. We

don't do anything, whether methadone maintenance or anything else, that is not ultimately working with people to bring them to treatment. When Dr. Newman talked about the 80 percent of people who are injection drug users that don't have access to treatment, what that is, is a result of people who really are under the radar screen.

I tell people all the time, we reach out doing work with people who don't have zip codes, Social Security numbers, phone numbers, correct addresses and, most often, lie about what their name is because they are under the radar screen. They are, in many instances, being out of the loop in terms of folks in society in a way that either allows them to access the avenues to treatment that we have available. We use a bridge as treatment. We establish credibility and establish rapport, and we have a tremendous track record in terms of being able to get people into treatment and off of drugs. I would be glad to go further with questions, but I know I probably used up my time. Thank you.

Mr. SOUDER. Thank you. And let me point that everybody's full statement will be in the record, and you heard me say multiple times, if you have additional comments you want to insert—and let me say for the record, the Republicans are just like the Democrats, we fight harder internally than we do each other. And both parties are pretty much the same.

Rev. SANDERS. I get stigmatized all the time for being a Republican.

Mr. SOUDER. I should always say that I am sure, when I say the different titles, that the individual may or may not be speaking for the whole department, and I appreciate your clarification, and I should have been saying it all day.

Dr. Beilenson, you are commissioner for the Baltimore City Department of Health. You have testified numerous times before this committee.

STATEMENT OF PETER BEILENSON, M.D., M.P.H.

Dr. BEILENSON. Thank you, Mr. Chairman, Mr. Cummings and Ms. Norton.

I, too, am a father of several children, and I, too, coach girls basketball, but I believe in needle exchange and not in a vacuum. I think everyone here who has been speaking for the minority side, if you will, has been talking about needle exchange as part of a comprehensive drug and HIV/AIDS reduction policy. That includes prevention, primary prevention and secondary prevention and includes the "Just Say No" issues. It includes drug treatment.

We have actually tripled treatment, as Congressman Cummings is well aware, in Baltimore City. So we have gone from treating 11,000 people from 5 years ago to 25,000 people last year, but we are still not a treatment-on-request or demand. But it also includes needle exchange programs. And for the last 10 years, we have run a needle exchange program in Baltimore City, legally, thanks in part to Congressman Cummings, who was a delegate who carried this bill in the State legislature and State General Assembly, and to the folks who have been running this program with me for the last 10 years who are here.

Let me tell you a little bit about how it works on the ground and why we so strongly believe in needle exchange. We have two large vans that go around to 12 different sites, many of them daily. I have been out probably 150 times to talk to addicts. And in fact, Congressman Cummings and Delegate Norton are absolutely correct; this is, unlike, with all due respect with what Mr. Peterson said, this is the way many hardcore addicts actually get to interface with the health field. We are attracting, on average, people who inject drugs 30 days a month. These are daily users. These are the hardest-core users. And they don't go to other care, and they don't go directly to drug treatment. So we run this needle exchange program.

Tied to our needle exchange program, which, again, is a needle exchange not a needle handout—we exchange dirty needles for clean ones, so we are cleaning up the neighborhoods surrounding our needle exchange sites. And everything I'm saying is backed up by Johns Hopkins peer-reviewed studies, which we can submit to the record, that have been talked about in the media for several years. These are not just anecdotes; these are actual peer-reviewed studies in major journals.

Our needle exchange has been tied from the beginning to drug treatment. We have about 400 treatment slots reserved for our needle exchange clients, and we have gotten 2,300 individuals, who would have never gone into treatment otherwise, into these slots over the last several years, and they are succeeding in treatment at as good of rates as people who are less hardcore addicts.

The reason we did this in Baltimore, as Congressman Cummings and Ms. Norton are obviously well aware, is that Baltimore has a significant drug problem, not the biggest. We constantly are touted as having the biggest, but we don't. But we have a significant drug problem. And when the needle exchange started back in 1994, 60 percent of our HIV/AIDS cases were injection drug users themselves. An additional 20 percent or so were actually partners of those IDUs and their babies. But 60 percent were drug users themselves. And it was the leading cause of death—black and white, male and female—in 25 to 44-year-olds in Baltimore and, I would assume, in Washington, DC, as well. That is why we instituted this needle exchange program tied to drug treatment.

I came to testify before the 104th Congress, and the chairman of the subcommittee at that time was Representative Hastert. And when I talked about Baltimore City's needle exchange—this is paraphrasing him. I'm not quoting him directly, because I can't remember from 9 years ago, whatever it was, he said: If all programs are run like Baltimore's, I wouldn't have such a big problem, except that it sends a bad message to kids.

On the way back to Baltimore, I called our friends at Johns Hopkins, and we instituted a study of high school students in Baltimore City to look at exactly that issue. And a peer-reviewed study came out that this needle exchange is not—is not—associated with increased drug use. It does not give kids permission. They do not view it as a good thing. They viewed it as basically a neutral thing or a negative thing about drug use.

So science, as Congressman Cummings has talked about, has been really what has been pushed aside here for ideology. Let me

give you three other issues about needle exchange that we can disprove. Again, remember 60 percent of our cases were injection drug users in 1994. Last year, we are down to 41 percent of all of our cases in Baltimore are injection drug users. This does reduce new infections among IV drug users. And I'm reporting on these three things specifically because Dr. Voth in his statement talks about three things that should be shown by needle exchange that, in fact, they do: One, it does reduce new cases of injection. Two, it actually decreases the number of drug users. We are down by about 5,000 to 8,000 drug users in Baltimore City by most estimates in the last 10 years. And three, it does eliminate dirty needles from around the areas. It does not make for dirtier areas or more dangerous areas around needle exchange sites, which actually is common sense, because it is a one-for-one exchange. And people will pick up dirty needles on the way to needle exchange, which cleans up an area around needle exchange sites.

Finally, it is actually not only—harm reduction is not only important in preventing humane concerns, like people getting HIV and passing it on to their partners or their babies, but it saves taxpayer dollars. We used this argument in Annapolis to point out that the average HIV case costs about $100,000 a lifetime. It is probably more than that now with the medications. And if we could prevent just eight cases in any given year—eight cases of HIV—because our entire cost including the drug treatment is $800,000, we would save taxpayer dollars. We have saved hundreds of times that, in the tens of millions of dollars.

So I would argue that you have to look at science as well as humanity and that needle exchange as part of a comprehensive drug policy and HIV reduction policy does make good sense and can be done in a very safe manner.

[The prepared statement of Dr. Beilensen follows:]

Oral Testimony of Peter Beilenson, M.D., M.P.H.
Baltimore City Health Commissioner

Before the House Government Reform Subcommittee on
Criminal Justice, Drug Policy, and Human Resources
U.S. House of Representatives
"Harm Reduction or Harm Maintenance: Is There Such a Thing As Safe Drug Abuse?"
Wednesday, February 16, 2005

Good afternoon, Chairman Souder, Ranking Member Cummings, Congressman Ruppersberger and other members of the Subcommittee. I have held the position of Baltimore City's Commissioner of Health for 13 years, and 10 years ago began the City's first needle exchange program. I want to thank the Subcommittee for inviting me to appear today to discuss the importance of harm reduction programs, specifically needle exchange programs.

Needle exchange programs (NEPs) have a long history dating back to the early 1980s in Scotland when they were created to address the epidemic of hepatitis B and C among injection drug users (IDUs). The advent of the HIV/AIDS pandemic has led to a proliferation of needle exchange programs in over 40 countries. NEPs are considered a fundamental component of any comprehensive and effective effort to prevent HIV infection among drug users and the broader community. The basic function of an NEP is to exchange used needles for clean ones, thus taking syringes potentially contaminated with HIV and Hepatitis C off the streets, increasing the availability of clean, sterile needles, and decreasing the likelihood of needles being shared. Additionally, NEPs are often embedded in larger comprehensive community based organizations that aid injection drug users to get into drug treatment and to access other critically needed services.

The focus of the Baltimore Needle Exchange Program is to reduce the spread of HIV/AIDS among injecting drug users and link persons addicted to drugs with substance abuse treatment. Since its inception in August 1994, the NEP has enrolled 15,000 clients, exchanged over 3 million needles, placed over 2,300 people into drug treatment, and 2,800 have been people have been newly tested for HIV. Additionally, the NEP has expanded over the last ten years from a one van operation with two sites to two, 26-foot mobile health vehicles with twelve sites, including the first pharmacy-based needle exchange site in the country. We offer evening hours and operate six days a week. We exchange needles on a one-for-one basis and offer cookers, bandages, and free condoms. Additionally, and equally important to the exchange of needles, our program promotes behavior change and risk reduction, encourages clients to be tested regularly for HIV, syphilis, and hepatitis C, and refers clients to primary care, and substance abuse treatment.

There is clear evidence on the importance of needle exchange programs. Independent, peer-reviewed research has shown that Baltimore City's NEP is effective in reducing HIV infection and as a link to substance abuse treatment.

Increasing the availability of sterile needles and other injecting equipment reduces HIV infection substantially. A Johns Hopkins University (JHU) study that took place over an 8 year

period, indicated a 35% reduction in HIV incidence among active IDU's after the NEP opened in Baltimore. Additionally, in Baltimore 41.0% of HIV cases in 2003 were attributed to injection drug use, down from 60.4% in 1994, the year the NEP started.

Needle Exchange programs have other benefits apart from reducing HIV infection among injection drug users. To date, the program has enrolled over 2,300 persons into drug treatment programs and has high treatment retention rates. A JHU evaluation study found that NEP attendance was independently associated

with entry into drug treatment, and once enrolled, the majority of NEP clients successfully complete treatment programs.

Needle Exchange programs are cost effective and cost-saving. The cost of needle exchange programs is much less expense than the cost of paying to care for persons infected with HIV. Taking care of just one adult with HIV/AIDS costs a minimum of $100,000 over the course of the person's lifetime. In Baltimore, our entire NEP budget is about $800,000 (the majority of which is dedicated to drug treatment slots) - if we prevent just 8 adult HIV/AIDS cases we save taxpayer dollars (and we have shown that we have prevented at least a hundred times that).

This and other clear evidence has resulted in the following organizations supporting NEPs:

Centers for Disease Control and Prevention
American Medical Association
American Public Health Association
National Institute of Health Census Panel
U.S. Conference of Mayors
American Pharmaceutical Association
National Institutes of Health
National Academy of Sciences
World Health Organization
American Bar Association
American Nurses Association

Needle exchange programs have been criticized as contributing to the addiction of injection drug users and sending conflicting messages to children about the acceptability of using drugs. However, many studies have refuted these criticisms. One of the most often-cited studies used to substantiate the deleterious effects of harm reduction is the "Vancouver Injection Drug User Study" by Strathdee et al. The study is often misrepresented as proof that NEPs are associated with HIV infection rather than HIV prevention. The study found that IDUs who visited the NEP frequently had high HIV rates compared to those who visited the exchange less frequently. The researchers concluded that the reason for the high HIV infection was because the NEP was reaching the riskiest set of injectors. By reaching this population, the NEP was succeeding in reducing the circulation of contaminated syringes in the community. Another study by Gibson et al. found that attending a NEP was associated with substantially reduced injecting or cessation of injecting compared to IDUs who had never attended a NEP. A Johns Hopkins University study sought to determine whether introduction of a needle exchange program would be associated with increased crime rates, and no significant differences in arrest trends including drug possession emerged. And finally another Johns Hopkins University study, which surveyed high

school students in Baltimore, showed that the influence of NEPs on promoting illicit drug use among adolescents was neutral compared to other factors known to be influential to this population group such as seeing their peers or parents use drugs. And students cited the NEP as the one factor that had the least influence on them choosing to use drugs.

In conclusion, the importance of harm reduction programs, such as needle exchange programs, cannot be overstated. Even a recently released report by the World Health Organization suggested that authorities responsible for areas threatened by or experiencing an epidemic of HIV infection among IDUs should adopt needle exchange programs. Research is consistent in finding that needle exchange programs reduce HIV infection, facilitate entry into drug treatment and other social services, and do not increase the amount of discarded syringes in the community nor do they recruit new injectors.

Thank you for your time. I am happy to answer any questions you may have.

Mr. SOUDER. Thank you.

Our next witness is Dr. Eric Voth, who is chairman of the Institute on Global Drug Policy.

Thank you for coming.

STATEMENT OF ERIC A. VOTH, M.D., FACP

Dr. VOTH. Thank you, Mr. Chairman. First, by the way it is Voth.

I have spent well over 25 years involved in this issue, and I have been involved in chemical dependency for 10. I spent enormous amounts of time tracking the drug culture, and I would echo Bob Peterson's comments that harm reduction has been hijacked by the decriminalization movement. I quote Pat O'Hare, who is the director of the International Harm Reduction Society who said, "If kids can't have fun with drugs when they are young, when can they." And I would also point a finger directly at the Drug Policy Alliance, Marijuana Policy Project, the Open Society Institute, all funded by George Soros. Keep in mind that we are mixing issues definitionally here, and the only issue is not drug needle exchange. It is a much broader issue, and the treatment is harm elimination. What we want is harm prevention and harm elimination and that harm reduction can be giving up on the addicts. And I want to talk about specific examples.

We talked about needle exchanges. There are prevention programs around the country that talk about responsible drug use. There are handout programs that are being looked at in Vancouver and British Columbia. And also, we have talked about Switzerland. They are looking at safe injection rooms in certain areas, responsible crack, cocaine-use kits, decriminalization schemes and medical-excuse marijuana. Let's talk about needle exchange for a moment.

First of all, there should be three measures as to whether needle exchange works. First, is there a consistent reduction, consistent reduction in Hepatitis B, C and HIV? Is there, No. 2, a significant actual reduction in IV drug use by virtue of people coming to treatment, going to treatment and getting clean? And three, is there elimination of dirty needles on the street?

When the CDC looked at this in 2001, of all the North American needle exchange programs found that 38 percent of the needles were not returned, which totaled 7 million needles, among the ones that were looked at just in that year alone, and realized the requirements for needle exchange are 4 to 12 needles per day, per addict. It is impossible to keep up with the entire requirement to keep addicts in clean needles.

Second, we have not talked about the well-put-together studies that actually looked at the Montreal needle exchange program and found that HIV conversion was twice as high among the needle exchange participants as in non-participants. The Seattle needle exchange looked at Hepatitis C, where it was more significant; the India needle exchange programs where Hepatitis B, C and HIV have gone through the roof; or Puerto Rico, where at low, only 12 percent of the needles were turned back in. That constitutes needle handouts. Only 9 percent, by the way, in that Puerto Rico needle

exchange actually sought treatment. Needle exchange doesn't fundamentally do anything for the underlying addiction.

I want to jump to this issue of responsible drug use. You have seen this book called, "It's Just a Plant." That book does go on to say a little girl quoted—and this is directed at preteens—"I want to go home and grow my own marijuana plant." It's financed by the Drug Policy Alliance, Marijuana Policy Project, thanks to George Soros goes in the forward in that book.

The medical-excuse marijuana movement is a perfect example of how Soros and friends have undermined the FDA. They have created medicine by popular vote rather than science. This is in your pamphlets. I highly recommend you read it. It documents Soros' money funding the whole marijuana legalization movement as it relates to medical-excuse marijuana.

Some examples of failed harm reduction, the 10,000-foot view. Let's look at Vancouver; 27 percent of the needle exchange folks there share needles, and 50 percent of those who use methadone and are in the needle exchange program share needles. They are spending $3 million a year on safe injectionsites, but still have 107 overdoses. Their overdose rate is their leading cause of death of people aged 30 to 49, and now they are going to add to that with heroin handouts.

With all due respect, in Baltimore, the violent crime rate in Baltimore exceeds New York, San Diego, Dallas, San Francisco, Denver, L.A., Miami and Atlanta, and the overdose deaths there are at least twice that of Chicago, Dallas, Denver, New York and a third higher than Philadelphia. I am glad to see they believe they have had some forward motion there.

We can talk about Switzerland and Holland. The big picture with harm reduction policy is, who are going to be the winners and who are going to be the losers? The people that profit from the sale and distribution of drugs will win. Those who want to continue using will win. And those who hope to profit from the futures investment market will win. And the losers are clear: kids, families and drug abusers themselves. And I would hope that you would stay away from harm reduction policy and embrace—reap harm elimination and harm prevention policies. Thank you.

[The prepared statement of Dr. Voth follows:]

Harm Reduction Drug Policy
Eric A. Voth, M.D., FACP
Chairman, The Institute on Global Drug Policy

Congressman Souder, distinguished members of the Congress. It is my position and that of the Institute on Global Drug Policy that the most effective drug policy is a restrictive policy based on primary prevention, abstinence-focused rehabilitation, and strong law enforcement. All three of these fill important functions if drug policy is to succeed.

At one time, the concept of "Harm Reduction" seemed to be a reasonable approach to decrease the effect that drug abuse would have on society. However, the phraseology and policies termed "Harm Reduction" have been hijacked by those who are seeking to tear down drug policy and ultimately gain decriminalization or legalization of drugs. These catch phrases are parroted by the leaders of the movement like Ethan Nadelman, or Arnold Trebach who contend that the harms from drug use are exceeded by the harms of trying to control it. Pat O'Hare, former director of the International Harm Reduction Society, has said, "If kids can't have fun with drugs when they are young when can they?" In some venues, Harm Reduction has been a ruse to cover criminal behavior with a cloak of political advocacy and cynical care for addicts.

The Harm Reduction movement has gained much of its international push from groups that also support drug legalization such as the Drug Policy Alliance, the Marijuana Policy Project, Open Society Institute, and dozens of spin off organizations who seek to hide destructive and illegal behavior under the shroud of political advocacy.

Billionaire George Soros, along with a cadre of other wealthy individuals such as Peter Lewis, John Sperling, George Zimmer, has financed these organizations along with numerous Harm Reduction and legalization schemes. His nucleus of power brokers are attempting to destabilize drug policy as we know it. If you have heard the phrase "the drug war has failed," chances are the message is being brought to you via such people. Saying, "The Drug War has failed," flies in the face of substantial and steady reductions in drug use since the 1970's. For instance, among high school students marijuana use has dropped by about half since the 1970's. It is an attempt to demoralize the public and destroy the gains of restrictive drug policy. If any other medical malady had dropped by that amount, we would celebrate in the streets.

Harm Reduction policy has become a cynical process for marginalizing and giving up on the addict while contending that drug use is inevitable. It also completely ignores the huge group of non-addicted users which serves to recruit non-users into drug using behavior, and which serves as a large reservoir to provide future addicts.

Examples of its misguided components include:

Drug prevention focused on teaching "responsible" and inevitable drug use

Needle handouts (needle exchange programs, NEP's)

Non-abstinence based treatment such as heroin hand-out programs

Responsible crack cocaine use kits

"Safe" shooting rooms for IV drug addicts

Drug decriminalization or legalization.

Medical excuse marijuana.

Time does not allow me to discuss each of these issues in depth, but I have provided publications which discuss these topics. I will cover some highlights.

Needle handouts to IV drug abusers are a great farce. There should be at least three measures of success for needle handouts: 1) Is there a consistent reduction in Hepatitis B, C and HIV in terms of net incidence and conversion rate among the participants not just on the needles tested? 2) Is there a significant reduction in actual use of IV drugs and a consistent increase in the numbers of patients who originate in NEPs who end up seeking and participating in treatment? 3) Is there an elimination of dirty needles on the street? You will find that most, if not all, needle handouts fail in every one of these measures.

Detailed evaluations in Montreal and Seattle as well as several others clearly demonstrate that HIV and Hepatitis B and C among the participants in needle handouts increases over non-participants. In Montreal, a study of HIV seroconversion rate found a rate of 7.9 per 100 person-years among NEP participants, and a rate of 3.1 per 100 person-years among non-participants. A cumulative probability of 33% HIV seroconversion existed among NEP participants as compared to 13% for non-users.

An analysis of behaviors in needle handouts in Puerto Rico demonstrated no significant change in injection habits; only 9.4% entered treatment, but results improved in the last month of the study by aggressive outreach. At the low, only 12.4% and at the high only 40.3% of needles were returned, and 26.6% of the needles turned in were sero positive for HIV.

In Seattle, in 1996 prevalence of HIV, Hepatitis B, and Hepatitis C were respectively 1%, 8%, and 17%. In February 2002, prevalence was 2%, 18%, and 66%. The conclusion was that the needle exchange program alone was not able to control the spread of Hepatitis C.

I refer to NEPs as needle handouts because even among the best programs in North America, 38 % of the needles are not returned. In 1998 that amounted to over 7 million needles floating around on our streets. On average , a singe heroin user will require around 2,900 needle per year, and a cocaine user as many as 7,300. The cost and health exposure of giving needles to the approximately 3 million addicts would be staggering. Of course, once a needle is used, it becomes contaminated and must be disposed of safely. For example, the NEP in Sidney Australia handed out 262,000 needles in 2003, and in the area of the NEP program, so many children were stuck with dirty needles that parents have quit reporting it.

A comparison between the prevention strategies of Norway, Sweden, and Denmark demonstrated that HIV counseling and testing may be more effective than needle handouts alone. Sweden and Norway had significantly lower rates of HIV in IV users as compared to Denmark where needles were the primary approach but with lower levels of counseling and required participation than Sweden. HIV rates in Denmark (with needle handouts) have been found since 1991 to be 1.49/1000, in Norway they were 0.92/1000 in 1991—0.58 in1996, in Sweden 0.77/1000 in1991 and 0.58/1000 in 1996

It is essential to remember that NEPs do nothing for the underlying drug addiction, and they waste precious resources that could be devoted to outreach, intervention, and treatment. No one has demonstrated that the outcomes for HIV control are superior to aggressive intervention and treatment.

The notion of "responsible" drug use among children is one of the most sinister components of harm reduction. It upholds the misguided notion that kids can be taught to use drugs responsibly. A key leader in this movement, Marsha Rosenbaum, promotes a concept called "Safety First." Recently, they have endorsed a book called, "It's Just a Plant." This is a pre-teen book teaching small children to accept marijuana. Credits in the book thank none other than George Soros. I include passages from the book that glorify marijuana and seek to create a positive picture on the part of children. At one place in the book, the little girl is gleefully telling her mother that she wants to grow her own marijuana plants. Once children are seduced into the marijuana culture, they may not escape it.

Those who embrace "responsible" drug use appear willing to ignore the fact that judgment is one of the first areas of impairment with drug use. While that creates its own set of problems in adults, it is even worse in young people who have not yet developed social and wise decision-making skills. The idea of teaching kids responsible marijuana use, much less heroin, cocaine, or methamphetamine use, is ludicrous.

So-called safe shooting galleries give addicts supposedly protected locations to take their drugs, and again, do nothing for the underlying destructive disease of addiction. Some cities have tried things like safe-crack kits teaching addicts to smoke crack instead of injecting and to not share pipes without cleaning them completely ignoring the destructive consequences of the continued drug use.

The medical excuse marijuana movement is a dramatic example of how millions of dollars can purchase drug policy and public opinion. In the papers I have included on marijuana, I document examples of the millions of dollars spent to manipulate various state marijuana initiatives. Soros and associates are jeopardizing consumer protection and have created an environment of medicine by popular vote rather than by science. None of the multiple international scientific evaluations have considered smoking crude pot to be an adequate medical treatment. I would be happy to discuss this in detail if requested.

Drastic examples of failed Harm Reduction policy include Vancouver, Baltimore, Holland, and Switzerland.

In Vancouver, despite a needle handout which gave out over 3 million needles in 2000, prevalence rates of HIV were 35% for men and 25.8% for women and was largely linked to cocaine use. Studies have demonstrated that 27.6% of participants in the Vancouver needle handout reported sharing needles in prior 6 months and needle sharing remains an alarmingly common practice. In the NEP, 50% of recipients who were also on methadone treatment still share needles. Vancouver also spends $3 million per year on "safe" injections sites whose staff claim to have treated "only" 107 overdoses so far.

As if their situation is not bad enough, health officials in Vancouver, Montreal, and Toronto have recently announced that the cities will experiment with giving addicts daily doses of heroin. From 1994 to 2004 use of marijuana has doubled. Thirty percent of young people in Canada age 15 to 17 have used marijuana in the last year. Such an approach to drug use is having other dire consequences. Concurrent with the extremely lax attitude toward drug use, British

Columbia has the highest number of drug overdose deaths per capita (4.7 per 100,000) which is the leading cause of death in adults age 30-49.

The Harm Reduction philosophy in Baltimore was initiated under Mayor Kurt Schmoke. Since the inception of Harm Reduction, the heroin use in Balitmore has become a staggering problem and is reputed as one of the worse in the USA. Its violent crime rate per 100,000 population equals or exceeds that of Detroit, New York City, San Diego, Dallas, San Francisco, Denver, Los Angeles, Miami, or Atlanta. The purity of the heroin used there is extremely high, and there is an influx of young people coming into the city to obtain heroin because of the relatively lax enforcement attitude and sense of protection of users.

The 2002 DAWN (Drug Abuse Warning Network) Data demonstrates that the drug related fatality rate reported in the Baltimore was 23 per 100,000 population. Heroin was the cause of 69% of these deaths. This drug-related mortality rate is about twice as high as Chicago, Dallas, Denver, New York, and about 35% higher than Philadelphia. Harm reduction has clearly failed in Baltimore.

Those controlling Swiss drug policy have been at odds with many traditional Swiss physicians who favor abstinence and rehabilitation for addicts. The Swiss heroin hand out program that was initiated several years ago was condemned by the World Health Organization as being so poorly designed and monitored that no conclusions could be derived. There was no mandatory examination of HIV rates, patients self reported use rather than being verified by drug testing, there existed no independent evaluation of criminal behavior, and even minimal employment was counted as employment. Furthermore, addicts within the trial were more likely to have access to essential social services than those outside of the heroin handout which gave them a greater chance of appearing productive in the study.

Holland has been the poster child of Harm Reduction policies especially as it relates to marijuana. While marijuana use has not been frankly legalized, the general atmosphere of acceptance has created numerous social problems. Numerous marijuana-selling coffee shops have emerged which provide marijuana. From 1990 to 1995, youth marijuana consumption increased by 142%. The number of organized crime groups rose from 3 to over 90. From 1997 to 2001 lifetime marijuana use increased 32%, cocaine use increased 121%, and methamphetamine increased 52%. Holland is now the leading exporter of the drug ecstasy (MDMA). As expected, HIV rates have risen 45% from 2001-2002.

The lax policy in Holland has resulted in a vexing problem of "drug tourism" involving mostly young people coming into the country specifically to use drugs or to purchase and take them. Ironically, tighter controls have been imposed to try to curb this substantial problem.

The bigger question when there is any consideration of drug policy changes is who will be the winners and who will be the losers. The winners will be clear. As we have also learned from the tobacco and alcohol industries, those who would step up to distribute and sell marijuana, or other illegal drugs, those who could profit from a futures or investment market, and those who want to continue using the drugs would profit to the detriment of the rest of us. Tough questions should be asked of the supporters of such changes.

Kids, families, and drug users themselves will be the losers with any policy that embraces decriminalization or legalization of drugs as an element. That, in turn, threatens the very viability of our nation.

In summary, a Harm Reduction policy is essentially a harm production policy. Hopefully Congress will ignore those who contend that current drug policy has failed, and will continue to support restrictive drug policy which embraces harm prevention through primary prevention, and harm elimination through treatment and enforcement efforts. Our goal should be no use of illegal drugs and no illegal or unhealthy use of legal drugs.

Mr. SOUDER. Thank you very much. And our clean-up hitter for the day is Dr. Andrea Barthwell, who was our long-time Deputy Director of the Office of National Drug Control Policy [ONDCP].

Thank you for coming back again before our subcommittee.

STATEMENT OF ANDREA BARTHWELL, M.D.

Dr. BARTHWELL. Thank you, Mr. Chairman.

Mr. SOUDER. I think you need to hit your——

Dr. BARTHWELL. Is it on now?

Mr. SOUDER. Maybe you just need to keep it closer.

Dr. BARTHWELL. Thank you, Mr. Chairman, for having me. Mr. Cummings, it's good to see you again, thank you for this opportunity to testify.

Nonmedical use is a preventable behavior. Nonmedical drug use is a preventable behavior, and an addiction is a treatable but fundamental disease of the brain. Years of research with both animals and humans teach that drugs of abuse have profound, immediate and long-term effects on the chemical balance in the brain.

Drug use can be described along a continuum of three groups, non-users, non-dependent users and those with abuse or dependence.

Non-users have never used, those who are not using and those who intend never to use, sometimes as being described in recovery. A key public policy goal is to keep non-users from using. The environment that supports non-using norms also supports recovery. The non-dependent user sits at the crossroads of non-users and dependent users able to return to a non-using state with the right incentives, yet apt to progress to a more chronic severe debilitating form of use with the wrong incentives.

When individuals use a drug of abuse for the first time, they either stop when the drug fails to deliver all that was promised or when external controls are applied, or they continue to use. New users' novel pleasurable experiences combined with their desire to normalize their own behavior lead them to recruit other new users.

Nondependent users fuel specific drug epidemics in the United States from cocaine to heroin to methamphetamine to Oxycontin. Public responses focus on the drug itself. Policies have failed to focus on the real source of the epidemic, the pool of non-dependent users who exist in communities across the country virtually unaffected by current drug policy.

Regular use of drugs in sufficient amounts can lead to a state in which the user comes to prefer the drug condition and in which the brain chemistry is so disturbed that the user's voluntary control of his or her behavior is impaired. These hallmarks of addiction make it difficult for dependent users to stop using. The cost of dependent use on the users themselves, their families and society as a whole are profound.

In order to break the cycle of chronic drug use, drug-dependent individuals must undergo significant changes in their lifestyles and attitudes. They usually need help doing so. Behavioral, medical and psychological treatments are the cornerstones of services available to help dependent users achieve and sustain meaningful periods of abstinence.

Our Nation's drug policies must be broadly designed to meet three goals. Stop the initiation of drug use, change the risk-benefit analysis of non-dependent users and provide brief and early prevention to those who abuse drugs and treatment to those who are dependent on drugs.

It's in our best interest to embrace scientifically sound policies to reject in an informed way those policies and practices that don't help us achieve our broad and national goals. No matter how attached to them we are, no matter how much we like them, we must fully grasp that policies that address thorny issues cannot be allowed to prevail if they create unintended consequences in other areas and impede our achievement of our national goals.

A perennial question among policymakers as it is today is whether harm reduction strategies make effective drug policies. The term harm reduction in drug policy refers to practices that promote safer ways to use drugs in which the primary goal is to enable drug users themselves to direct the course of their own sanctioned drug use, not to stop their drug use.

At first glance, there may appear to be numerous societal analogs at policies aimed to reduce the harmful consequences of non-medical drug use rather than eliminating the use itself. Safety implements such as guardrails and seat belts reduce inherent dangers of automobile travel, but placement of lifeguards on public beaches reduce the likelihood of drowning. They seek not to prohibit potentially dangerous activities but to alter the conditions under which these activities occur.

There is, however, a logical flaw in equating harm reduction measures for activities mentioned above with harm reduction strategies for drug use. Despite their risk, these activities involve common, socially acceptable behavior. Given that it would be neither desirable nor realistic to attempt to prohibit these activities, harm reduction is the only viable option.

You heard earlier clinically trained physicians such as myself worked to achieve harm reduction within visible chronic diseases, true. These chronic diseases can only be controlled, not cured.

This chronic progressive disease addiction, however, cannot be controlled, but it can be cured, and untold numbers of people in recovery are testament to that.

The non-medical use of drugs, on the other hand, does not constitute common or socially acceptable behavior. Preventing and eliminating non-medical drug use is both desirable and realistic. Sanctioning drug use has not produced desirable outcomes.

Harm reduction is a part of society's approach to harmful tobacco products, because legally available, yet they must be managed. These efforts are based upon an assumption that use occurs, and we must as a society manage it.

Contrasting tobacco products against crack cocaine illustrates that, when possible, prohibitions on use are preferable.

Some 40 years after the harms of tobacco consumption became commonly known in the United States, 35 million hardcore nicotine addicts appear unable to quit. Nicotine provides an example of what can happen when a rewarding addictive drug is readily available. Like nicotine, crack is easily administered, smoked. Animal

self-administration experiments suggest that cocaine is greatly preferred to and more addictive than, nicotine.

Unlike tobacco, however, crack cocaine is prohibited. As a result, the number of Americans who use crack cocaine weekly is less than 1 million. Easy availability, stemming from lax legal controls, has permitted far more people, often adolescents, to become addicted to nicotine than the more pleasurable and addictive cocaine.

To avoid harm, not just to reduce it, these pleasurable yet addictive substances that are currently prohibited from us must remain prohibited.

Harm reduction efforts are inconsistent with three broad goals of drug policy. Then I will close.

First, harm reduction strategies cause harm to non-users. The best way to reduce harm to non-users is to keep them off drugs. The best way to keep them off drugs sincerely is to foster a non-using norm. Harm reduction policies undermine the non-using norm by creating ambiguity as to the illegality, dangers and social consequences of drug use.

Harm avoidance is the goal. Harm reduction does not satisfy the goals of the grandmother who wants to keep kids off drugs.

Second, harm reduction strategies cause harm to non-dependent users with pleasurable drug-using experiences and few, if any, consequences; the internal incentives for the non-dependent user to stop using are few. External influences are imperative to preventing the non-dependent user from progressing to abuse or dependence. Harm reduction strategies undermine the non-using norm and reduce the external deterrents to drug use by perpetuating the notion that drug use can be controlled.

Taking it one step further, harm reduction campaigns provide the actual tool for drug use. Harm reduction serves the purposes of the non-dependent user.

Finally, harm reduction strategies cause harm to individuals suffering from abuse and dependence. Quite simply, treatment research recognizes that dependent users have lost voluntary control over their drug abuse. Whether they want to stop using makes no difference. Stopping outright is necessary to treat the disease and ensure the patient's survival.

I want you to explain harm reduction to the six children who lost their mother to AIDS, contracted from unprotected intercourse to get money for heroin shot through a clean needle. Harm reduction is harm promotion in the end, and we have to ask ourselves what is the sense in that.

[The prepared statement of Dr. Barthwell follows:]

Testimony of
Dr. Andrea Barthwell
Former Deputy Director
Office of National Drug Control Policy
"Harm Reduction or Harm Maintenance: Is There a Such Thing as Safe Drug Abuse?"
February 16, 2005
Subcommittee on Criminal Justice, Drug Policy and Human Resources

Background

Non-medical drug use is a preventable behavior, and addiction is a fundamental, yet treatable, disease of the brain. Years of research with both animals and humans have taught us that drugs of abuse have profound, immediate, and long-term effects on the chemical balance in the brain. Those who have had a drug-using experience, even if they are not currently using, are changed permanently by the experience.

Drug use can be described along a continuum, along which there are three groups: non-users, non-dependent users, and those with abuse or dependence.

Non-Users. Non-users are made up of those individuals who have never used, those who are not using, and those who intend "never to use again," who are sometimes described as being "in recovery." A key public policy goal is to keep non-users from using (or using again). An environment that supports a non-using norm also supports recovery.

Non-Dependent Users. Non-dependent users are made up of new users and more regular users who have not yet suffered the complications of their drug use. The non-dependent person is important because, while he does not actively recruit new users, he contributes to the spread of drug use and dependence. The non-dependent user sits at the crossroads of non-users and dependent users, able to return to a non-using state with the right incentives, yet apt to progress to a more chronic, severe, debilitating form of use with the wrong incentives.

Non-users contemplating drug use look to these non-dependent users as models for using drugs without significant consequences. Non-dependent users are not hard to find, particularly given that many are users of marijuana, which is associated with low rates of progression to dependence (in an environment of late-age initiation and low potency, one of ten individuals who try marijuana is reported to progress to dependence).

When individuals use a drug of abuse for the first time, they either stop when the drug fails to deliver all that was promised, or when external controls are applied, or they continue to use. New users' novel, pleasurable experiences, combined with their desires to normalize their own use, can lead them to recruit other new users. New users who fail to stop using often settle into a pattern of regular non-dependent use, and the vicious cycle continues.

Non-dependent users fuel specific drug epidemics in the United States, from cocaine, to heroin, to methamphetamine, to Oxycontin®. While public responses have focused on the drug itself, policies have failed to focus on the real source of the epidemic: the pool of non-dependent users who exist in every community across the country virtually unaffected by drug policy.

Abuse or Dependence. Regular use of drugs in sufficient amounts can lead to a state in which the user comes to prefer the drugged condition, and in which the brain chemistry is so disturbed that the user's voluntary control of his or her behavior is impaired. These hallmarks of addiction mean that it is difficult for dependent users to stop using and to maintain abstinence if they do stop. Thus, without strong outside intervention, a dependent user's drug use is likely to continue. The costs of dependent use – on the users themselves, their families, and society as a whole -- are profound.

In order to break the cycle of chronic drug use, drug-dependent individuals must undergo significant changes in their lifestyles and attitudes. They usually need help in doing so. Behavioral and psychosocial treatments are the cornerstone of services available to help dependent drug users achieve and sustain meaningful periods of abstinence.

Approach to Policy

Our nation's drug policies must be broadly designed to meet the following three goals:

1. Stop the initiation of drug use by reinforcing a non-using norm among non-users;
2. Change the risk-benefit analysis of non-dependent users to steer them away from use; and
3. Provide brief and early interventions for those who abuse drugs and treatment for those dependent on them.

Concerning the "war on drugs," the metaphor is perhaps helpful in calling attention to the serious dangers of drugs and that drug use is an endemic public health problem. Public health problems are best dealt with by the classical public health approaches -- prevention, early intervention, and treatment -- provided the procedures are based on solid findings of scientific research.

It is in our best interest to embrace scientifically sound polices and to reject in an informed way those polices and practices that do not help us to achieve our broad national goals, no matter how attached to them we may be. Finally, we must fully grasp that policies to address thorny issues cannot be allowed to prevail if they create unintended consequences in other areas that impede our national goals.

Drug Policy and Harm-Reduction

A perennial question among policymakers is whether harm reduction strategies make effective drug policies. The term "harm reduction" in drug policy refers to practices that promote "safer" ways to use drugs, in which the primary goal is to enable drug users themselves to direct the course of their own sanctioned drug use, not to stop their drug use.

At first glance, there may appear to be numerous societal analogies to policies that aim to reduce the harmful consequences of non-medical drug use, rather than eliminating such use itself. Safety implements, such as guard rails and seat belts, reduce the inherent dangers of automobile travel. The placement of lifeguards at public beaches reduces the likelihood of drowning. The development of protective gear for athletes, the requirement that motorcyclists wear helmets, and the placement of expiration dates on processed foods are technically harm reduction strategies. They seek not to prohibit potentially dangerous activities, but to alter the conditions under which

such activities occur and, thereby, reduce the incidence of negative consequences for individual participants and society as a whole.

There is, however, a logical flaw in equating harm reduction measures for the activities mentioned above with harm reduction strategies for drug use. Despite their risks, these activities involve common, socially acceptable behavior. Given that it would be neither desirable nor realistic to attempt to prohibit these activities, harm reduction is the only viable option.

The non-medical use of drugs, on the other hand, does not constitute common or socially acceptable behavior. Preventing non-medical drug use is both desirable and realistic. Sanctioning drug use, on the other hand, is not an acceptable practice and does not produce desirable outcomes.

For Public Health, Prohibition is Preferable

Harm reduction is a part of society's approach to harmful tobacco products because they are legally available (and it is presently unrealistic to attempt to prohibit them), yet they must be managed. Social policies that require the use of labeling and restrictions on advertising, and public health policies that permit the use of the nicotine patches and chewing gums in breaking the nicotine addiction, are attempts to lessen the harm of tobacco products that remain socially acceptable and beyond prohibition. These efforts are based upon an assumption that use occurs, and we must, as a society, manage it.

Contrasting tobacco products against crack cocaine illustrates that, when possible, prohibitions on use are preferable. Some 40 years after the harms of tobacco consumption became commonly known in the United States, 35 million "hard-core" nicotine addicts appear unable to quit. Nicotine provides an example of what can happen when a rewarding addictive drug is readily available.

Like nicotine, crack cocaine is easily administered; it is smoked. Animal self-administration experiments suggest that cocaine is greatly preferred to, and more addictive than, nicotine. Unlike tobacco, however, crack cocaine is prohibited. As a result, the number of Americans who use crack cocaine in any month is less than two million. The number who use it weekly or daily is less than one million. Easy availability, stemming from lax legal controls, has permitted far more people (often adolescents) to become addicted to nicotine than to the more pleasurable and addictive cocaine.

To avoid harm – not just reduce it -- those pleasurable yet addictive substances that are currently prohibited must remain prohibited. In the meantime, the notion of an outright prohibition of tobacco, for which harm reduction is merely a second-class public health approach, is becoming more and more socially realistic.

Harm Reduction Causes Harm

Harm reduction efforts are inconsistent with the three broad goals of drug policy.

First, harm reduction strategies cause harm to non-users. The best way to reduce harm to non-users is to keep them off drugs. The best way to keep them off drugs is to foster a non-using

norm. Harm reduction policies undermine the non-using norm by creating ambiguity as to the illegality, dangers, and social consequences of drug use.

Second, harm reduction strategies cause harm to non-dependent users. With pleasurable drug-using experiences and few, if any, consequences, the internal incentives for the non-dependent user to stop using are few. External influences are imperative to preventing the non-dependent user from progressing to abuse or dependence. Harm reduction strategies undermine the non-using norm and reduce external deterrents to drug use by perpetuating the notion that drug use can be controlled. Taking it one step further, harm reduction campaigns provide the actual tools for drug use.

Consistent with the notion that non-dependent users are the vector through which the disease of drug addiction is spread, it is no surprise that the primary architects of harm reduction efforts are non-dependent users themselves. They are the same advocates that push to legalize, decriminalize, and de-penalize drug use of all kinds.

Finally, harm reduction strategies cause harm to individuals suffering from abuse and dependence. Quite simply, treatment research recognizes that dependent users have lost voluntary control over their drug abuse. Whether they want to stop using makes no difference; stopping outright is necessary to treat the disease and ensure the patient's survival.

Medical Treatment Distinguished

The use of approved medications in achieving abstinence from non-medical drug use is not harm reduction. Approved medications can serve vital functions in the drug treatment process. Medications can make dependent users more comfortable during the early days and weeks of abstinence. This boost, in turn, can help to motivate the patient to remain abstinent and continue in treatment rather than resuming drug use in order to relieve withdrawal symptoms. Another function of medications is to alter the effects of drugs of abuse should they be ingested.

Heroin addiction deserves special mention. Methadone maintenance therapy (MMT) is a form of therapy akin to insulin replacement for diabetes. MMT is highly effective in resolving the signs and symptoms of addiction. It can prevent opiate withdrawal, diminish "drug craving," and free heroin users from the necessity of obtaining street drugs. Methadone patients are not chronically intoxicated, making it possible for them to live more stable and productive lives. Another important benefit of methadone is the reduced risk for the various adverse health consequences that accompany repeated injection, including HIV infection.

Studies have produced evidence of significant positive outcomes of MMT. Retention rates have been much higher than those for other treatment modalities, and methadone patients have had lower rates of criminality, arrest, and imprisonment.

Methadone maintenance has become increasingly restrictive in the United States, however. Regulations regarding dosage levels have become stricter, despite evidence that better outcomes are often obtained with higher doses, and the number of programs has contracted.

Specific Steps to Improve Drug Policy

Screening, Intervention, and Referral to Treatment. As with all progressive diseases of a catastrophic nature, earlier diagnosis and treatment produce better outcomes. Screening for drug use, followed by immediate intervention and referral to treatment, are keys to ensuring patients' long-term health. The alternative, a failure to diagnose and intervene in the early stages of drug use, will continue to reap less-than-optimal outcomes. It will leave society vulnerable to attempts to make moderated use – not abstinence -- the norm, while abstinence-based treatments will be cast as heartless, inhumane, and unachievable.

Reimbursement for Drug Treatment Services. Data confirm the benefits, if not the necessity, of sustained professional care for drug abusers. A common reason for ending treatment is the lack of available reimbursement for ongoing services. Dropout from treatment often results in relapse to drug use. The inability of those with an identified need to access necessary care contributes to a common belief that treatment does not work, supports the notion that people cannot recover from drug dependence, and bolsters the arguments of those who claim that treatment is futile but harm reduction is effective.

Reorganization and Expansion of Methadone Services. The loosening of overly restrictive methadone policies would improve the health and social functioning of chronic heroin injectors, including those on program waiting lists, those not amenable to or eligible for standard MMT programs, and those who are patients in AIDS and tuberculosis clinics. In addition, greater methadone availability can produce positive consequences for society by reducing drug users' reliance on street drugs, reducing criminality, and limiting the spread of HIV infection. Consistent with evidence of effectiveness in limited trials, federal regulations prohibiting methadone prescriptions for maintenance by physicians outside of formal MMT programs should be re-evaluated. Failure to re-focus our efforts here leaves us vulnerable to charges of insensitivity and efforts to "treat" dependent users with the very substances and modes of delivery that have ravaged their lives.

Support Medications Development. Medications such as methadone help to keep patients in treatment, and efforts to develop new medications must have support. Failure to support medications development programs enables harm reduction advocates to point to moderated drug use as a public health strategy.

Conclusion

When a drug of abuse becomes more available, more people use it. And those who use it, use it more. The number of individuals who encounter problems caused by the use of the drug then increases. Legal controls that restrict availability of drugs, including, but not necessarily limited to, prohibition, are effective means of reducing drug-induced problems.

Public policy should meet a minimum a standard of creating benefit to our broad goals while not increasing problems elsewhere. Scientifically based policies to prevent drug use, intervene in cases of non-dependent use, and treat problems of drug abuse and dependence best serve the public interest. Harm reduction strategies, on the other hand, fail to meet the minimum standard for sound public policy.

Mr. SOUDER. I thank you all for your testimony.

Let me ask a couple questions about Baltimore, Dr. Beilenson. Did you say that the total heroin drug use is down in Baltimore?

Dr. BEILENSON. The estimate is that we have gone from about 50,000 to 55,000 to 40,000 or so folks. It's not a very good survey, but it's the best estimate.

Mr. SOUDER. One of the difficult things in estimates, and I remember when I was a staffer, there was a study done on birth control clinics at high schools in Minneapolis, and they showed that there had been a reduction in teen pregnancy. The problem was that in the schools where they didn't have the clinics, the drug use went down even more. I mean, excuse me, teen pregnancy went down even more. The national average in the United States has declined faster than your average.

Dr. BEILENSON. Well, that may be. Needle exchange only serves 13,000 people. We have more than that, obviously, that use drugs, so it doesn't totally relate to it.

But as a support, the DAWN data was being used in, I guess, in Dr. Voth's statement, written statement. We have shown the second largest drop in drug-related emergency room visits in any of the 21 major urban areas, second, I think, only to Dallas over the last several years. So we are, in fact, seeing a decrease in drug use and the consequences of drug use.

Mr. SOUDER. Or at least you are maintaining them on heroin so they are not——

Dr. BEILENSON. No, no, we are not—well, needle exchange is not heroin maintenance.

Mr. SOUDER. Why would they need a new needle?

Dr. BEILENSON. I'm sorry, what?

Mr. SOUDER. Why would you need a clean needle if it is not maintenance?

Dr. BEILENSON. Oh, because we are not providing the heroin. Clearly, they are using drugs, and they matched the point of harm reduction. If you are not going to get clean, at this given time, that doesn't mean that you later will not. We have—I think you have dozens of people out there who have gotten clean or have been prevented from getting HIV from dirty needles.

Mr. SOUDER. Would you agree that the problem is, if you haven't had a greater reduction than the rest of the United States and if your crime rate and the population of Baltimore has declined and if you haven't had—I mean, if you haven't had clear changes in crimes—emergency room visits are an estimate of gain of the severity of the drug addiction, I would grant that. It's not—so that you aren't drug addicted, but it may mean because you are getting clean needles you are staying on a fair level playing field of heroin; you are not overdosing on a regular maintenance program with it, much like they do in Switzerland, only, like you say, you don't provide the heroin like Switzerland.

But, in fact, by having regular supervision, they don't go to the emergency room. In other words, emergency room visits are not a criteria of whether you are addicted to heroin. Emergency room visits are a criteria of whether you have overdosed.

Dr. BEILENSON. No, that is actually, excuse me, I am sorry, go ahead and finish.

Mr. SOUDER. Do you think anybody who is using heroin would go to an emergency room? What was I——

Dr. BEILENSON. Oh, oh my. Absolutely.

Mr. SOUDER. No, no, no. But, would you agree that you can use heroin and not have to go to the emergency room?

Dr. BEILENSON. Yes.

Mr. SOUDER. My argument was what that means is that you control a level, arguably, of it; emergency room visits do not show that you have gotten people off heroin.

Dr. BEILENSON. No, that's actually not true. If I may——

Mr. SOUDER. How is it not correct?

Dr. BEILENSON. Being a practicing physician myself and being on the faculty at Hopkins, in addition to being the city health commissioner for almost 13 years, I have seen this personally as well as being an intern, etc., that the way that the drug related emergency room visit date is collected, DAWN data, is any mention of drug use in the chart. And most of them are not overdose. In fact, we are talking thousands, as are most cities. And hundreds or fewer are actually overdoses.

Most of them are cellulitis due to skin popping, skin infection due to skin popping, things—heart infections, like subacute bacterial endocarditis, again doing injection drug use, hypertension, sometimes secondary to substance abuse.

So any of those mentions show up, and so, in fact, it is a pretty good marker that there is less drug use going on—and remember that many, most of our addicts, as Congressman Cummings is very well aware, do not have health insurance and in fact use the emergency room as their primary source of healthcare.

So, in fact, I would argue that the drug-related emergency room visit decrease does make a difference.

Second, our violent crime rate has dropped in the last 4 years, 41 percent faster than any other major city in the United States.

Mr. SOUDER. Well, we are fencing with statistics, but first off, because you were so high, you can conceivably have a quicker drop. Your crime rate is still very high. But that's good news, crime rate is dropping across the country.

Dr. BEILENSON. Yes.

Mr. SOUDER. It is not dramatically different at 41 percent. If you have a 17 percent—are reductions in emergency rooms greater than 17? You roughly had in 55,000 to, 44,000, understanding that was a rough estimate, somewhere between 17 and 20 percent reduction. Did emergency rooms go down by that percent?

Dr. BEILENSON. I honestly can't remember. I just know it is the second faster drop of the 21 biggest cities.

Mr. SOUDER. Because all my point is, at most, you can argue that you could make an argument. I am not making the argument for you, but you could make an argument that for me to say that it absolutely doesn't work isn't clear, but you can't make an argument that in fact it does work if your statistics aren't dramatically different than other cities in the United States that don't have the program.

Dr. BEILENSON. I think you might be able to say, taking a step hypothetically, that looking at the local issues in Baltimore City

statistics, you could say, well, maybe it doesn't work. You can't prove that it is working on the global level.

We can show by these peer-reviewed Hopkins studies—I mean, probably the best public health school in the United States, probably in the world—has shown a 40 percent decrease in new cases, not in the needles, as some people talk about, but in the people, because we test our folks frequently, every 6 months, that those enrolled in the needle exchange are converting to HIV positive 40 percent less frequently than the other matched addicts in the cities that don't use needle exchange.

Mr. SOUDER. What about—are you doing counseling with them, too, treatment?

Dr. BEILENSON. Oh, yes.

Mr. SOUDER. What about Mr. Peterson's comment, if they were getting that, you would see that reduction anyway?

Dr. BEILENSON. Because as I said before, we are seeing——

Mr. SOUDER. Wouldn't come in, is that correct?

Dr. BEILENSON. That's correct. When we—and actually there's a study that's been on that as well that have shown these were hardcore users who have not had treatment before.

Mr. SOUDER. So, basically, is there treatment on demand in Baltimore?

Dr. BEILENSON. No, we are not there yet. We need to have about 40,000 slots. We are at 25,000.

Mr. SOUDER. So basically you are running this program and giving them this special treatment when others can't get it.

Dr. BEILENSON. Wait, I don't understand.

Mr. SOUDER. In other words, if you can't meet everybody who needs treatment, and these people are getting it, it goes back to Mr. Peterson's argument.

Dr. BEILENSON. Oh, I see what you are saying.

Mr. SOUDER. You are not really disproving or proving the effectiveness of your program. You may be proving the effectiveness of—who follow and work with individuals.

Dr. BEILENSON. No, these are—but, again, these are addicts that are coming to us.

Mr. SOUDER. But if you use that same thing on other addicts who weren't addicted to heroin or were addicted to heroin, who came to you who weren't this hardest-to-reach population, you might have a greater dispute. That is hard to prove——

Dr. BEILENSON. I understand exactly what you are saying. But as Congressman Cummings has been pointing out, is our ultimate goal treatment on demand, absolutely. And we have tripled funding for that. But I do want to point out—as I think Rev. Sanders, and I don't want to speak for him, but I think was pointing out that, since Mesopotamian times, 5,000 years ago, people have been inventing mind-altering substances and using them; "Just Say No" makes good sense. I went to school with Ronnie Reagan. Governor—President Reagan held the chains on the sidelines of my 5th grade football team. I know Nancy Reagan; "Just Say No" is great. That's what I say to my teenage kids.

Mr. SOUDER. By the way "Just Say No" led to the greatest reductions, 11 straight years.

Dr. BEILENSON. And I am not disagreeing, but we still have millions and millions of people still using. Even if you have treatment on demand, you will still have people using, and it makes sense to reduce harm, not just to themselves but to their partners, to their babies and to taxpayers, to have programs like this available. I am not saying that abstinence is not the ultimate goal. I totally agree with that.

Mr. SOUDER. I find the Baltimore statistics interesting, which is why I wanted to go into an extended discussion.

Clearly, as Dr. Voth has pointed out, isn't true for Montreal, isn't true for Vancouver, isn't true for Seattle; in that Baltimore is an interesting case.

At most, I believe, you are arguing that it hasn't done additional harm like, in my opinion, some of those programs have. I know there are disputes on those statistics in other cities, but they do not even begin to make the argument that you are making for Baltimore.

Dr. BEILENSON. Well, if I can, I mean, you may want to talk to other people, too. Again, by attracting the hardest-core users—remember the Hep C number, Hepatitis C number, makes sense that you have hardcore users have higher rates because, in fact, 85 to 90 percent of injection drug users that are chronic drug users in the United States and every state are Hep C positive. So you would expect, actually, as you have hardcore users come into your needle exchange, they would have higher rates of Hep C. What you want to look at is change of new cases, and that's what we can demonstrate in Baltimore in a well-run program.

Mr. SOUDER. Thank you.

Mr. Cummings.

Mr. CUMMINGS. Yes. It may be, it just may be, Mr. Chairman, that we have an outstanding health commissioner, just maybe, who is doing a great job. I mean, that does happen in the United States, and we do live in a city where we have one of the top health institutions in the world, Johns Hopkins. But that's just maybe.

Rev. Sanders, I don't have my glasses on, I'm sorry.

Rev. SANDERS. That's all right.

Mr. CUMMINGS. Here is a term that I just found so interesting and makes a lot of sense. You talked about the bridge to treatment. Could you talk about that a little bit, the bridge to treatment?

Rev. SANDERS. Sure. One of the things that is important for us. We have discovered that you get people into treatment—who are out of what I would say is the loop of social involvement that allows them to be able to pursue traditional routes—by developing rapport and developing the ability to be able to encounter them.

What I was trying to make is the point that many of these folks who end up in the numbers, that do not have access to treatment, it is really because they are out of the social patterns that allow them to be able to take advantage of traditional avenues that are available. They don't show up. Their lives end up very often being driven by how they get the next fix and how they continue to perpetuate a lifestyle that has long been addiction.

By engaging them at that level, we begin to talk about—and let me just tell you this to begin with—every program—and by the way, we do not have a needle exchange program anymore in Nash-

ville. We haven't had it for a number of years, because we decided that, well, put it like this, there is not a formal needle exchange program in Nashville, mainly because we realize that it compromised our ability to take advantage of comprehensive strategies that were available to us.

And I would argue that we need to keep focusing on this whole question of a comprehensive drug policy. It's not a either/or, and I think we need to talk about how you develop the kinds of protocols, how you develop the kinds of procedures, how you develop the kinds of structural norms that would be able to allow us to guarantee that we are using all that is available to us, would help.

So what we do with our bridge to treatment is we engage people. Now that happens more through our methadone initiative that we have, and it helps us to be able to bridge people into a formal treatment situation, not just people who are getting dosed on methadone and maintained on methadone—I know people who have been maintained on methadone for years. Our whole thing is to get people into and move them toward treatment. That was the strategy that's been used in terms of the RIMS exchange. It is the strategy that is being used in terms of methadone. It's the strategy that we use in terms of reaching those who are normally unreachable folks.

But every one of our protocols and every one of the initiatives that I have ever been involved with starts with abstinence. We start off by saying, don't use. I mean, that's what you want. I had an interesting question. Somebody asked me about that a couple of years ago. They said, well you tout the fact that all of your protocols start off with abstinence. If you looked at your resources, what percentage of resources go to abstinence versus what percent go to harm reduction?

And I decided to look at that very closely. And I found out that it actually ends up being pretty significant, the part that goes to abstinence. Because what we end up going to in counseling, what we do with people who manage cases, is always the emphasis on stop using. But the fact is, we try to make sure that the avenues are open that allow people to be able to access treatment in the most effective ways they can.

Mr. CUMMINGS. You know, I think that anybody listening to us, I don't want anyone to ever get the wrong impression—and I think Ms. Norton said it best. Nobody here is talking about legalizing drugs.

And if anybody has seen the pain that a drug addict goes through and the fact that you are dealing with the ghost of the person—you are not dealing with them, you are dealing with the ghost of them—nobody buys that. I don't think any, that I know of and what I hear about the term reduction in this whole—what is it, reduction therapy being hijacked, I think—I don't want—just because you come, Reverend, and you, Dr. Beilenson, and others have come to talk about this, I just want to make sure that you all are not of the view that drugs should necessarily be legalized.

I know I have heard you talk about, Dr. Beilenson, about a health issue, making it a health issue and whatever. But the suffering is so great to anybody. And we would all like for nobody to use drugs. I mean, but the fact is, they do.

The Vancouver study, Dr. Beilenson, are you familiar with that? Because it seems like that comes up all the time.

Dr. BEILENSON. Yes, fairly familiar.

Mr. CUMMINGS. If it—do you see that as a success?

Dr. BEILENSON. Yes. Let me give you the analogy. Again, they are serving higher, harder-core addicts. It's as if you were—compare it to less hardcore addicts. It's as if you compared sick people and how sick they were in the hospital compared to a private doctors office. Well, obviously the sicker people are in the hospital, and you are going to have higher rates. In fact, that's exactly what Dr. Strathdee, who is the lead investigator on the Vancouver study, has said and has clarified in the comments that you were making earlier today.

Mr. CUMMINGS. So, as far as Baltimore is concerned, how is that program different than Vancouver, because it seemed like the chairman was kind of making a little contrast/comparison thing going on. I don't know what he was doing.

Dr. BEILENSON. To be honest, I am not exactly sure how they are run. Ours is a legal program. Theirs is legal as well, but I don't think it's——

Mr. CUMMINGS. What do you attribute Baltimore's success to?

Dr. BEILENSON. The fact we keep very close tabs on our data. We have had excellent people Michelle Brown, Lamont Cogar, since the very inception of the program. We have very dedicated staff. We do a lot of outreach, and we have fairly comprehensive services, which bring people in as the bridge to treatment, that have made a big difference in people's lives.

Mr. CUMMINGS. I don't have anything else.

Mr. SOUDER. Ms. Norton.

Ms. NORTON. Thank you, Mr. Chairman.

Dr. Barthwell, I am trying to, particularly in light of your scientific background, I was interested in your testimony. I would just like to ask for some clarification. On page—these pages aren't numbered—you discuss nicotine.

Are you suggesting in your testimony that selling of cigarettes in the United States should be prohibited absolutely? I am reading here because of your contrasting with the fact that we have tolerated nicotine, and then you go on to make analogy to crack cocaine, as if because we have nicotine, because people smoke cigarettes, it was easy to move on somehow to crack cocaine; otherwise, don't know that has been a trend of those who smoke cigarettes. Some of us wish that everybody would stop smoking, but I wish you would clarify, under the heading for public health, prohibition is preferable.

Dr. BARTHWELL. Right. I am not suggesting that we do anything about nicotine. I am contrasting our experience with nicotine with that of cocaine. It is very clear in animal study models and in human studies that cocaine is a much more powerfully reinforcing substance than nicotine. Animals will bar press more to get it, once it has stopped. And you substitute a placebo instead of the cocaine itself, they will work harder to try to get it reinstated, when compared to nicotine.

But if you look at the numbers of individuals in this society who use tobacco products versus the number of people who use cocaine,

the sizes of the populations are vastly different. Part of it is because nicotine is readily available, not prohibited, and cocaine is prohibited.

It is very clear from looking at the data and understanding human behavior, that people do more of that which is sanctioned and allowed than that which is prohibited and disallowed. And you have a different level of control on cocaine than on tobacco, but you have many, many, many more people using tobacco than cocaine, even though cocaine is much more powerfully reinforcing than nicotine.

Ms. NORTON. I can only, when I read your testimony, and even hear your explanation, Dr. Barthwell, I can only think that you are the greatest enemy to the tobacco industry, and I welcome you to the club.

Some of the sweeping statements you make really interested me in talking about—again, we get into this word harm reduction.

Again, for scientists to make such unqualified sweeping statements is itself interesting. Dr. Beilenson has testified about the effect of a carefully done needle change program. The chairman has tried to indicate, tried to take him on at least on his scientific methology. Do we know cause and effect? All of that is fair.

I contrasted how you deal with methadone with how you deal with something lumped under harm reduction. I remember when methadone was introduced. There is great abuse of methadone as well in many communities. Those communities where methadone is administered, not as carefully as Dr. Beilenson's program, complain about methadone clinics, yet scientists like you understand that, despite possible abuses, the benefits of methadone overwhelm the problems, and you get those methadone clinics under control rather than say, you don't do methadone clinics.

Now, analytically, you seem unwilling to transfer that kind of thinking that you do quite readily by simply defining yourself out of harm reduction. By telling, by saying, well, but you know, it's an approved drug, so methadone is not harm reduction but all of that other stuff, and I am not sure what you are talking about, because you sweepingly say harm reduction, you all are on the wrong side; I am on the right side because I have said I am now defining myself out of harm reduction. I am going to take you to some communities in the District of Columbia where they would define you right back in. Because sometimes methadone is not administered as well as needle exchange is done in Baltimore.

You say—and let me ask specifically some questions in the part of your testimony that is sweeping. In talking about how certain techniques lead people not to internalize the need to get off of drugs in your testimony—this is under the heading of harm reduction causes harm, blankedly, harm reduction causes harm.

That's it. Right up against the wall, all of you all, everything you are doing. I am not telling you what harm reduction is. I am just telling you that what I would like is not harm reduction methadone. All the rest of you are doing harm. That's just how blankedly it is stated, Dr. Barthwell.

Here is my question, you do say, however, external influences are imperative to preventing the non-dependent user from progressing to abuse or dependence. You have heard me and others question

witnesses about legalization, heroin maintenance, that kind of thing and heard definitively people who are involved in what I am sure you might call certain harm reduction approaches believe that legalizing drugs is wrong.

In speaking about external influences, Dr. Barthwell, I have to ask you, have you ever heard of "three strikes and you are out" mandatory minimums or the sentencing guidelines.

Dr. BARTHWELL. Uh-huh.

Ms. NORTON. Would you not call those particularly strict external influences on non-users or, as you call them, non-dependent users, as well as users? Is that what you think, alone, society should depend upon to—as you say, stopping outright is necessary to treat the disease and ensure the patient's survival?

Dr. BARTHWELL. May I respond now? My testimony is written in the way that it is. I knew where I was going to be on the panel. I saw all the people who were going to come before me. I knew they had very data-laden presentations.

I will provide to you and the other members here the research upon which I have based my conclusions, and I have about four pages worth of studies that were reviewed in preparation for this.

You have a synthesis, my understanding of that, and the references that I am going to provide to you.

Ms. NORTON. Do you have particular harms in mind when you say under the blanket statement that all of these are harm reductions? Would you tell me the kinds of harm reduction techniques you have in mind?

Dr. BARTHWELL. Yes. I thought you had six categories of statements that you were making about my testimony. I am trying to respond to them in turn. If you don't want to hear about why the statement is written the way it is, I will go on to the next one.

Ms. NORTON. It is not that I don't want—I have the right to intervene to ask you to clarify what you are saying. I want to hear each and every part of your answer.

Dr. BARTHWELL. I will take them in turn. I don't agree with all the studies that were reviewed. And giving them to you is not an endorsement of them, but it was critical to me to have an understanding of the breadth of our understanding of this issue.

As you so aptly point out, it is the methadone itself that is not problematic; programs and clinics have been demonized because of the way in which they provide their services. And a large part of that is because of inadequate funding for an increase in the intensity of the needs of patients over time.

Some of it has to do with disparities and funding of clinical staff in them. They don't have access to higher-paid counselors as some of the abstinence-based programs. So there are a number of problems that are associated with the provision of methadone therapy in this country that has little to do with the medication itself and more to do with the system of care.

But I like the fact that you know that there's a difference between how a good methadone program operates and how a poorly resourced or poorly run——

Ms. NORTON. Just like there's a difference between a badly run needle exchange program and one that's well run.

Dr. BARTHWELL. Absolutely. I have no argument that a poorly run needle exchange program will, in fact, probably be associated with more harm to the community in the same way that a poorly run methadone program is associated with more harm to the immediate community.

But I have a lot of concern, having watched good ideas come along and then be inadequately funded, that to go down this path, you are not going to get programs that are supported with the research dollars, the high level of science, the integrity and fidelity to the model that you are seeing described in the Baltimore program. And, in fact, if you look at the way most are run, they are not run to that standard. So we are actually opening a Pandora's box.

Ms. NORTON. I don't know that, and I am not sure you know that. I am not sure you can point to a study that has looked at methadone maintenance programs across the country, and you can conclude that most—that's another sweeping statement—are not run the way they are run in Baltimore.

You know what, Dr. Barthwell, close them down, because you and I would be on the same page on that wouldn't we?

Dr. BARTHWELL. I agree. Part of what I have spent my life doing in the Chicago area is trying to increase the quality of care that is delivered in those programs that are there. But I, you know, I will take you to places, too, as you have offered to take me to places in the District, where there is not fidelity to the model or the intent, once it is funded and it goes out there. I think that is a very serious issue for consideration, for expanding something that is a novel idea, that is highly researched and highly resourced.

I listened to the high school data as the evidence that needle exchange programs don't influence the perception of drug use in a positive way for young people. Unfortunately, our targets for prevention are between 9 and 12. They are not high school students. And high school students have very well-formed ideas about drug use by the time they get to high school.

So until we see the data on what it means to the 6 to 7 to 8 to 12-year-old, I am not sure that we can say that we understand that needle exchanges do or don't move more toward—sometimes subtle and sometimes not subtle ways—our community toward a tolerance of drug use.

Ms. NORTON. You think 9 to 12-year-olds are into watching what happens in needle exchange programs?

Dr. BARTHWELL. I think 9 to 12-year-year-olds look at a number of things that are communicated to them about drug use and are affected by the models that the adults in their——

Ms. NORTON. Although there is no research to that effect, you would like to see it done?

Dr. BARTHWELL. I think that we probably shouldn't see it done. I don't think that we should be at a point where we are looking to see what impact the needle exchange is having on an 8-year-old. I don't want to see the proliferation of needle exchanges.

The other notion is that there are these positive results being reported from the Baltimore study. I think, before we accept them wholesale on review of the literature, you have to look at the amount of money that is being spent per patient and per encoun-

ter, and if it is really of value because needles are being provided, or is it really of value because there is an intense outreach effort which is supported by clinical care and support once the person has been engaged.

I resent dangling needles in front of addicts to lure them into treatment. I might believe the proponents of needle exchange programs were much more genuinely inclined toward trying to get people off of treatment if they put that same amount of effort in fighting for programs where needles were not a part, and they did a side-by-side comparison of all of the same services with needles and all of the same services without needles.

Ms. NORTON. What about the effect of keeping the injector from, in fact, infecting innocent people in his or her community, is that worth a needle?

How are we keeping him from doing that? Because he doesn't get HIV. Because he turns in his needle every day and gets a clean needle.

Dr. BARTHWELL. You know, again, I would like——

Ms. NORTON. Doesn't get Hepatitis C, for which there is no vaccine, HIV/AIDS.

Mr. SOUDER. Even Dr. Beilenson didn't make that claim.

Dr. BARTHWELL. I am recommending that we, you know, rather than resource needle exchange and leave people with a chronic treatable disease, that we put that resource into giving people more treatment and that we also move our efforts upstream so that we don't have as many chronic severe debilitating forms of dependence that we do in those communities.

And I really want to make the case in these broad sweeping statements that I am using that to look for a solution and a narrow slice of all the drug policy and find one, that, you know, seems to meet most of our needs without anticipating or studying anticipated unintended consequences across the full spectrum of drug control, is not advisable at this point.

We have had drug policy that has been based on—focusing on two sets of populations, non-users for prevention and dependent users, and we have spent quite a bit of our time and energy over the last 15 to 20 years and our resource dollars trying to find more and more discrete ways of treating people with chronic severe debilitating forms of the disease, you know, that are very discrete subpopulations of all of the people who have dependence. What we have done in doing that and in focusing on drug policy in that way is that we have failed to treat people who are not those so-called hardcore users, and we have not addressed non-dependent use at all in this country.

And it is my belief, based upon observations, scientific study, curiosity, review of the literature and understanding this from a much broader perspective, that until we have drug policy that focuses on all three populations, and until we begin to do more to address the needs of treatment for people who have not a controllable disease but a treatable curable disease, that we will continue to leave ourselves open for trying to find a band aid solution that in the end does not address what the underlying problems here. We have not invested adequately across the full continuum.

Ms. NORTON. I appreciate—I think we have a lot in common, I think, Dr. Barthwell.

Dr. BARTHWELL. I think we do.

Ms. NORTON. Dr. Barthwell does want to concentrate on prevention, and I commend her for that and for the work that she has done in methadone. And I agree with her that we ought to spread methadone. She wants to increase and spread methadone and do more of it.

Dr. Barthwell, I do ask you to think about the fact that many communities now have millions of people who are addicted, and they are our responsibility as well. We have to do—we have to find something to do about them even if, for the moment, we say that they have caused their own problem, because now they are infecting entire communities.

In my own city, two wards, the poorest wards, we now have equal numbers of women and men with HIV/AIDS. So we are not prepared to throw away those people and are forced to look at those who already have the disease as well as the very important avenue you suggest needs more attention. I thank you for your testimony.

Dr. BARTHWELL. Thank you.

Mr. CUMMINGS. Mr. Davis.

Mr. DAVIS OF ILLINOIS. Thank you very much, very much, Mr. Chairman, and let me thank the witnesses for their patience, their long enduring time that they have spent.

I think that this issue is one of the most challenging and most difficult problems facing our country and certainly perhaps even our world today.

When I think of the large numbers of individuals who, for any number of reasons, find substance abuse or drug use desirable to them, or if it is not desirable, they are doing it anyway—I mean, it alarms me when the Chicago Police Department suggests that 75 percent of the individuals that they arrest, or more, test positive for drug use. That's a lot of people.

Or when the county that we live in, Dr. Barthwell, suggests that there might be 300,000 hardcore drug users in our county. Admitted, it's the second largest in the country, but nevertheless, it's still a county.

And, you know, lots of people have different approaches and different ideas. But I also find that one of the big problems is that many people do not believe that individuals are seriously helped, or that treatment really works and therefore don't want those dollars, their money, their resources, used for that purpose, even though they don't have any other solution, or they don't have any other answer.

How effective—and this is something that I am constantly searching for, because I am constantly trying to convince people, that we can make better use of our public dollars by putting them into treatment for those individuals who have already become affected and put in more resources into prevention for those who have not, in terms of believing that we can really head it off. How effective is treatment? I think we can get more of a handle on that even than we know, how effective different kinds of prevention are. So that really becomes my question.

Perhaps we will start with you, Dr. Barthwell.

Dr. BARTHWELL. OK. We know, over 20 to 25 years of study, that some treatment is better than none; more is better than less. The treatment is best when it's driven by assessment, buttressed with case management and completed with followup support in their community.

When I started working in this field in Cook County, we—when we looked at all treatment experiences, someone made an appointment, had an assessment, was assigned a treatment, made their first appointment at a treatment provider, and then were looked at at the end of treatment, looking at the discharge records of all of those people who had made their first appointment, whether they made a second or not; 25 percent of people who were admitted to treatment, opened both clinically and administratively on the State rolls, completed treatment.

Now that didn't predict in one way or another what they were doing 6 months, 18 months or 24 months after treatment. But we know about one out of four people who entered treatment completed treatment in a positive way.

We also know that we can do much, much better than that. And in the intervening period, there have been a number of forces that are external to treatment that have reduced the length of treatment experience where programs stopped being program driven in their models and began to respond to arbitrary lengths of stay for people and discharged them, whether they had achieved a threshold of improvement in response to treatment that they could build on in a self-directive way; once leaving treatment, they basically met the time criteria and not necessarily therapeutic criteria.

But in programs that are therapeutically driven, that use national standards for assessment, such as the ASAM placement criteria, and use them to determine when one has completed treatment and they are ready to leave, they can get 96 percent or better sobriety rates 2 years, as documented by urine drug testing.

We know that if we can get people out 2 years beyond their treatment experience, using an external locus of control, such as urine drug testing, that many, many people do better after that point. Unfortunately, like the needle exchange programs that might be developed, there will be—there is variance in funding and support. And most programs that operate in the public sector don't, in fact, followup on people, don't put them in a program of external control after they complete treatment.

So we are not getting the kinds of results that we have the science and the medicine and the technology and the knowledge in this country to support.

Now, I think if you looked at the national average, where you, again, look at all comers and don't discriminate whether they are hardcore or soft core users, but take all comers, we are up around the 35 percent completion rate. It's better. But it is not what we can do if we put our efforts to it.

Dr. BEILENSON. If I could, we have studied this in Baltimore. We do a lot of data-driven stuff. We have a 3-year study that was done by Johns Hopkins University of Maryland and Morgan State University that found that, a year after treatment, whether or not someone was successful or stayed in the full span of treatment, just

all comers, there was a 69 percent decrease in heroin a year later; 48 percent decrease in cocaine; 69—67 percent decrease in crime; and a 65 percent increase in illegal income; all of it based on other data bases. So we were able to check criminal justice data bases, etc.

In addition—that's the global issues, as Chairman Souder sort of has been talking about on the AIDS side. In addition, we run a process called drug stat where, every 2 weeks, my chief of staff, Melissa Lindamood, and I meet with all the directors in the drug treament programs in the city—we have 43 of them that have public funding. And we hold them to outcomes; urines that are positive, improvements in housing, housing arrest, employment from admission to discharge. And we have been able to show retention rates in treatment far above those.

Our methadone retention rates at 6 months are about 90 percent. Our non-methadone—our residential retention rates are at 6 months, because that is the length of the program; oftentimes, is close to 100 percent. And the intensive outpatient methadone programs are about 60 to 65 percent.

Rev. SANDERS. I am sitting here, and I am feeling very impressed with the fact—and I hope we are all hearing the same thing, that there is—I think in the voices, especially when I listen to Dr. Barthwell, a level of passion about saving lives. All of us seem to be agreeing that treatment is an essential part of it.

What I hear as being a big issue for us is how you get people there. A lot of us talk about these programs we call a bridge to treatment, that helps us to create another vehicle by which we get people to treatment that otherwise don't end up there. Now, the other argument, I think, that has to be dealt with is the issue of the dollars and the costs.

The fact is that we spend a lot more money incarcerating people than we do in processes by which we can get treatment done. I think we ought to begin to think about how we get people into treatment programs, use diversion and other methods to get people there. I am not saying that there aren't going to be consequences, but I am saying the consequences should be structured such that we get people into the arena that all of us are agreeing is an essential component in dealing with the problem of substance abuse and drug abuse and that is treatment.

I think our dollars can be more well spent. A lot of our dollars these days are being spent in punitive programs, a lot of which is going on, in terms of mandatory sentencing and the like, is translating into dollars being spent in ways that are not getting us the best return for our money.

I think we got some stuff we are agreeing on here. I am saying it's important for us to talk about things like about how do we get people to treatment, and I know that, especially when I listen to Dr. Barthwell, we were actually intellectually incubated and on common ground, and I think that we come out equally passionately committed to people getting treatment.

I think—how do we get people there? I am saying that I think what we are talking about in terms of some of the harm reduction models are some very effective ways to do that. I know that I am not, and I hope that there are not others who are simply saying

this is a vehicle by which we legalize drugs and by which we bring—that is not their agenda.

Last but not least, just so you understand where I come from in this. OK, I think people who tout 12-step models have to agree with me. Addiction is first and foremost a spiritual problem.

What we are dealing with most, folks caught up in addiction, people who have dysfunctional belief systems that cause them to behave in ways that translate into that which is self-destructive. I think that one of the things that we spend time doing in terms of engaging folks and getting them into treatment is to impact how those negative, destructive, counterproductive belief systems have come to dominate, which I believe are probably the most powerful things in your life.

And one of the things we try to do is make sure we engage folks in a way that is translated into that which is positive but still being constructive.

I spent time doing this for, you know, for all the agencies in the Federal Government, almost. I do it with people for DEA. I do it with people for SAMHSA. I do it with people everywhere, talking about this issue. Because that is what we have to be about. And I am saying, giving people treatment is where we can do that. We now have models, we now have programs, we now have replicable models that can be shared that can help folks do this effectively.

So I don't want us to lose the point of this issue of how we get more people to treatment, how we best spend the government dollar and how we get the result that I think all of us are looking for, and that is, I think, to save human lives.

Mr. DAVIS OF ILLINOIS. My sentiments, exactly. I thank you very much, Mr. Chairman.

Mr. SOUDER. Would you like to close?

Dr. VOTH. Just a couple of quick thoughts. I am heartened to see that the panel and all of you seem very clear in your legal opposition to legalization of drugs. I just want to reemphasize, there is a nucleus, maybe not a large one, but certainly a nucleus that is very powerful that does want to legalize drugs and is using the harm reduction movement as a stalking horse to get there. We don't have enough time to get into details, but it's there, and it's well documented.

One of the things that, as a treatment professional, that has really bothered me through the years, and I certainly appreciate, around the table, the difficulties here, and that's that in-stage, difficult addict that simply can't or won't walk away.

I think one thing we may have turned to is Sweden, because they have tried a couple of things in this regard. And somewhere along the line, we may actually have to explore ways we extract people from a harmful environment and try to find almost a mandatory treatment process.

They do have a way in Sweden to take folks who are just so repetitively harmfully involved and literally remove them from society and long-term treatment until they can get them back to a functional state. I hate to see the loss of personal freedoms in that regard, but then again, you know, where do we juggle some of those things. Is it more free to be enslaved to heroin or to be work-

ing toward sobriety in some way? I don't have the answer in that regard.

But I do think that intensifying pressure on addicts, certainly a continuity of the system, certainly a continuity of services, works. And one of the things I would love to see in terms of research—and I am on the CSAT advisory, national advisory board—is more research directed at looking at the issue of, can we get services out that entice people into treatment and sobriety that are at least as good, if not better, than needle exchanges and services?

In other words, is there really a function in the needle exchange other than prolonging what we hoped to be getting to sobriety. I don't know the answer to that. And maybe actually you have some of the answers to that. But I think that's really a fundamental question.

Ms. NORTON. Mr. Chairman, may I ask a followup question? I thought there was some understanding in the scientific community that in order to get people away from drugs, you had to bring them to the point where they themselves desired—that compulsory treatment—I don't think you would—this would, of course, fly in a democratic society in any case, but leave that aside for a moment. That compulsory treatment would not work and cannot work. I thought that was the state of the science.

Mr. SOUDER. Let me supplement that, and rephrase this, because this is something we have had come up a number of times in our committee.

Would you say it's safe to say that if a person has voluntarily made a decision to come, which Dr. Barthwell was saying, if they show up at the first visit, if they start into the program, they show up in the next meeting, they agree to do a profile, to the degree it's voluntary and they want to change, their likelihood of success goes up?

Dr. BARTHWELL. Absolutely.

Mr. SOUDER. But it is not necessarily true that an involuntarily assignment, for example, to a drug court won't work.

Dr. BEILENSON. That's correct.

Dr. VOTH. That's correct, yes, I think all of us would probably agree on that.

Ms. NORTON. To clarify what you said, there will be some people who will believe you are for taking people, putting them in concentration camps. You have to be careful——

Dr. BEILENSON. No, if I could, coercive treament—I am someone who has come late to this actually, but it's clear to me from studies and from working with patients that voluntary—when you are ready, and there's a window of opportunity, you are more likely to be more successful.

But coercive treatment through diversion programs in lieu of probation or in lieu of parole or in lieu of incarceration, which can be viewed as sort of coercive, can work, especially if you keep them there for the first 3 months or so in this program, not concentration camps, but assigned there in lieu of incarceration or something like that.

Ms. NORTON. This is a carrot-and-stick program, so it is strongly favored, carrot-and-stick program.

Dr. BEILENSON. Absolutely.

Mr. SOUDER. Let me. I want to finish with a couple of comments, because I actually asked the least questions because I was going with Dr. Beilenson. I do have a couple of closing comments here.

One is that I think everybody here in this subcommittee agrees on treatment. But we don't necessarily agree, Rev. Sanders, on your formulation that, for example, mandatory sentencing, which was really intended to address some of the questions that you raised in racial disparities.

In other words, not letting rich kids who are white be able to get off for the same crime that a black would be thrown in jail for. We have talked about that. It may not have been how it has actually played its way through, but that was a lot of the intent behind it. And I would argue it probably has reduced some of the disparities from the past by doing mandatory sentencing.

I believe that all of us are looking at consequence-based alternatives, in the sense of drug courts, drug testing, and other types of testing, but not decriminalization, where there isn't a consequence that is severe, that causes behavior change.

Because that becomes this question that we are fencing around with here, on what Mr. Peterson is saying, what is the message you are saying underneath this, internationally and domestically? What is the broader message you are saying in addition to the practical, trying to address it? If you say yes, you know, getting pregnant as a teen is wrong, but everybody does it so let's try to address it here, that's not a very effective abstinence practice. Same in drugs, it's the intensity with it. Where is the intensity? You can undermine that intensity with a follow through.

That is a debate that we are having that is kind of behind some of this and that, I believe, we need a comprehensive program in that the bottom line is that, if we don't get the heroin, poppy and the cocaine and the meth precursors and everything before they get there, you will be so overwhelmed trying to treat it you won't begin to handle the number of people being treated. The people in the community, 75 to 80 percent of all crime, including child-support, child abuse, spouse abuse, loss of job, are drug and alcohol related. Part of the reason we put people in prison is to protect everybody else, including the poor kid at home who has been getting beaten.

So it isn't just a matter of harm reduction for the individual; it's also harm reduction for society.

Now we have had a lot of discussion today, and I didn't mean for it to get this much, and I just read through; it's not a long book. I am going to ask that this entire document be put in, all the words of the book, so nobody thinks I am just quoting out of hand. But first off, a title that says, "It's Just a Plant," going to kids, is wrong for starters. It's sending the wrong message.

But I am going to read a little bit of this, because it has been suggested that we have mischaracterized this book:

> Jackie just loved to go to sleep at night. Before she got tucked in, her mother would help her walk on her hands all the way to bed. One night Jackie woke up past her bedtime. She smelled something funny in the air, so she walked down the hall to her parents bedroom. "What is that, Mommy," asked Jackie. "Are you and Daddy smoking a cigarette?"
>
> "No, Baby," said her mother, "This is a joint. It's made of marijuana."
>
> "Mara what," asked Jackie sleepily.
>
> "Marijuana," smiled her dad. "It is a plant."

"What kind of plant?"
"Well," said her mom, "how about we go on a bicycle ride tomorrow, and I will tell you all about it. Is that OK?"
"OK," said Jackie.
The next day Jackie woke up early to get ready for their adventure. Then she remembered Halloween.

It goes on a little bit about that.

Then the first trip to the farm where Jackie's mother got her vegetables.

"Farmer Bob," she called out.
"Hi there," said the farmer. "There is a nice costume."

Then she comes up to a plant called marijuana. So they talk a little bit about how marijuana developed, marijuana grows around the world. It can be very, very tall. Is marijuana a fruit? You could say it is. It makes flowers.

It goes on.

The bottom line, she says,

"Wow, I am going to plant marijuana at home."

Then the lesson is that children shouldn't use marijuana; it's an adult thing, and then it goes into—criticize—marijuana is for adults, who can use it responsibly.

That is not true. It is illegal for adults. It is not responsible use for adults. That is the legalization argument that we are making. "It gives many people joy. But like many things, it can also make someone sick if it is used too much. I do not recommend it for everyone." It is recommended for no one. It is illegal for adults. It goes on, and then comes the conclusion about the importance of changing the drug laws, that these were imposed by politicians because doctors opposed it. We used to smoke hemp, which is an anthology. But at the very end of the book it says, "This book succeeds in helping parents send two important messages: Marijuana has a long history in various uses. And whereas adults can use it responsibly, it is not to be used by children."

The fact is, this promotes legalization of marijuana. It's the thrust of that book. It's an indisputable conclusion.

And Reverend Sanders, it is contrary to your heart and what you have been saying, and you are secretary of the organization. We had another board member of the organization who said he didn't know of this. Then get this off the market, because it is fundamentally contrary to what you said.

Rev. SANDERS. Mr. Chairman, I appreciate your sharing, and putting the book in the record. Let me just give you a feel for how these conversations go. It is not unlike what goes on in conversations with other groups that I end up being a part of, which I would not belabor. But I have been at the table.

I have been at the table in the board room of the organization when the conversations went on. As a matter of fact, I remember when we were doing the mission statement for the organization, there were some voices there that were clearly different from mine, but I think one of the reasons why there is the thoughtfulness in terms of what ultimately drives the organization, I'd like to think that some of that has to do with my presence there, just like I think it is important to have a voice that sometimes counters oth-

ers. I don't want the association to be that just because—and I will not——

Mr. SOUDER. But you don't join a gang in order to try to change the gang. They are promoting marijuana use in the United States. We have had hearing after hearing and people have come up to me and said my mom beat me because she was high on marijuana. My dad didn't have enough money for that because he spent it on his marijuana habit. Most people in treatment today are in fact in treatment for marijuana and not heroin. And you being on a board that more or less says, look, I'm trying to influence to be better, you are on a board that is distributing something that is killing kids in your town.

Rev. SANDERS. I guess what I'm saying to you is that I also serve on a board where if my voice was not in the room there might be something that you would find much more deplorable. I'm always in there to be a voice that is counter to. I used an example a little while ago. I share this again with you. I see this all the time in my political life because I end up being a voice at the table that very often has to mitigate on the side of that which represents human justice, racial equality and fairness.

As you well know, there are people who will find organizations—there are people who will find political parties where they will harbor and find themselves advancing their agendas. I want to be clear about the fact. But that is not my agenda, OK. And I guess what I'm saying is I think that my being present in those conversations is an important part of what continues to mitigate on the side of what's reasonable because I do believe harm reduction is a strategy that is effective.

I do not believe in legalization. I have issues for criminalization, which I've explained to you earlier, and we are talking about ways in which we can be better. So I am saying I don't want to be demonized by saying that is my book and my position and that's what I'm about. If I did that with every organization I was a part of, including the Republican Party, I would be in trouble, so I don't do that. So don't do that.

Mr. SOUDER. We are in a very fundamental point here and this is what Mr. Peterson and Dr. Voth and others of us who feel so strongly about and this is our argument with George Soros. There may be some things that work within the movement, but our skepticism broader is based on this very point, and that is that you view it that you had this group be less and it could have been worse. That is why you are on the board and they do some things that are good.

Rev. SANDERS. I do not review the literature and all of these, so I'm not aware of all of that.

Mr. SOUDER. What I'm saying is, to me, a book that promotes to children that it's adult usage and it's OK and misrepresents the laws in the United States, advocates changing those laws, says helps you sleep, makes you happy or sleep, that book is killing people.

Rev. SANDERS. If it helps for me to say it this way, my voice will always be one that speaks on behalf of there being not anything that advances——

Mr. SOUDER. I don't mean this in an inflammatory way. Would you join the Ku Klux Klan group to try to get their policies to be better? I view this when they are promoting of killing of people.

Rev. SANDERS. So you understand who Edwin Sanders is, I apply this to every level of my life. One of the ways in which Metropolitan Interdenominational Church is most well known is that we were the church that had James Earl Ray's funeral. So you asked me the question, would I go to a Ku Klux Klan meeting. I do engage the Ku Klux Klan. I take it to the extreme because I believe if you're fair you have to do it with everybody.

I believe that everybody is a child of God. I believe that everybody is created by the hand of God. I believe that everybody has infinite worth and value, and I do everything I can to bring people to the point of Godly lives. I think I'm in good company and I like the fact that Jesus is often referred to as hanging out with the sinners, the tax collectors and the undesirables. I deal with the sinners and the tax collectors and the undesirables. My purpose is to bring a presence. And I believe that's a transforming power and I believe that power is mine through the presence of the Holy Ghost at work in my life through Jesus Christ. If you want to know it, that's the reason why I'm there.

I do know that at every Ku Klux Klan meeting they will stand up and read from the Bible. I have had people challenge me about being a Christian preacher because the Ku Klux Klan reads from the Bible. And just like E. Franklin Frazier said years ago, that religion was the opiate of the people, that lulled them to sleep instead of being aggressive about the human rights. And that is what I'm saying.

I'm consistent about this. And I believe it is important to not shy away from dealing with anybody who does anything that compromises the value of human life and the God-given right that all of us should have. That is what America is about and that's what I'm about, and my voice is always going to be in those arenas. And I will run the risk that Jesus ran of being called one of those who associates with sinners, who ends up with the tax collectors and the undesirables.

Mr. SOUDER. You have demonstrated to me we disagree flatly on theology, because Jesus also said that when people do not hear you should kick the dust off your feet and go to a town where they're accepted. I would not have had the funeral of James Earl Ray.

Rev. SANDERS. But I think they did hear me. If they hadn't heard me, you should have seen what the mission statement of the Drug Policy Alliance would look like.

Mr. SOUDER. But you are consistent in your views and I appreciate that and I established that. I disagree somewhat with those views. I appreciate everyone's tolerance today.

Ms. NORTON. Mr. Chairman, can I put on the record that this book, the name of the publisher of this book is Magic Propaganda Mill Books. It is not a publisher whom I recognize and I would like to say, Mr. Chairman, I don't blame you for your views on this book. I think you would agree with me, however, that the 99.9 percent of the parents in the United States of America of every background would find this book inappropriate for a child and the first thing they would want to do is keep not only marijuana from their

children, but the knowledge that they have ever smoked a joint in their lives. And finally, Mr. Chairman, if I may say so, we should not use things like this, which I think is a royal red herring to smear all that people are trying to do to get people off of drugs.

I know you remember Joe McCarthy, and some of us would appreciate this book not being held up to represent people who are trying to get people to no longer use drugs. I think this is as marginal as it is possible to be to put this kind of stuff in a child's book, and I don't think anybody on this panel——

Mr. SOUDER. I'm sorry, that is totally unfair. The two organizations that did that book are both represented before us.

Ms. NORTON. Then I would agree with Reverend Sanders. I think Reverend Sanders and their councils, telling them whatever you want to do for adults, you can do, but we don't want this kind of book out there to appear to condone smoking joints anywhere near children. So I would agree with you, but they are not going to listen to us. If he is on the inside, at least he can get the message there.

Mr. CUMMINGS. Mr. Chairman, we spent the last 20 minutes—and it just reminds me somewhat of the Clinton hearings where witnesses would come forward and we would—and they would be basically criticized up and down after they spent their time volunteering to come. As I understand it, Reverend Sanders said, are you familiar with this book?

Rev. SANDERS. No. I've never seen the book.

Mr. CUMMINGS. He has never seen the book. One thing, we say there are two organizations which he may be affiliated with that put this book out.

Mr. SOUDER. He is only affiliated with one.

Mr. CUMMINGS. The man doesn't even know about the book. Doesn't know about the book and we spent 25 minutes now trying to say—get him to disagree or agree. I don't know what we are trying to do, but the fact is we heard the testimony and the witnesses for your side. I respect them. I respect their opinions and I would not spend one moment trying to disrespect what they have said. I believe that they come here in good faith. My friend, the basketball coach, has children back there or from his team and they have come here and watched his coach and he has done a great job. I respect that and I respect all of our witnesses, and that is something we must do.

This is still America. And there has not been—and I have sat here and I listened to Dr. Beilenson being torn apart before he even sat down. And these are Americans, all of whom want to make a difference in the world. They may be coming from different viewpoints, and that is because they have had different experiences. So I respect each and every one of you, and I thank you. And I don't want when people are called to hearings in Washington for them to feel as if they are going to be torn apart.

It is one thing for your testimony to be torn apart. It is another thing for people, us on this side, to be doing what has been done here today. And I want to encourage people to come before panels and give their testimony. I want to encourage them to continue to stand up in their communities for what they believe in. And this book, the man doesn't even know anything about the book. And so

we have spent all this time doing what we just did, whatever that was.

Mr. SOUDER. I respect the individuals and I know that they are very committed. The fact is when the minority brings witnesses from the boards of groups that are promoting drug legalization, and you said earlier that no one favored drug legalization, you brought representatives from two of the major drug organizations in the country. Reverend Sanders says he is fighting internally. I respect him. I think Dr. Beilenson, as well as the earlier doctor from the first panel, disassociated themselves with the marijuana policy, but the fact is when you bring witnesses in from groups that are advocating legalization, you can expect the chairman to point that out.

Dr. BEILENSON. I am only with the city health department. I am not on any of the boards.

Mr. CUMMINGS. And we will continue down that road that we just talked about. These are people that are coming here and testifying, doing the best they can with what they have, and I believe they are coming from their hearts and they give it their best. They are affiliated with organizations just like Ms. Norton said and Reverend Sanders said. Just maybe it is good to have folk in certain places so they can turn those organizations around. I appreciate it. We have to agree to disagree.

Mr. SOUDER. Thank you. The hearing is now adjourned.

[Whereupon, at 7:05 p.m., the subcommittee was adjourned.]

[Additional information submitted for the hearing record follows:]

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February 21st, 2005

The Honorable Mark E. Souder
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The Honorable Elijah Cummings
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Dear Representatives Souder and Cummings,

I would like to thank you and the other members of the committee again for the opportunity to give testimony at the February 16th hearing on "Harm Reduction or Harm Maintenance: Is There Such a Thing as Safe Drug Abuse." During the question and answer period after Panel 1, in which I participated, an issue arose for which I am now submitting this letter for clarification. I stated that what was being exported from Afghanistan today was not just opium, but largely heroin. Representative Souder responded that my assertion was "...factually incorrect..." and that what was exported was opium which was refined elsewhere, and he suggested this might occur in Bangkok. It did not seem appropriate in the context of the hearing to enter a debate on this subject, but I feel it is imperative to set the record straight, particularly as it is heroin injection which has linked so clearly to HIV spread in the states around Afghanistan, and it is injection practices which were so much a focus of subsequent discussion at the hearing. Two recent reports, one from the World Bank Social Development Papers series, and the second from the Center on International Cooperation at New York University, both document the recent change in Afghan exports from opium base to refined opiate compounds including heroin and morphine. Let me detail a few relevant facts from these reports below.

The World Bank report Drugs and Development in Afghanistan (William Byrd and Christoper Ward, Social Development Paper, Conflict Prevention & Reconstruction Paper No. 18 / December 2004) reports that in 2003:

> Opium Production (measured at farm-gate prices) is estimated to have generated around one-seventh of total national income in 2003, and the subsequent trade and processing of opium into opiates (heroin and morphine) generated a somewhat greater amount of income within Afghanistan.(Page 2)

The authors report further that "The increase in refining of opium into heroin within Afghanistan may be accompanied by drug industry consolidation."(Page 6) This could make control efforts even more challenging.

The World Bank's report also addresses some innovative approaches to control of Afghan narcotics. One suggestion is:

> *Interdicting shipments of chemical precursors into Afghanistan.* It takes about four liters of acetic anhydride to yield a kilogram of heroin, so large amounts of precursor chemicals are currently being imported into the country. (Page 18.)

In my own work studying the relationship of HIV spread and heroin trafficking around the border zones of Burma, we found that acetic anhydride was also not produced in that country, and was being imported in substantial quantities through the India-Burma border point in Manipur State, Northeast India (The Moreh-Thamu crossing, controlled on the Burma side by then Chief of Military Intelligence for the junta there, Gen. Khin Nyunt). We shared with information with the U.S. State Department, and it was later confirmed that these were Italian precursor chemicals purchased legally for pharmaceutical use in India, but then diverted into Burma. A similar investigation is clearly called for in Afghanistan.

The Bank's findings have been corroborated by Barnett R. Rubin in his recent report Road To Ruin: Afghanistan's Booming Opium Industry. (Rubin, October 7, 2004, Center on International Cooperation, New York University.) Rubin describes the changing nature of the opiates industry in Afghanistan:

> ...the industry is starting to show new signs of vertical integration with a rise in the domestic processing of opium. One indicator of this rise is the composition of reported seizures of opiates just outside the borders of Afghanistan...**In 2003, fully 96% of the drugs seized in Central Asia consisted of processed products, up from 59 percent only 4 years before.** These changes appear to be due to the rapid increase in opium production **and the establishment of processing laboratories in northeast Afghanistan,** the home base of the dominant group in the Northern Alliance.(Page 9)

More recent work, including my own, suggests that this trend is continuing. During my last visit to Dushanbe, Tajikistan in August 2004, we met with the Director of the National Narcotics Program who reported that his agents had just seized 136 kilos of refined heroin at one of the Afghan-Tajik border zones. This shipment was coming from Afghanistan into Tajikistan.

Rubin cites a report from *Jane's Intelligence Review* (Couvy, "Opiate Smuggling Routes from Afghanistan to Europe and Asia" 1 March, 2003) that Afghan, Russian, and Pakistani organized crime may be responsible for the increase in refining and export of refined opiates out of Afghanistan.

Evidence of the increased availability of processed heroin in countries bordering Afghanistan is not limited to seizure and interdiction statistics. HIV prevention programs in Kyrgyzstan, Uzbekistan and Tajikistan all report sharp increases in the numbers of their clients who are injection processed heroin. This is highly consistent with the findings of our recently completed baseline assessment among drug users in Dushanbe, Tajikistan, virtually all of whom report primary use of heroin. This appears likely to continue.

In my view, these are important realities when we consider the problems of HIV prevention in Central Asia and beyond. Refined opiates generally lead to rapid transitions to injection, and the HIV outbreaks currently underway across the region are all the evidence one needs, sadly, to confirm that this process is well advanced already.

As I stated in my testimony, now is not the time to restriction prevention efforts with evidence for efficacy. We have a narrow, and closing window of opportunity to prevent concentrated epidemics among IDU across this region from becoming the kind of generalized catastrophes now visited upon the peoples of Africa.

Thank you again, and please do not hesitate to contact me if you have any questions or concerns,

Sincerely,

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Government Reform Subcommittee on Criminal Justice, Drug Policy, Human Resources
February 16, 2005

According to the proponents of illegal drug use harm reduction is about the inclusion of drug users into society. They advocate a "right" for drug addicts/users to be accepted members of society. According to one supporter, "It is about basic and fundamental human rights, but even more, it is about very concrete social rights and the righting of wrongs." It encompasses such concepts as maintaining addict/users on their drug of choice, teaching "responsible" use, needle exchanges for intravenous drug users, safe crack use kits, decriminalization/legalization, drugs are not innately harmful it is only abuse that is a problem, it is inevitable that people will use drugs so let's facilitate their use so as to minimize the harm that accrues to them, etc.

The **harm reductionists** claim that such programs not only reduce the harm that drug use does to addicts/ users, but brings them into places where treatment is available and that the addict/users may then avail themselves of such help. Does anyone seriously imagine that a significant number of addicted persons, with their drug of choice laid before them for use without consequences, would wake up some morning, yawn, choose to go through cold turkey, stroll past their favorite heroin/cocaine/methamphetamine maintenance clinic, and head off to a rehabilitation center to start a new drug-free life?

Some drugs, e.g., heroin, crack cocaine, and methamphetamine, seem not to lend themselves to the user to functioning normally, e.g., holding a job, caring for their families, contributing to society, etc. So for those who have these substances as their drug of choice, we may have to feed, clothe, shelter, as well as drug them. Is that compassion? A right?

The simple truth is that **harm reduction** is nothing more than **enabling**. For years, we have been admonishing families and friends not to enable addicts/drug users to continue their behavior. Could we have been wrong? Is the answer as simple as facilitating their use and occasionally pleading that they reconsider their behavior? Not likely! As a point of fact, these **"harm reduction"** programs are **acts of violence** against drug addicts/users. Enabling and/or encouraging continued drug use leaves the addict/user trapped in the enslavement that drugs impose on them. Their drug of choice determines their behavior, e.g., they spend their day obtaining and using the drug that is the center of their existence. Their membership in and contributions to their families, neighbors, and society are lost in a haze of intoxication.

Harm reduction is just another segment in the sophistic tapestry that "drug policy reformers" have woven to lead society to their ultimate goal: **drug legalization**. *It is a trojan horse. Open the door, and full drug legalization is next on the agenda.* This misguided, malignant policy course is destined to perpetuate drug use, not abate it. It is **harm production, not harm reduction.**

Unfortunately, many European and South American governments have bought into **harm reduction**. If they were able to view this dreadful decision with clarity and honesty, they would recognize that **harm reduction** has dramatically increased crime, including violent crime, adolescent use, incapacitation of their drug-using citizens/workers, has led to further disintegration of families, and significantly increased spending for medical, law enforcement, corrections, and social programs. Is **harm reduction** a direction that serious prevention/treatment practitioners and compassionate governments should take? The answer is a loud, clear **NO**! Turning back is difficult, but it is the only responsible course for caring governments to follow.

American Journal of Epidemiology
Vol. 146, No. 12
Printed in U.S.A.

ORIGINAL CONTRIBUTIONS

High Rates of HIV Infection among Injection Drug Users Participating in Needle Exchange Programs in Montreal: Results of a Cohort Study

Julie Bruneau,[1] François Lamothe,[2] Eduardo Franco,[3] Nathalie Lachance,[2] Marie Désy,[4] Julio Soto,[5] and Jean Vincelette[2]

Needle exchange programs (NEPs) are designed to prevent human immunodeficiency virus (HIV) transmission among injection drug users. Although most studies report beneficial effects in terms of behavior modification, a direct assessment of the effectiveness of NEPs in preventing HIV infection has been lacking. A cohort study was conducted to assess the association between risk behaviors and HIV seroprevalence and seroincidence among injection drug users in Montreal, Canada. The association between NEP use and HIV infection was examined in three risk assessment scenarios using intensive covariate adjustment for empirical confounders: a cross-sectional analysis of NEP use at entry as a determinant of seroprevalence, a cohort analysis of NEP use at entry as a predictor of subsequent seroconversion, and a nested case-control analysis of NEP participation during follow-up as a predictor of seroconversion. From September 1988 to January 1995, 1,599 subjects were enrolled with a baseline seroprevalence of 10.7%. The mean follow-up period was 21.7 months. The adjusted odds ratio for HIV seroprevalence in injection drug users reporting recent NEP use was 2.2 (95% confidence interval 1.5–3.2). In the cohort study, there were 89 incident cases of HIV infection with a cumulative probability of HIV seroconversion of 33% for NEP users and 13% for nonusers ($p < 0.0001$). In the nested case-control study, consistent NEP use was associated with HIV seroconversion during follow-up (odds ratio = 10.5, 95% confidence interval 2.7–41.0). Risk elevations for HIV infection associated with NEP attendance were substantial and consistent in all three risk assessment scenarios in our cohort of injection drug users, despite extensive adjustment for confounders. In summary, in Montreal, NEP users appear to have higher seroconversion rates then NEP nonusers. *Am J Epidemiol* 1997;146:994–1002.

cohort studies; HIV; needle exchange programs; substance abuse; substance abuse, intravenous

Injection drug use is now recognized as one of the major routes for transmission of HIV infection. For the past 15 years, several strategies have been developed to reduce HIV transmission among drug users, and needle exchange programs (NEPs) have constituted one of the most favored (1). These programs aim at increasing accessibility to sterile needles and syringes and removing circulating contaminated injecting material (2).

There are many difficulties and pitfalls in trying to assess the effectiveness of NEPs in reducing HIV transmission. Accessibility to the injecting drug user (IDU) population is difficult because of legal barriers surrounding drug use. Random assignment of participants to interventions can rarely be achieved, introducing potential for selection bias in subsequent program evaluations. NEPs are often initiated in the community along with other intervention measures, causing difficulties in the interpretation of the specific effects for each component of the entire intervention program. Such considerations have been recently and extensively reviewed by a panel of experts (3).

The first studies on NEPs were conducted in Europe, mostly among heroin users, and they showed

Received for publication December 18, 1995, and accepted for publication January 2, 1997.

Abbreviations: CI, confidence interval; HIV, human immunodeficiency virus; IDU, injection drug user; NEP, needle exchange program; OR, odds ratio.

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encouraging results. In London, England, and Glasgow, Scotland, a significant reduction in injecting behaviors was observed among recent NEP attenders (4–6). In the United Kingdom, a prospective survey between 1987 and 1988 reported higher levels of risk behaviors among nonattenders and a decrease in syringe sharing from 34 to 27 percent among attenders (7). In Australia, there was no increase of intravenous drug use due to the implementation of a NEP among clients of a methadone maintenance unit (8).

In North America, several studies have been conducted in recent years. In Hartford, Connecticut, and in New York City, NEP attenders reported decreased equipment sharing (9, 10). In Tacoma, Washington, in a case-control study among IDUs entering a methadone program, the nonuse of the NEP was associated with a significant risk for hepatitis B and hepatitis C (11, 12). A 4-year study evaluating the impact of NEPs among IDUs admitted for treatment in San Francisco, California, detected no negative consequences (13).

As stated earlier, changes in the rate of HIV infection among NEP attenders have been difficult to monitor. In Sweden, a small NEP was found useful in maintaining a low HIV seroprevalence among heroin and amphetamine IDUs (14). In the NEP of Portland, Oregon, one HIV seroconversion was observed in 162 person-years at risk (15). Kaplan and Heimer (16) used an innovative, albeit indirect, method of assessing HIV transmission by testing the returned syringes; and they estimated that incidence had declined among IDUs attending a NEP in New Haven, Connecticut. In Amsterdam, the Netherlands, where a large NEP was established in 1984, HIV seroprevalence remained at approximately 30 percent; and the seroconversion rate decreased from 9.2 percent in 1986 to 2.5 percent per year in 1992 (17). This decrease in incidence could not be directly attributed to the impact of the NEP. In two recent reviews by individuals commissioned to study the impact of NEP (1, 3), the authors concluded that such programs are generally useful in halting the progression of HIV infection in IDUs.

In Canada, implementation of NEPs started in 1989—almost simultaneously in Vancouver, Toronto, and Montreal. In 1988, our group began to accrue subjects in a cohort investigation of active IDUs in downtown Montreal. This cohort is an observational study and was not designed to study or evaluate NEPs. However, preliminary results on risk factors as predictors for HIV seroconversion among IDUs recruited in this cohort indicated a significant independent association between HIV seroconversion and the following variables: street recruitment, previous imprisonment, cocaine as drug of choice, number of injections in the last month, having two or more sharing partners in the last month, sharing with an HIV-seropositive partner, having HIV-seropositive acquaintances, and finally, having attended a NEP at least once in the last 6 months (18). Because of the potential consequences of these findings on policies and prevention of HIV among IDUs, we present herein an extensive analysis of the association between NEP use and baseline HIV seroprevalence and cumulative seroincidence in our cohort.

MATERIALS AND METHODS

Subjects

Cohort members were actively recruited from three main sources. The Detoxification Unit of Saint-Luc Hospital in downtown Montreal contributed 33 percent of the recruitment, and referral from collaborating institutions catering to the needs of IDUs in the city such as shelters, private and public readaptation centers, therapeutic communities, and community-based agencies including city street workers contributed 5 percent of the cohort. With IDU groups gradually becoming aware of our ongoing investigation, direct self-referral became more and more important with 62 percent of the total recruitment. A $10 fee (in Canadian dollars) was given at each visit as an incentive to participate in the study. Recruitment is ongoing and has been stable, with a mean of 23 new subjects enrolled each month.

IDUs were eligible if they had injected drugs within the last 6 months. After providing an informed consent at admission, subjects underwent a structured, questionnaire-based interview to elicit detailed information on sociodemographic characteristics, knowledge and attitudes concerning HIV infection, drug use, and sexual behavior. A follow-up questionnaire probed for similar information during all subsequent returns. All interviews were conducted by trained nurses with extensive experience with drug users. The first follow-up return was scheduled at 3 months and subsequent visits, every 6 months thereafter. A venous blood sample was drawn at each visit for serologic testing. Presence of anti-HIV antibodies was detected with a commercial enzyme-linked immunoassay (Bio-Chem ImmunoSystems Inc., Montreal, Canada) and confirmed at the Quebec Provincial Public Health Laboratory by Western blot or radioimmunoprecipitation assay.

Of the 1,599 subjects enrolled from September 1988 to January 1995, 171 were seropositive at enrollment, for a seroprevalence rate of 10.7 percent. Subjects included in the cohort are those who have been followed up at least once after their initial visit. Among the initially seronegative subjects, 377 (26.4 percent)

were lost to follow-up. The present cohort analysis includes 974 HIV-negative subjects after elimination of 77 enrolled after October 1994 to ensure that all participants had been followed for at least 3 months. The mean follow-up period was 21.7 months, with a median of 15.4 months and intervals ranging from 3 months to 5 years, and with each subject contributing follow-up information since the date of entry until the date of a positive HIV serology for seroconverters or until the date of the last visit for those remaining seronegative.

Regression analyses

Three risk assessment scenarios were used to study the association between NEP use and HIV infection. In the first scenario, as subjects were enrolled into the cohort, their initial serologic status was ascertained along with baseline questionnaire information on risk factors. NEP use in the entry questionnaire is a dichotomous variable, and the subject was asked whether he or she had attended a NEP to get his/her equipment in the past 6 months or in the past 3 months in the case of the follow-up questionnaire. This scenario is akin to a cross-sectional study of NEP use at entry as a marker associated with baseline HIV seroprevalence, and it also allowed a comparison of NEP attenders with nonattenders.

After eliminating those who were seropositive at entry, a cohort of seronegative individuals was assembled for continued surveillance. In this second scenario, NEP use reported in the entry questionnaire was treated as a possible predictor of subsequent seroconversion during follow-up.

In the third scenario, NEP participation during follow-up at the time of seroconversion was examined as a predictor of seroconversion in the cohort. A nested case-control design was used, whereby seroconverters were considered cases and up to four matched controls were randomly chosen from among those of the same gender, age (5-year groups), language (French vs. other), and year of enrollment who remained seronegative at the time their index case seroconverted. Information on NEP use was obtained from the interview at the time of the first visit, when the subject tested seropositive for cases, and from the last follow-up interview, for controls.

The odds ratio (OR), computed in unconditional logistic regression models, measured the magnitude of the association between NEP use at entry and HIV seroprevalence (first scenario) (19, 20). The hazard ratio, computed in Cox's proportional hazards regression models, was the estimate of effect for NEP use in all cohort analyses (second scenario) (21, 22). For the nested case-control analyses, due to the matched nature of the data, conditional logistic regression models were computed to derive ORs for the association between NEP use and HIV risk (third scenario) (19, 20).

Adjustment for confounders

A major concern in the assessment of a statistical association between NEP participation and risk of HIV seropositivity is the potential existence of confounders related to drug utilization and sexual practices. Confounders were identified empirically, i.e., by comparing the magnitude of the association between NEP use and HIV risk in regression models containing NEP use adjusted for the covariate of interest with that observed in crude models where NEP was the sole variable. The ratio between the adjusted and the crude estimates gauged the magnitude of the confounding effect for a given variable. An empirical confounder was considered any variable whose model produced an adjusted estimate for NEP that was either higher or lower than the crude estimate for NEP by at least two specified thresholds, 10 percent and 4 percent. Multivariate models of increasing complexity were computed by adding the confounders selected at the 10 percent level followed by those at the 4 percent level, corresponding respectively to models 2 and 3 in tables 2–5. In all analyses, covariate data were always derived from the same interview eliciting information on NEP use.

RESULTS

Seroprevalence analysis

Most subjects recruited in the study were male (n = 1,274, 79.7 percent). The mean age at entry was 32.2 years (median 32 years). Women were slightly younger (28.9 vs. 33 years) with half of them (162 of 325) reporting involvement in prostitution. Most participants reported consumption of multiple drugs lasting an average of 9.1 years, with cocaine the drug of choice for 64.2 percent of them; 82 percent reported having injected drugs in the previous month. Seven hundred sixty-seven (48 percent) IDUs reported NEP attendance at entry.

In table 1, the differences between NEP attenders and nonattenders are outlined, and NEP attenders are defined as those who reported having obtained their clean equipment at least once in a NEP in the 6 months before enrollment in the study. Prevalences of HIV and hepatitis B markers were significantly higher among NEP attenders; they were younger, had a lower income, and had been in treatment for addiction less frequently. They reported homo- or bisexual orientation and involvement in prostitution activities more frequently. In general, NEP attenders reported higher frequencies of risk behaviors related to drug injection.

TABLE 1. Characteristics of subjects according to their needle exchange program (NEP) attendance at study entry among intravenous drug users in Montreal, Quebec, Canada, 1988–1995*

Variables	NEP attenders (n = 767) (48%)	NEP non-attenders (n = 832) (53%)	p value†
HIV‡ seropositive	16	5.8	<0.001
anti-HBC‡ positivity	59	45.7	<0.001
Gender			
Male	81	78.5	0.22
Female	19	21.5	
Age (years)			
≤25	21.8	14.5	0.002
26–30	23	26.8	
31–35	25.8	27.8	
≥36	29.5	30.9	
Income (Canadian dollars)			
<10,000	38.7	32.4	0.003
10–24,999	32.5	30.3	
25–49,999	15.5	21.8	
≥50,000	13.4	15.5	
Homo-/bisexual reported orientation	11.1	7.5	0.01
Have ever engaged in prostitution activity	26.6	19	<0.001
Cocaine as drug of choice (vs. other)	65.4	63.2	0.6
Presently in treatment for addiction	37.4	61.3	<0.001
No. of injections previous month			
0	13.3	22.1	<0.001
1–29	24.1	28.5	
30–100	34.2	26.1	
>100	28.4	23.3	
Borrowed IV‡ equipment in the last 6 months	78.2	72.1	0.005
Disinfected IV equipment with "javel" last 6 months	57.4	25.7	<0.001
Used IV drugs in shooting galleries last 6 months	22.9	12.7	<0.001
Practiced booting in the last 6 months	25.7	18.8	<0.001
No. with three or more HIV-positive acquaintances	30.4	16.9	<0.001
Shared IV equipment with HIV-positive partner	14.7	6.9	<0.001

* All data shown are percentages.
† Significance from chi-square test.
‡ HIV, human immunodeficiency virus; HBC, hepatitis B core antigen; IV, intravenous.

There were no significant differences between the two groups for language, living status (alone vs. with other people), schooling, number of recent sexual partners, drug of choice, drug use in prison, and number of recent intravenous users from whom they had borrowed syringes. Borrowing was defined as either borrowing a used syringe from another person or using a used syringe from an unknown origin. Borrowing from an HIV-seropositive person is based on the reported HIV status of the lender.

In table 2, the association between NEP participation and seropositivity at entry for all subjects and for males only, with additional stratification for sexual orientation, is shown. All minimally adjusted ORs (controlling for age, entry period, gender, and language, taken as a priori confounders) indicate moderate but significant higher risks associated with NEP use that were of comparable magnitude across all sexual strata. The additional and incremental two-step adjustment for empirical confounders (10 percent threshold for OR2 and 4 percent treshold for OR3 as described in Methods) reduced the magnitude of the associations but still revealed consistent risk elevations in all subsets.

Incidence analysis

Seronegative subjects included in the cohort study (n = 974) were different from those lost to follow-up (n = 377) on the following parameters: the proportion of male subjects (81 vs. 74 percent) and francophones (80 vs. 72 percent), declaring a lower income (11.5 vs. 21 percent), cocaine as drug of choice (64 vs. 57 percent), sharing in the last 6 months (78 vs. 68 percent), having more than two sharing partners in the last month (23 vs. 17 percent), and getting syringes and needles at the drug dealer (57 vs. 33 percent). Subjects lost to follow-up more often reported sharing with an HIV-positive partner (11 vs. 7 percent). There were no differences for the following variables: mean age, prostitution, getting syringes and needles from pharmacies, injecting in shooting galleries, and attending a NEP.

With 89 incident cases of HIV seroconversion during follow-up, overall incidence was 5.1 per 100 person-years (95 percent confidence interval (CI) 4.1–6.2). Incidence was 7.9 per 100 person-years (95 percent CI 6.0–10.2) among NEP attenders and 3.1 per 100 person-years (95 percent CI 2.1–4.4) among non-attenders. The cumulative probability of HIV seroconversion during follow-up according to NEP participation can be seen in figure 1. The difference between the two curves is highly significant ($p < 0.0001$, log rank test). In table 3, it can be seen that although the nearly threefold elevation in risk associated with NEP use at entry is considerably reduced upon adjustment by empirical confounders, hazard ratios remain significantly greater than unity for all subjects and for males only, indicating that NEP use during the 6 months before entry is a predictor for HIV seroconversion during follow-up in the cohort.

TABLE 2. Odds ratios (ORs) and 95% confidence intervals (CIs) of human immunodeficiency virus (HIV) seropositivity among injection drug users at enrollment associated with participation in needle exchange program within the last 6 months in Montreal, Quebec, Canada, 1988–1995

Subjects included in the analysis	No.	OR1*	95% CI	OR2†	95% CI	OR3‡	95% CI
All subjects	1,599	3.1	2.2–4.5	2.3	1.6–3.4	2.2	1.5–3.2
Heterosexuals	1,147	2.9	1.8–4.6	2.3	1.4–3.7	2.1	1.3–3.5
Homosexuals and prostitutes	447	2.7	1.5–4.8	2.0	1.1–3.7	1.9	1.0–3.6
All male subjects	1,274	3.6	2.4–5.3	2.7	1.8–4.1	2.5	1.6–3.8
Heterosexuals	1,000	3.3	2.0–5.4	2.6	1.5–4.3	2.4	1.4–4.1
Homosexuals and prostitutes	270	3.0	1.5–6.1	2.4	1.1–5.2	2.4	1.0–5.4

* Adjusted for age, entry period, gender (for all subjects only), and language.

† Adjusted for variables above and additionally for number of acquaintances known to be HIV positive, treatment for addiction, and other sources of intravenous (IV) equipment (pharmacy, shooting gallery, dealer) in the last 6 months.

‡ Adjusted for all of the above and additionally for number of times IV drugs were used in previous month, number of times new IV equipment was used in previous month, sharing IV equipment with an HIV-positive person, living status, and drug of choice.

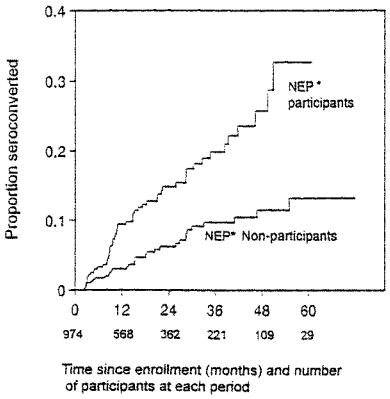

FIGURE 1. Cumulative human immunodeficiency virus seroincidence among needle exchange program (NEP*) participants and nonparticipants in the Montreal Saint-Luc cohort, Canada, between 1988 and 1995.

Nested case-control analysis

In table 4, the results of the nested case-control analysis can be seen, with 88 seroconversion cases and their 320 matched controls (one case that had no controls fulfilling the matching criteria was excluded) based on use of the questionnaire at the time of seroconversion. In the nested case-control analysis, participation was further categorized as exclusive or nonexclusive, depending on whether subjects also obtained their intravenous equipment from sources other than the NEP, e.g., pharmacies, dealers, friends, and in shooting galleries. There were substantial risk elevations among NEP users, both exclusive and nonexclusive, that persisted after adjustment for confounders, for all subjects, and for males only.

We also investigated whether consistency of NEP attendance influenced risk of HIV seroconversion in the cohort using the information on NEP attendance from baseline and follow-up interviews. Consistent attenders were defined as those who reported some NEP attendance at all visits, whereas those with no reported NEP attendance in any of the interviews were considered nonattenders. Those reporting intermittent NEP attendance were subdivided according to the proportion of interviews with reported NEP attendance. Consistent attenders, when compared with nonattenders and intermittent attenders at baseline, were more likely to identify cocaine as their drug of choice (84.6 percent), had injected more often in the last month (76 percent with 30 injections or more), had more sharing partners in the last month, reported more booting in the last 6 months, and reported getting their equipment less often at shooting galleries. However, they had used brand new equipment more often in the previous month and had disinfected their equipment more often in the last 6 months. As shown in table 5, there was a clear tendency for risks of seroconversion to increase with frequency of NEP use over time. Upon adjustment for confounders, significant elevations remained only among self-reported consistent users for all subjects and for males only.

In searching for interaction effects between NEP attendance and other variables, period of admission into the cohort was found to yield a marginally significant interaction with NEP ($p = 0.06$). The association between HIV seroconversion and NEP attendance appears to have decreased in magnitude for those recently admitted into the cohort. After stratifying the cohort by entry periods, the following crude hazard ratios for NEP attendance were found: Septem-

TABLE 3. Hazard ratios (HRs) and 95% confidence intervals (CIs) of becoming seropositive to the human immunodeficiency virus during follow-up associated with participation in a needle exchange program within the last 6 months at entry in a cohort of injection drug users in Montreal, Quebec, Canada, 1988–1995*

Subjects included in the analysis	No.	HR1†	95% CI	HR2‡	95% CI	HR3§	95% CI
All subjects	974	2.6	1.7–4.0	1.8	1.1–2.9	1.7	1.0–2.7
Males only	787	3.1	1.9–5.0	2.1	1.3–3.5	1.9	1.1–3.3

* Results by Cox proportional hazards regression.
† Adjusted for age, entry period, gender (for all subjects only), and language.
‡ Adjusted for variables above and additionally for drug use during occasional encounters in last 6 months, ever having borrowed intravenous (IV) equipment from an HIV-positive person, treatment for addiction, and other sources of IV equipment (pharmacy, shooting gallery, dealer) in the last 6 months.
§ Adjusted for all of the above and additionally for drug of choice, number of times IV drugs were used in previous month, drugs used with regular partners in last 6 months, drug used at dealer's in previous month, number of times new IV equipment was used in previous month, number of acquaintances known to be HIV positive, living status, and practice of disinfection.

TABLE 4. Odds ratios (ORs) and 95% confidence intervals (CIs) of becoming seropositive to the human immunodeficiency virus during follow-up in a cohort of injection drug users between 1988 and 1995, associated with participation in a needle exchange program 3 months before the last visit*

Needle exchange program use	No.	OR1†	95% CI	OR2‡	95% CI	OR3§	95% CI
All subjects	408						
Nonusers	273	1.0	Referent	1.0	Referent	1.0	Referent
Users, nonexclusive	104	6.8	3.9–12.1	3.3	1.6–6.7	4.2	1.6–11.0
Users, exclusive	31	7.8	3.1–19.2	4.2	1.5–11.5	6.5	1.8–23.8
Males only	367						
Nonusers	240	1.0	Referent	1.0	Referent	1.0	Referent
Users, nonexclusive	96	6.1	3.4–11.1	3.5	1.6–7.5	4.2	1.5–12.2
Users, exclusive	31	7.2	2.9–17.9	4.3	1.5–12.1	10.0	2.3–43.9

* Results from the nested case-control analysis by conditional logistic regression.
† From analysis conditioned on age, gender, year of admission, and language.
‡ Adjusted additionally for intravenous (IV) drug use since last visit, number of times IV drugs were used in previous month, borrowed IV equipment since last visit, number of times new IV equipment was used in previous month, and practice of disinfection.
§ Adjusted for variables above and additionally for drug of choice, drug use alone in last 3 months, drug use with regular partners in last 3 months, drug use during occasional encounters in last 3 months, drug use with friends in last 3 months, number of partners from whom IV equipment was borrowed in last month, borrowed IV equipment from an HIV-positive person since last visit, number of acquaintances known to be HIV positive, practiced booting in last 3 months, drug use while in prison, and living status.

ber 1988 through September 1991, 2.73 (95 percent CI 1.6–4.6); January 1991 through December 1993, 3.7 (95 percent CI 1.2–11.1); January 1994 through January 1995, 0.7 (95 percent CI 0.16–2.8).

DISCUSSION

As shown by the seroprevalence data at entry into the cohort, the Montreal NEP appears to have attracted subpopulations of IDUs with a higher baseline rate of HIV and hepatitis B infections. Consistent NEP attenders also have a higher profile of high risk behaviors than other IDUs.

In spite of these differences among NEP attenders and nonattenders, a positive association between NEP attendance and risk of HIV infection emerged consistently in the three risk assessment scenarios of this study. Recent NEP attendance, a single exposure variable, was a strong predictor of the risk of seroconversion during follow-up among those initially seronegative. In addition, NEP attendance during follow-up was also predictive of seroconversion. Most of the excess risk appeared to be experienced by those reporting consistent and exclusive attendance at NEPs, which was their primary source of new intravenous equipment.

We hypothesized initially that the direction of this association represented simply the net confounding effect by behavioral characteristics biasing the NEP use-risk association toward an effect that would be opposite from the expected protective one. Interviews conducted at entry and on multiple opportunities during follow-up elicited detailed information on numerous potential confounders. These variables were identified empirically by comparing crude and adjusted

TABLE 5. Odds ratios (ORs) of becoming seropositive to the human immunodeficiency virus during follow-up among injection drug users associated with overall history of participation in a needle exchange program in Montreal, Quebec, Canada, 1988–1995*

Needle exchange program	No.	OR1†	95% CI	OR2‡	95% CI	OR3§	95% CI
All subjects	408						
Nonusers	129	1.0	Referent	1.0	Referent	1.0	Referent
Users <50% of time	110	1.3	0.5–3.2	0.9	0.3–2.7	0.7	0.7–2.5
Users ≥50% of time	104	3.9	1.7–8.7	2.6	1.0–6.7	2.2	0.6–5.7
Consistent users	65	22.9	8.4–62.3	10.2	3.3–31.5	13.1	2.7–41.0
Males only	367						
Nonusers	116	1.0	Referent	1.0	Referent	1.0	Referent
Users <50% of time	95	1.4	0.5–3.8	0.9	0.3–2.8	0.7	0.2–2.8
Users ≥50% of time	93	4.0	1.7–9.6	2.7	1.0–7.4	2.9	0.6–6.5
Consistent users	63	21.8	7.7–61.5	10.2	3.1–33.1	19.1	2.6–50.1

* Results from the nested case-control analysis by conditional logistic regression.

† From analysis conditioned on age, gender, year of admission, and language.

‡ Adjusted for intravenous (IV) drug use since last visit, number of times IV drugs were used in previous month, borrowed IV equipment since last visit, number of times new IV equipment was used in previous month, and practice of disinfection.

§ Adjusted for variables above and additionally for drug of choice, drug use alone in last 3 months, drug use with regular partners in last 3 months, drug use during occasional encounters in last 3 months, drug use with friends in last 3 months, number of partners from whom IV equipment was borrowed in last month, borrowed IV equipment from HIV-positive person since last visit, number of acquaintances known to be HIV positive, practiced booting in last 3 months, drug use while in prison, and living status.

estimates of effect for the NEP-risk association. All plausible sociodemographic, behavioral, and drug consumption variables available were examined as potential confounders.

Because of the low threshold for selecting empirical confounders, the regression models included an extensive list of covariates. This may have decreased the precision of the estimates of effect for NEP attendance, further adding an element of conservatism to our strategy. The fact that the association between NEP attendance and HIV infection risk persisted after being scrutinized with such a conservative analytical approach bolsters our conclusion that it is internally valid and merits further attention.

Before we address the possible implications of our study, it is important to consider its limitations. Our study is observational and was not specifically designed to evaluate the efficacy of NEP in preventing HIV infection. We cannot generalize its findings to other IDU populations in Montreal or elsewhere because of the type of recruitment and of the differences between participants and those lost to follow-up. It is also possible that despite the exhaustive data-driven process to identify confounders, some had been left unaccounted for in the analysis because they were absent from the list of variables derived from the interviews. However, this is unlikely, at least for individual variables, because our questionnaires probed repeatedly for detailed information on risk behaviors and other HIV determinants. Any irrelevant variable with respect to HIV risk that could be linked to NEP attendance would be unlikely to confound the association because confounding ensues only if a factor is associated with the outcome as well as with the exposure.

Misclassification bias could explain our results if we assume that at least one of the following conditions occurred: 1) HIV-positive attenders falsely reported NEP participation, or 2) HIV-negative NEP attenders underreported participation. These are unlikely to have occurred, however, because subjects were unaware of their serologic status before the follow-up interviews.

Substantial misclassification of confounder variables would also lead to a decreased ability to control for their effects in the regression analysis. The extent of the impact of such a misclassification is difficult to predict.

Apart from the statistical issues described above, what are the possible explanations for our results? In our cohort, subject recruitment has relied mostly on self-selection based on informal word-of-mouth advertisement about the existence of our investigation. One possibility is that this method may have led to oversampling of high risk (HIV infection-prone) individuals among NEP attenders in the cohort, affecting the external validity of our study. Even if subjects lost to follow-up did not differ on NEP attendance, differential attrition might have occurred. However, it is reassuring that an independent study among IDUs recruited at CACTUS-Montreal has found seroprevalence and seroincidence rates comparable with those in our study despite use of a different methodology (23).

Differences in baseline prevalence between groups of IDUs have already been pointed out as a predictor for seroconversion in a study of HIV incidence in different cities of the United States (24). This study may have targeted a subpopulation of IDUs attending NEP who are at particularly high risk for the propagation of HIV.

NEPs are often developed within a global organization of prevention and care for drug users. In Montreal, NEPs have been implemented in an environment where needles and syringes are readily available through pharmacies and where policies encouraging pharmacists to sell intravenous equipment to IDUs were introduced in 1988, a year before the first NEP (25). Among opiate users from Manchester in the United Kingdom, the access to sterile equipment through local pharmacies was thought to have reduced the effects of a NEP on sharing habits (26).

It is also conceivable that through a combination of factors, the dynamics in Montreal might have favored HIV acquisition among NEP attenders. NEPs were developed as multifaceted prevention programs offering additional services such as primary health care, support, and counseling. To achieve these goals, the exchange of needles and syringes in the various programs was deliberately limited in an effort to encourage multiple visits and binding to the program. CACTUS, the largest NEP in Montreal, has a needle and syringe exchange policy based on a ratio of one for one, with a maximum of 15 syringes exchanged per person per night. In view of the high risk population attending NEPs, the number of needles distributed may have been less than the actual number needed. Because of availability of clean equipment through pharmacies, which are often conveniently located in the neighborhood, NEPs might have attracted existing core groups of marginalized, high risk individuals. More importantly, NEP implementation, through new socialization among IDUs, also may have facilitated formation of new sharing networks, with the programs becoming gathering places for isolated IDUs. Nonuniform needle sharing among core group members of NEP attenders also may have contributed to the risk differentials seen in our study. The trends toward a decrease of the association over time in our study might be related to changes in the social dynamics around NEPs as well as to long-term effects of such programs.

In view of the higher baseline prevalence for NEP attenders, the risk of HIV acquisition per sharing episode with another NEP attender may be higher than for nonattenders. With a greater incidence around NEPs, sharing during the seroconversion phase may contribute further to HIV transmissibility because of the high viral load in the donor blood during that period (27–29). The predominance of closely related and possibly more infectious HIV strains among NEP attenders is also another hypothesis to consider (30).

In summary, Montreal NEP users appear to have higher HIV seroconversion rates than NEP nonusers. This study also indicates that at least in Montreal, HIV infection is associated with NEP attendance. These findings cannot be explained solely on the basis of the concentration around NEPs of a higher risk IDU population with a greater baseline HIV prevalence. Since NEPs have been viewed as a credible preventive intervention for drug users who continue to inject (1, 2), we believe that caution is warranted before accepting NEPs as uniformly beneficial in any setting. Our investigation was not designed to address a possible causal relation between NEP attendance and HIV infection; its conclusions were derived purely from an observational rather than an experimental study design. NEP implementation involves complex dynamics of individual and collective behaviors that may have different and possibly deleterious effects on HIV transmission. The impact of NEPs may be much more context sensitive and locally dependent than previously realized. It is also possible that the apparent impact of a NEP might diminish over time (31). In Amsterdam, a comparison of the injecting behavior of drug users who seroconverted for HIV with a control group that did not seroconvert yielded no evidence overall of a protective effect, except possibly in the early stages of the program (32). It may be possible also that impact of a NEP may have a longer latency period.

Public health authorities have been informed of our findings, and measures have already been implemented at CACTUS since January 1995—notably, removal of the individual quota on syringe distribution. Our work firmly suggests that NEP programs should be fine-tuned to local needs. More studies are needed to elucidate the mechanisms implicated on the transmission of HIV around NEPs in Montreal or elsewhere and to further assess the potential advantages of this intervention. Such expanded studies should include viral load measures, molecular epidemiology analyses of HIV strains, and qualitative investigations of risk behaviors and networking around NEPs.

ACKNOWLEDGMENTS

This research was funded by National Health Research and Development Program grant NHRDP 6605–2936AIDS from Health Canada.

The authors thank Chantal Clément, Solanges Dion, and Diane Labrie for conducting the interviews, Claudine Chouinard for technical assistance, and Elisabeth Deschênes for secretarial assistance.

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American Journal of
EPIDEMIOLOGY

Volume 149
Number 3
February 1, 1999

Sponsored by the Society for Epidemiologic Research

ORIGINAL CONTRIBUTIONS

Syringe Exchange and Risk of Infection with Hepatitis B and C Viruses

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The authors utilized a cohort study among Seattle injection drug users (IDUs) to assess whether participation in a syringe exchange program was associated with incidence of hepatitis B virus (HBV) and hepatitis C virus (HCV) infection. Susceptible IDU subjects (187 seronegative for antibody to HCV, and 460 seronegative for core antibody to HBV) were identified in drug treatment, corrections, and social service agencies from June 1994 to January 1996, and followed for seroconversion one year later. The subjects included in the analysis were Seattle-King County (Washington State) area IDUs enrolled in a larger multipurpose cohort study, the Risk Activity Variables, Epidemiology, and Network Study (RAVEN Study). There were 39 HCV infections (20.9/100/year) and 46 HBV infections (10.0/100/year). There was no apparent protective effect of syringe exchange against HBV (former exchange users, relative risk (RR) = 0.68, 95% confidence interval (CI) 0.2–2.3; sporadic exchange users, RR = 2.4, 95% CI 0.9–6.5; regular users, RR = 1.81, 95% CI 0.7–4.8; vs. RR = 1.0 for nonusers of the exchange; adjusted for daily drug injection). Neither did the exchange protect against HCV infection (sporadic users, RR = 2.5, 95% CI 0.8–8.5; regular users, RR = 1.3, 95% CI 0.8–2.2; vs. RR = 1.0 for nonusers; adjusted for recent onset of injection and syringe sharing prior to enrollment). While it is possible that uncontrolled confounding or other bias obscured a true beneficial impact of exchange use, these data suggest that no such benefit occurred during the period of the study. *Am J Epidemiol* 1999;149:203–13.

hepatitis B; hepatitis C; incidence; injection drug users; needle-exchange programs; needle sharing; prevention

Syringe exchange programs have been established in numerous communities throughout the United States, primarily for the purpose of prevention of blood-borne viral infections, but with the secondary purpose of gaining access to a hidden population with multiple health concerns. Evaluations of exchange programs have reported a reduced risk of HIV infection (1, 2), reduction in HIV risk behavior (3–6), and lower risk of infection with hepatitis B and C viruses (HBV and HCV) (7). This analysis addresses whether the risk of HCV and HBV infection in current injection drug users (IDUs) was associated with participation in the Seattle-King County Department of Public Health needle exchange program in Washington State.

MATERIALS AND METHODS

A cohort study design was used to address the relation between syringe exchange participation and HBV- and HCV-seroconversion. Subjects for this analysis were identified from IDUs enrolled in a larger multipurpose cohort study, the Risk Activity Variables, Epidemiology, and Network Study (RAVEN Study).

Beginning in June 1994, cohort study subjects were recruited from six drug treatment programs and from

Received for publication November 24, 1997, and accepted for publication July 6, 1998.

Abbreviations: anti-HBc, antibody to hepatitis B core antigen; CI, confidence interval; HBV, hepatitis B virus; HCV, hepatitis C virus; HIV, human immunodeficiency virus; IDU, injection drug user; RAVEN Study, Risk Activity Variables, Epidemiology, and Network Study; RR, relative risk.

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social service, corrections, and drug-use assessment agencies. In each setting, subjects were systematically selected by use of a random-number based scheme from 1) all agency clients present during recruitment hours (non-drug treatment settings), or 2) all newly enrolled drug treatment clients. Series of random numbers between one and nine were issued to interviewers who would select the *n*th client as he or she entered the agency, or appeared on client lists.

Those selected were screened for eligibility (drug injection during the previous one year, English or Spanish speaking, age 14 years or older, and not already in the study), and were also asked whether they were likely to be in the Seattle-King county area one year hence, when the follow-up interview would be completed. Participants were paid $10 to complete the baseline interview and blood draw, and $25 at the follow-up visit. To be included in the present analysis, participants needed to have been enrolled in the cohort study between June 1994 and January 1996 and to be seronegative for HBV or HCV infection at that time.

At the enrollment and follow-up visits, a standardized questionnaire was completed during a face-to-face interview. The interviews asked about sociodemographic characteristics, and injection and sexual risk behavior. Injection risk behavior included sharing of syringes, sharing of drug preparation equipment (drug-cookers and other items used to prepare for an injection), and dividing up drugs between two or more IDUs using a common syringe ("backloading"). Blood samples were tested at the Seattle-King County Department of Public Health Laboratory for antibodies to HCV and HBV. Sera were screened for anti-HCV using a third generation Enzyme Immunoassay (Abbott Laboratories, Chicago, Illinois). To determine susceptibility to HBV, sera were screened for anti-HBc using an Enzyme Immunoassay (Abbott). Seroconversion was determined by the appearance of anti-HCV or anti-HBc in a previously seronegative individual. All subjects were informed of their test results, were given risk reduction counseling, and were offered referral assistance in seeking medical care.

Classifications were created to characterize syringe exchange use during the follow-up period, to test the hypothesis that the syringe exchange would be able to prevent infection only if susceptible IDUs had access to the exchange during the follow-up period. In our primary analyses, we separated IDUs into four groups: 1) those who had never been to a syringe exchange by the follow-up interview (never exchangers); 2) IDUs who had been to the syringe exchange at some time before the baseline interview, but did not attend the exchange during the follow-up period (former exchangers); 3) current users of the syringe exchange who got most (half or more) of their syringes from sources other than the exchange ("sporadic" users); and 4) current users of the exchange who obtained most of their syringes from the exchange ("regular" users).

In this analysis, IDUs who did not inject during the follow-up period were removed, in order to estimate the effect of the exchange on risk of HBV or HCV in those who continued to inject. Because there was little variation in person-time, and time-to-event was not directly measured, cumulative HCV and HBV incidence and 95 percent confidence intervals were calculated. Demographic and risk behavior characteristics were examined in relation to syringe exchange use categories and HCV/HBV seroconversion, to identify factors that may have confounded the association between exchange use and seroconversion. Logistic regression analysis was performed, entering confounding factors and syringe exchange terms into the model. The confounding effect of a variable was assessed by first examining the distribution of subject characteristics in relation to syringe exchange and HBV/HCV incidence, to determine which needed to be evaluated in the multivariate analysis. If entering any of these in the logistic regression model changed the exchange-use coefficient by more than 10 percent, it was considered a confounder and retained in the final model. Relative risks and 95 percent confidence intervals were calculated for each category of exchange use, using IDUs who had never been to the exchange as the referent category. Because there were few former exchangers in the HCV-negative cohort ($n = 15$), this group was not included in the analyses of HCV infection.

RESULTS

Between June 1994 and January 1996, 2,728 injection drug users were systematically selected and asked to participate in the RAVEN study; 266 potentially eligible individuals (9.8 percent) refused (table 1). Of the 2,462 enrolled between June 1994 and January 1996, 353 were anti-HCV negative. Seven deaths occurred in this group (2 percent), and 241 (70 percent) of the remaining 346 returned for their follow-up visit. A total of 187 (78 percent) of the HCV-negative subjects reported any injections during the follow-up period. Enrolled subjects also included 780 anti-HBc-negative IDUs; 12 (1.5 percent) of these subjects died before the end of the follow-up period. Of the remaining 768 believed to have been alive at the end of the follow-up period, 565 (74 percent) completed their follow-up interview. A total of 460 (81 percent) of the HBV negatives injected at least once during the follow-up period.

There were no differences between IDUs lost versus those retained in the study with respect to baseline

TABLE 1. Injection drug users that were included in analysis patitis C virus (HCV) and hepatitis B virus (HBV) seroconversion, RAVEN Study*, Seattle, Washington State, June 1994 to June 1997

	No.	%
RAVEN Study eligible subjects enrolled June 1994 to December 1995	2,462	
No. of subjects HCV-negative at enrollment	353	14.3
Deaths	7	2.0
Believed to be alive at the end of follow-up	346	98.0
Completed follow-up	241	69.7
Injected during follow-up period	187	77.6
No. of HCV cases (% per year)	39	(20.8)
No. of subjects HBV-negative at enrollment	780	31.7
Deaths	12	1.5
Believed to be alive at the end of follow-up	768	98.5
Completed follow-up visit	565	73.6
Injected during follow-up period	460	81.4
No. of HBV cases (% per year)	46	(10.0)

* RAVEN Study, Risk Activity Variables, Epidemiology, and Network Study.

...erview characteristics, such as ever-use of the exchange prior to the baseline interview (74 percent and 72 percent of lost and retained, respectively), injecting once a day or more often (34 percent and 37 percent), reporting of any needle-sharing during the one month period prior to the baseline interview (67 percent and 66 percent), or sharing of cookers (42 percent and 45 percent). Neither were these risk behaviors related to exchange use reported at baseline among the IDUs who were lost to follow-up, with no differences observed in the characteristics of lost and retained exchange users and never-exchangers.

The study protocol allowed for a 12-month follow-up period to observe seroconversion; however, subjects could complete their second study visit beginning at 11 months after enrollment. For the HCV-negative cohort (n = 187), the mean follow-up time per subject was 408.9 days (standard deviation (SD) 81.1), with 209.5 person-years of observation contributed to the study. There were 39 cases of HCV infection, for a cumulative incidence of 20.8 percent per year. HCV-negative subjects included 47 who had never exchanged, 15 who stopped using the exchange (former exchangers), 35 current exchangers in the ...radic-use group, and 90 who were classified as cur...t, regular exchange users.

The mean follow-up period for the HBV-negative cohort (n = 460) was 401.8 days (SD 81.8), with a total of 506.4 person-years of observation. Forty-six cases of HBV infection were detected, for a cumulative incidence of 10 percent per year. There were 102 never-exchangers in the HBV-negative cohort, 48 former exchangers, 95 current, sporadic exchangers, and 214 current, regular exchange users.

The annual incidence of HCV infection was relatively high in IDUs aged 24 years or younger (26 percent), and also elevated in 25–34 year olds (23 percent) compared with older injectors (14 percent, table 2). Although only 4 percent of blacks seroconverted to HCV-positive, the denominator was so small that the difference from the corresponding proportion of whites who seroconverted was well within the limits of chance. HBV infection was not associated to any appreciable degree with race/ethnicity or age; it was somewhat elevated in males (11 percent vs. 8 percent in females), in those who reported streets or shelters as their place of residence (17 percent vs. 9 percent for all others), and in heterosexuals (11 percent vs. 5 percent in gay or bisexual IDUs).

HCV incidence was particularly high among IDUs who had been injecting for one year or less at the baseline interview (31 percent), whereas HBV incidence was not associated with duration of drug injection. There was somewhat lower HCV incidence in subjects whose usual drugs were stimulants (~15 percent for cocaine or amphetamine users) compared with those who usually inject heroin alone (24 percent) or in combination with cocaine ("speedball", 20 percent). Only 2 percent of cocaine users seroconverted to HBV-positive compared with 9 percent of speedball users and 12 percent of those who usually injected heroin or amphetamines. Frequency of injection during the one month before baseline interview was not clearly related to HCV or HBV infection. However, other injection risk behaviors at the baseline and follow-up interviews (frequency of sharing syringes, the number of IDUs shared with, and indirect sharing via cookers and cottons or by backloading) were associated with a higher frequency of both HCV and HBV. For these subjects who continued to inject during the follow-up period, being in drug treatment at baseline or during the follow-up period was not associated with a lower risk of HBV or HCV.

Recency of sexual contact was associated with an increase in HCV incidence (22 percent vs. 16 percent depending on whether the last sexual contact was or was not within 6 months before baseline). Subjects who had sexual contact during the follow-up period had a somewhat lower incidence of HBV than those who did not. Women who had sexual contact with an IDU partner at baseline or follow-up had substantially higher incidence of HCV compared with other women. In general, sexual risk behavior was not associated

TABLE 2. Hepatitis C virus (HCV) and hepatitis B virus (HBV) seroconversion rates in injection drug users, by subject characteristics, RAVEN Study*, Seattle, Washington State, June 1994 to June 1997†

Characteristic	HCV-negative		HBV-negative	
	No.	% HCV converters	No.	% HBV converters
TOTAL	187	20.9	460	10.0
Demographic characteristics				
Sex				
Male	115	18.3	280	11.4
Female	72	25.0	180	7.8
Age group (years)				
≤24	50	26.0	81	9.9
25–34	78	23.1	184	8.7
≥35	59	13.6	195	11.3
Race/ethnicity				
White	143	23.1	344	9.9
Black	23	4.3	55	9.1
Other	21	23.8	61	11.5
Residence				
Lives in shelter/streets	38	15.8	71	16.9
Other	149	22.1	389	8.7
Sexual orientation				
Heterosexual	153	20.9	402	10.7
Gay/bisexual	33	21.2	56	5.4
Drug use characteristics				
No. of years injecting				
0–1	62	30.6	80	6.3
2–5	59	16.9	115	13.0
6–10	29	20.7	92	8.7
11–20	21	14.3	113	7.1
≥21	16	6.3	60	16.7
Drug injected most often				
Speedball	15	20.0	45	8.9
Heroin	102	23.5	293	11.6
Cocaine	26	15.4	57	1.8
Speed	28	14.3	34	11.8
Other	6	16.7	6	0.0
No. of injections/day				
0‡	33	15.2	84	9.5
0.1–1.0	43	23.3	106	5.7
1.1–3.9	70	18.6	171	11.7
≥4.0	41	26.8	99	12.1
Injection risk behavior				
Reported at the baseline interview				
Frequency that subject shared syringes				
Never	84	17.9	206	9.2
Rarely	27	29.6	78	7.7
Sometimes	24	25.0	50	8.0
Usually	8	25.0	23	26.1
Always	2	50.0	6	0.0

Table continues

with HBV infection in a pattern that would conform to substantial sexual transmission.

Characteristics associated with HCV infection were more prevalent in exchange users than nonusers. Current exchange users were somewhat younger than those who had never used the exchange, with twice as many less than 24 years old (table 3). Those who had been injecting one year or less (the group with highest

TABLE 2. Continued

Characteristic	HCV-negative		HBV-negative	
	No.	% HCV converters	No.	% HBV converters
Injection risk behavior (contd.)				
No. of IDUs* with whom subject shared syringes				
0	108	13.9	275	8.0
1	30	23.3	88	6.8
≥2	27	40.7	57	17.5
Shared cooker				
No	94	18.1	231	7.4
Yes	89	23.6	217	12.4
Shared cotton				
No	110	17.3	262	8.4
Yes	73	26.0	190	12.1
Backloaded				
No	90	17.8	244	7.8
Yes	64	26.6	136	14.0
In drug treatment				
No	96	21.9	189	11.1
Yes	91	19.8	271	9.2
Reported at the follow-up interview				
No. of IDUs with whom subject shared syringes				
0	102	12.7	235	9.8
1	65	30.9	198	10.3
≥2	7	28.6	27	18.5
Shared cooker				
No	54	9.3	138	8.7
Yes	125	26.4	305	10.5
Shared cotton				
No	69	10.1	163	8.6
Yes	110	28.2	277	10.8
Backloaded				
No	88	13.6	221	10.4
Yes	63	28.6	141	9.9
In drug treatment during follow-up				
No	48	27.1	94	10.6
Yes	136	19.1	363	9.9

Table continues

HCV incidence) were more likely to be never- or regular-users of the exchange. Both regular and sporadic exchange users were more likely to report sharing injection and drug preparation equipment during the follow-up period.

A substantially larger proportion of current exchange users reported that they usually injected four times per day or more often, a practice that was also associated with higher HBV incidence. In general, former exchange users had fewer HBV injection risk behaviors than did current users of the exchange. On average, regular users of the exchange injected more frequently than never- and sporadic users, and generally reported more high-risk behaviors (table 4).

IDUs who had never used the syringe exchange had a lower incidence of HCV than those who did use the exchange (15 percent vs. 21–26 percent, [illegible]). Compared with sporadic exchangers, the regular [illegible] had a slightly lower incidence. For HBV, [illegible] exchangers and former exchangers had a lower [illegible] infection than current users of the exchange (4–6 percent vs. 11–14 percent).

For the association between use of the [illegible] exchange and HCV infection, two factors were [illegible] tant confounders: direct syringe-sharing at [illegible] line period, and having begun to inject during [illegible] vious one year. Relative to nonusers of the [illegible], regular users during follow-up had about a 30 [illegible] increase in the rate of HCV infection (relative [illegible] (RR) = 1.31), adjusted for these confounders. However, the confidence limits around this [illegible] were wide (95 percent confidence inter[illegible]

TABLE 2. Continued

Characteristic	HCV-negative		HBV-negative	
	No.	% HCV converters	No.	% HBV converters
Sexual risk behavior				
Reported at baseline interview				
Last sexual contact				
>6 months before	25	16.0	60	15.0
1–6 months before	37	21.6	84	13.1
During last 1 month	125	21.6	315	8.3
How often usually uses condoms with steady sex partners				
Never–rarely	90	20.0	247	10.9
Sometimes–usually	34	32.3	56	3.6
Always	21	14.3	42	7.1
How often usually uses condoms with casual sex partners				
Never–rarely	29	10.3	68	10.3
Sometimes–usually	33	33.3	53	7.5
Always	51	25.5	94	7.4
Subject is a female who had sex with an IDU/1 month before baseline				
No	126	18.3	311	10.6
Yes	42	33.3	108	7.4
Reported at follow-up interview				
Last sexual contact				
Not during follow-up	24	10.3	62	19.6
During follow-up, not last month	51	23.1	120	9.2
During the month before follow-up	100	22.0	241	10.4
How often subject used condoms with casual sex partners				
Never–rarely	36	19.4	105	8.6
Sometimes–usually	45	24.4	106	11.3
Always	59	23.7	118	10.2
Subject is a female who had sex with an IDU/1 month before baseline				
No	78	19.2	197	11.6
Yes	30	24.3	73	5.5

* RAVEN Study, Risk Activity Variables, Epidemiology, and Network Study; IDU, injection drug user.
† Numbers may not sum to total because of missing values.
‡ These individuals did inject during the follow-up period and therefore were included in the analysis.

0.79–2.19), as were those around the even higher relative risk associated with sporadic exchange use (RR = 2.59, 95 percent CI 0.79–8.5). The analysis of the HBV cohort data adjusted for daily injecting at the baseline period. The adjusted relative risks (95 percent CIs) were 1.8 (0.69–4.77) for regular exchange use, 2.36 (0.86–6.47) for sporadic use, and 0.68 (0.19–2.46) for former use. Further analysis of the data did not reveal any subgroups in whom needle exchange use was associated with a particularly altered risk of HBV or HCV. However, the size of most of these subgroups was small, and so this analysis did not have much power to identify an across-subgroup difference in the impact of exchange use on infection rates even if one truly were present.

DISCUSSION

Particularly because our results were different from those of the case-control study that evaluated the impact of the Tacoma, Washington syringe exchange on hepatitis B and C (7), we assessed the possibility that the design or conduct of the present study might have affected our results. In a cohort study, selective losses to follow-up can lead to substantial bias. In this study, 26 and 30 percent of the initial cohort was not

TABLE 3. Subject characteristics in relation to needle exchange use in hepatitis C virus (HCV)-negative injection drug users, RAVEN Study*, Seattle, Washington State, June 1994 to June 1997†

Characteristic	Needle exchange use at follow-up					
	Never (n = 47)		Sporadic (n = 35)		Regular (n = 90)	
	No.	%	No.	%	No.	%
Age group (years)						
≤24	7	14.9	11	31.4	30	[illegible]
25–34	25	53.2	16	45.7	31	[illegible]
≥35	15	31.9	8	22.9	29	[illegible]
No. of years injecting						
0–1	18	38.3	6	17.1	35	[illegible]
2–5	11	23.4	15	42.9	28	[illegible]
6–10	8	17.0	8	22.9	11	[illegible]
11–20	6	12.8	3	8.6	7	[illegible]
≥21	4	8.5	3	8.6	9	[illegible]
No. of injections/day						
0‡	13	27.7	6	17.1	10	[illegible]
0.1–1.0	14	29.8	9	25.7	18	[illegible]
1.1–3.9	12	25.5	13	37.1	38	[illegible]
≥4.0	8	17.0	7	20.0	24	[illegible]
Injection risk behavior (follow-up period)						
No. of IDUs* with whom subject shared syringes						
0	31	78.1	21	70.0	44	[illegible]
1	2	6.7	6	20.0	19	[illegible]
≥2	7	17.1	3	10.0	17	[illegible]
Shared cooker						
No	16	36.4	10	28.6	23	[illegible]
Yes	28	63.6	25	71.4	64	[illegible]
Shared cotton						
No	22	50.0	9	25.7	33	[illegible]
Yes	22	50.0	26	74.3	54	[illegible]
Shared rinse water						
No	27	61.4	17	48.6	42	[illegible]
Yes	17	38.6	18	51.4	45	[illegible]
Backloaded						
No	30	75.0	15	55.6	35	[illegible]
Yes	10	25.0	12	44.4	38	[illegible]

* RAVEN Study, Risk Activity Variables, Epidemiology, and Network Study; IDU, injection drug user.
† Numbers may not sum to total because of missing values.
‡ These individuals did inject during the follow-up period and therefore were included in the analysis.

assessed for the incidence of HCV or HBV infection, respectively. We compared those who did complete the follow-up visit to those who did not return to the study, and did not note any important differences between the two groups in terms of age, sex, race, or injection or sexual risk behavior reported at baseline. Therefore, it is unlikely that selective losses to follow-up would have biased the association between exchange use and risk of infection.

Measurement error can be a problem in studies that rely on collection of self-reported risk behavior. In this study, behavioral information was used to classify subjects with respect to exposure, and to potentially confounding factors. Although most of the information on characteristics of study subjects was collected prior to the follow-up period, classification of exchange use was primarily determined by use during follow-up. If a person who became infected was more or less likely to report use of the exchange, the relative risks may have been under- or overestimated. However, few cases were aware that they had acquired infection at the time of the follow-up interview. Four of the HCV cases (10 percent) reported that they had experienced symptoms of hepatitis, three of which (8 percent) had jaundice during the follow-up. In the HBV cohort, seven cases (15 percent) had hepatitis symptoms, all of whom had jaundice. All of the symptomatic HBV cases and three of the four HCV cases with symptoms said they were current exchangers.

Our inability to measure a relevant confounding variable or misclassification of confounders that were measured could also have led to bias. The

TABLE 4. Subject characteristics in relation to needle exchange use in hepatitis B virus (HBV)-negative injection drug users, RAVEN Study*, Seattle, Washington State, June 1994 to June 1997†

Characteristic	Needle exchange use at follow-up							
	Never (n = 102)		Former (n = 48)		Sporadic (n = 95)		Regular (n = 214)	
	No.	%	No.	%	No.	%	No.	%
Age group (years)								
≤24	10	9.8	7	14.6	14	14.7	50	23.4
25–34	42	41.2	12	25.0	46	48.4	84	39.3
≥35	50	49.0	29	60.4	35	36.8	80	37.4
No. of years injecting								
0–1	20	19.6	5	10.4	11	11.6	44	20.6
2–5	17	16.7	12	25.0	30	31.6	56	26.2
6–10	21	20.6	14	29.2	21	22.1	36	16.8
11–20	26	25.5	10	20.8	27	28.4	50	23.4
≥21	18	17.6	7	14.6	6	6.3	28	13.1
No. of injections/day								
0‡	22	21.6	15	31.3	15	14.6	31	14.5
0.1–1.0	35	34.3	10	20.8	31	30.1	38	17.8
1.1–3.9	28	27.5	13	27.1	40	38.8	90	42.1
≥4.0	17	16.7	10	20.8	17	16.5	55	25.7
Injection risk behavior (follow-up period)								
No. of IDUs* with whom subject shared syringes								
0	61	65.6	36	81.3	55	64.0	125	62.8
1	19	20.4	7	15.9	17	19.8	45	22.6
≥2	13	14.0	1	2.3	14	16.3	29	14.6
Shared cooker								
No	36	38.7	16	36.4	20	21.3	56	31.3
Yes	57	61.3	28	63.6	74	78.7	145	68.7
Shared cotton								
No	42	45.7	20	45.5	25	26.9	75	35.7
Yes	50	54.3	24	54.5	68	73.1	135	64.3
Shared rinse water								
No	56	60.9	24	54.5	35	37.6	105	49.8
Yes	36	39.1	20	45.5	58	62.4	106	50.2
Backloaded								
No	61	76.3	28	71.8	36	54.5	95	54.0
Yes	19	23.8	11	28.2	30	45.5	81	46.0

* RAVEN Study, Risk Activity Variables, Epidemiology, and Network Study; IDU, injection drug user.
† Numbers may not sum to total because of missing values.
‡ These individuals did inject during the follow-up period and therefore were included in the analysis.

needle exchange in Seattle is located in the drug/sex market area where there was a possible concentration of more compulsive drug users and those who risk exposure from unprotected sex to a greater degree. Indeed, this site was chosen for its proximity to a high-risk population. It is possible that non-exchangers who were able to obtain sterile syringes from pharmacies and other sources also may have been different from exchangers in other means of exposure to HBV and HCV beyond those we could measure and adjust for. Thus, retention in the needle exchange of higher-risk IDUs could have contributed to the observed higher HBV/HCV risk in current users of the exchange compared with nonusers and those who stopped exchanging. On the other hand, it is conceivable that participation in the exchange may have truly increased the risk of HBV or HCV among certain users by bringing them into regular contact with compulsive drug users and with those with a pattern of routine sharing of injection equipment. However, whether the exchange increased risk by association with higher risk IDUs could not be addressed by the data available because we did not ask about IDU-interactions stemming from exchange participation.

The design also limited the ability to examine any effects of participation in the exchange that extended beyond the one-year follow-up period. Examination of duration of exchange use in relation to exchange-category at follow-up indicated that more former exchange users had been using the exchange for more

TABLE 5. Relative risks (RR) of hepatitis C virus (HCV) and hepatitis B virus (HBV) seroconversion in relation to needle exchange use by injection drug users, RAVEN Study*, Seattle, Washington State, June 1994 to June 1997†

Needle exchange use	No.	No. of cases	Risk/100/ year (%)	RR	95% CI	Adjusted RR	95% CI
HCV seroconversion†							
Never	47	7	14.9	1.0		1.0	
Current–sporadic	35	9	25.7	1.72	0.71–4.19	2.59	0.79–8.5
Current–regular	90	19	21.1	1.42	0.64–3.13	1.31	0.79–2.19
HBV seroconversion‡							
Never	102	6	5.9	1.0		1.0	
Former	48	2	4.2	0.71	0.15–3.38	0.68	0.19–2.46
Current–sporadic	95	13	13.7	2.32	0.92–5.87	2.36	0.86–6.47
Current–regular	214	24	11.2	1.9	0.8–4.52	1.81	0.69–4.77

* RAVEN Study, Risk Activity Variables, Epidemiology, and Network Study.
† The adjusted relative risk for HCV seroconversion was adjusted for onset of injection within the year prior to baseline interview and any sharing at the baseline.
‡ The adjusted relative risk for HBV seroconversion was adjusted for daily injection at baseline.

than one year (60 percent vs. 47 percent and 41 percent of regular and sporadic exchange users), and that sporadic exchange users were more likely to have begun using the exchange within the one month before baseline interview (33 percent vs. 10 percent of former users and 20 percent of regular users). This would be consistent with a gradual effect of needle exchange on development of safer injection skills, and with loss of more "successful" IDUs from the exchange as they acquire other, perhaps more convenient sources of syringes. Under the Prochaska "Stages of Change" behavior change model (8), new and inconsistent exchange users would tend to be in the contemplative or early action stages of risk behavior change, and former exchangers would include more IDUs who are able to maintain safe injection behavior even while not actively participating in the program. In this study, we did not collect data on risk behavior before 1994 or in relation to when subjects first began to use the exchange, so we could not explore whether behavior change was more substantial in earlier years. However, among exchange users, adjustment of the relative risks for duration of exchange use did not lead to an important change in the results.

There are several studies that have related risk of blood-borne viral infection to syringe exchange participation. Kaplan (9) tested all syringes returned to the New Haven syringe exchange and found that 50 percent of program syringes (originating from the exchange) tested positive for HIV, compared with 68 percent of non-program syringes. Assuming that non-program syringes were representative of those that IDUs had access to prior to the start of the exchange, Kaplan concluded from the difference in positivity in the syringes that there was a 25 percent decrease in the risk of HIV for exchange users. In an ecologic study, Hurley et al. (1) reported that HIV seroprevalence in IDUs increased an average of 6 percent per year in 52 cities without syringe exchange, but decreased 6 percent per year in 29 cities with an exchange program. The influence of the Amsterdam syringe exchange on HIV seroconversion was studied in a cohort of IDUs from 1986 to 1991 (10); after controlling for individual characteristics associated with seroconversion, no association with syringe exchange use could be found. However, the data suggested that calendar time modified the association, with a reduced risk (odds ratio = 0.4) in 1986–1987 but not in later years. A meta-analytic study design was used to estimate the effect of syringe exchange on HIV transmission in New York area IDUs (2); adjusting for other HIV risk factors, a threefold excess risk in those who did not participate in exchange programs was reported. Included in the meta-analysis were data from two current studies in New York, and historical controls (IDUs studied in the 1980s) who were classified as non-exchangers because exchange programs were not available when the studies took place. Another study examined hepatitis B and C incidence in relation to ever-use of the Tacoma syringe exchange during 1990–1993 (7); nonuse was associated with a six- to sevenfold greater risk of viral hepatitis. Most recently, an HIV outbreak occurred in IDUs in Vancouver, British Columbia, where there is a large-scale syringe exchange (11). In the investigation of the outbreak, 23 of 24 HIV seroconverters reported that the exchange was their main source of syringes. Even though no corresponding data were presented for persons who did not seroconvert, it is clear that the

presence of the syringe exchange program in Vancouver could not have prevented many IDUs from acquiring HIV infection. The tendency for the earlier studies, but not the later ones, to have shown a reduced risk of viral blood-borne infections among IDUs who used a syringe exchange program is compatible with the hypothesis that, over time, sterile needles are becoming increasingly available through means other than an exchange. The research also suggests that identification of a comparison group that is similar to exchange users regarding other risk factors for blood-borne viral infections may become increasingly problematic over time. For example, in Amsterdam in the early 1990s, the syringe exchange had become the primary source of safe injection equipment for a particularly high risk segment of the IDU population (10).

Our study suggests that the influence of needle exchange on risk of HCV infection may be affected by the high prevalence of infectious carriers in the underlying IDU population. During the period in which HBV/HCV infection was studied in the cohort, the incidence of HIV infection was quite low, with only four seroconversions among 1,651 study participants (0.2 percent). Thus, it would appear that high incidence of viral hepatitis can occur in the presence of low HIV incidence, presumably because of the higher prevalence of HCV carriers in the Seattle IDU population (70 to 80 percent, vs. 5 percent for HIV and HBV (12)) and perhaps because of higher transmission efficacy for HBV compared with HIV and HCV (13). Mathematical modeling of the ability of disinfectant bleach to prevent needle-borne HIV transmission indicates that predicted effectiveness of bleach may be highest in low-prevalence settings (14). Another study of more than 6,000 IDUs in 15 US cities (15) found that HIV seroprevalence modified the effect of individual risk factors for HIV seroconversion, with syringe-sharing being a significant risk factor in high-prevalence cities, whereas factors representing the likelihood that a needle-sharing partner was infected were associated with seroconversion in low-prevalence areas. In our study, the likelihood that another IDU was an HCV-carrier was at least 70 percent, and *any* syringe-sharing was an important risk factor for HCV infection.

The emphasis of risk reduction counseling in most needle exchange programs has been on direct sharing of syringes. Only recently has sharing of drug preparation equipment (drug cookers or cottons, or backloading) been recognized as an important risk factor for HIV, and an additional focus of HIV prevention education for IDUs (16, 17). In this study, we did not collect information regarding specific risk reduction advice given to subjects by needle exchange staff. However, if the primary effect of the needle exchange was to reduce direct sharing, then any infections that occur as a result of indirect sharing would tend to reduce the likelihood of detecting an association between exchange use and HBV/HCV. Both HBV and HCV infections occurred in some IDUs who reported that they did not share syringes, but shared cookers and cotton or backloaded. This would suggest that needle exchange users and other IDUs need to know that HBV and HCV might be transmitted by this route, and that the only safe way to inject is to not share any injection equipment whatsoever.

Conclusions

In this study, there was no indication of a protective effect of syringe exchange against HBV or HCV infection. Indeed, highest incidence of infection occurred among current users of the exchange, even after adjustment for confounding variables. Whether the excess incidence in exchange users is due to disproportionate retention of high risk IDUs in the exchange could not be directly addressed by the design of this study. Additionally, the incidence of viral hepatitis was high in the entire cohort, with 10 percent annual seroconversion rate among HBV-susceptible IDUs, and 20 percent among HCV negatives. In an era of HIV/AIDS, such high seroincidence of other blood-borne viral infections is troubling, and suggests that the goal of elimination or substantial reduction of risk behavior that may transmit HIV in IDUs has not been achieved. Clearly, risk factors for HBV/HCV infection such as syringe-sharing are still practiced by a substantial proportion of Seattle-area drug injectors.

Drug treatment programs that lead to cessation or reduction in drug injection may lower the risk of both HCV and HBV in current drug injectors (18, 19). Because only a small proportion of IDUs are in treatment programs at any point in time and treatment primarily attracts older IDUs, most of whom have already been infected with HBV and HCV, drug treatment may be expected to have a small net effect on HBV/HCV transmission (20). Additionally, programs to vaccinate IDUs against HBV have also been extremely limited, so this remains a possible but little-used HBV-control strategy.

ACKNOWLEDGMENTS

This study was funded by grants from the National Institute on Drug Abuse (1RO1DA08023 and 1F31DA05680) and from the Centers for Disease Control and Prevention (U62/CCU006260).

The authors thank the RAVEN interviewers, systems analysts, and office staff for their contribution to the study. I wish to acknowledge their dedication to first quality data collection and management. The late Dr. Noreen Harris was the original principal investigator for the RAVEN Study, and this paper is dedicated to her.

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PERSPECTIVE

Reprinted from ANNALS OF INTERNAL MEDICINE Vol. 123; No. 6, 15 September 1995
Printed in U.S.A.

Drug Legalization, Harm Reduction, and Drug Policy

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■ The current U.S. policy options on drug use are reviewed in the context of the history of drug policy in the United States. A restrictive drug policy is a deterrent to drug use and helps reduce drug-related costs and societal problems. Although legalization or decriminalization of drugs might reduce some of the legal consequences of drug use, increased drug use would result in harmful consequences.

Ann Intern Med. 1995;123:461-465.

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Two opposing policy options shape the current debate on how to proceed in addressing the problems with drug use in the United States (1). One school of thought, broadly labeled "prohibition," supports widening interdiction, treatment, and prevention efforts while keeping drugs such as marijuana, cocaine, LSD, and heroin illegal. A conflicting viewpoint called "legalization" supports eliminating restrictive drug policy while trying to limit the harms associated with the nonmedical use of drugs (2). An understanding of the history of drug control in the United States places the current debate on drug policy option in perspective.

Background

Modern drug prohibition began in the 19th century when the medicinal chemistry industry began to produce many potent and habituating drugs. One such drug was heroin, which was first sold in the United States in 1898. These drugs were sold as ordinary commercial items along with a popular new drink, cocaine-containing Coca-Cola. At that time, physicians freely prescribed addicting drugs to their patients, thereby producing a large group of medical addicts. Drugs such as cocaine were originally used for legitimate medical indications. Drug use by the public later rapidly grew to include compulsive use, illegal activity to support nonmedical use, and consumption despite clear negative medical and social consequences.

This era of indiscriminate sale and use of addictive drugs ended during the first two decades of the 20th century with a new social contract embodied in the Pure Food and Drug Act of 1906 (3), which addressed the labeling of drugs. In 1914, the Harrison Narcotics Act (4) prohibited the sale of narcotics. The Volstead Act, along with the 18th Amendment to the Constitution in 1919, prohibited the sale of alcohol. These laws were part of a broad reform movement in the United States that also promoted women's right to vote.

Under this new social contract, habituating drugs were not available except through a physician's prescription; even then the drugs were used sparingly in treating illnesses other than addiction. In 1933, alcohol was removed from the list of strictly controlled or prohibited substances. In 1937, marijuana was added to the list of prohibited substances because of a sudden increase in the use of the drug (5). The patent drug epidemic had begun with morphine and heroin in the final decade of the 19th century and ended with an explosive increase in the use of cocaine during the first decade of the 20th century.

The social contract regulating drugs of abuse served the country well by nearly ending the first drug abuse epidemic. The U.S. drug control laws proved to be a model throughout the world during the first two thirds of the 20th century. The use of habituating drugs, which had been out of control at the end of the 19th century, was dramatically reduced in the United States between 1920 and 1965 (5).

The nation was lulled into complacency by the great and prolonged success of this drug abuse policy. Public and policy leaders in the United States entered a period of amnesia of the tragic consequences of widespread drug use. By the 1960s, most Americans had no personal memory of the earlier U.S. addiction epidemic. Strict prohibition of nonalcohol drugs was broadly respected until the ascendant youth culture integrated drugs as a central element of its new lifestyles.

Marijuana, the hallucinogens, and cocaine became widely defined as "marginally addictive" or "soft" drugs (6). Their use became the focus of a call for legalization based on unsubstantiated claims that these drugs were no worse than alcohol and tobacco. Both the substantial health and addiction0 problems now known to result from the use of crack cocaine and marijuana and the extensive research on the harmful effects of many drugs are testimony to the manner in which society was misled in the 1960s (7). These effects include addiction, vehicular trauma, disease, suicide, and specific negative physical effects of the drugs themselves (8–15).

Legalization of Illegal Drugs

In recent years, the drug legalization movement has gained modest public support by attempting to associate opponents of drug legalization with the negative public perceptions of alcohol prohibition and by calling the opponents of legalization prohibitionists. For this discussion, we define prohibition as a restrictive policy that maintains legal restrictions against the nonmedical use or sale of

See editorial comment on pp 468-9.

Table 1. Drug Use in the United States*

Variable	Year		Decrease in Use
	1985	1993	
	n†		%
Drugs legal for adults			
Alcohol	113	103	9
Cigarettes	60	50	17
Most widely used drugs illegal for all ages			
Marijuana	18	9	50
Cocaine	6	1.3	78

* Adapted from reference 20.
† Values refer to the number (in millions) of persons using the listed drugs. Data reflect use in a 30-day period.

addicting drugs, as covered under the Controlled Substances Act (16).

Drug legalization is neither a simple nor singular public policy proposal. For example, drug legalization could at one extreme involve a return to open access to all drugs for all persons, as was seen at the end of the 19th century. Partial legalization could entail such policy changes as making currently illegal drugs available in their crude forms to certain types of ill patients. This limited legalization might include the maintenance of persons addicted to heroin or their drug of choice, distribution of needles to addicts without requiring that they stop using drugs, or marked softening of sentencing guidelines for drug-related offenses.

The evidence of the negative global experience with the legal substances tobacco and alcohol is overlooked by most supporters of drug legalization. The data on alcohol and tobacco support the view that legalization of drugs leads to large increases in the use of the legalized drugs and to higher total social costs. These added costs are primarily paid in lost productivity, illness, and death. In the United States, about 125 000 and 420 000 deaths are annually attributed to alcohol and tobacco, respectively. Fewer than 10 000 deaths each year result from the use of all illicit drugs combined. The social costs from alcohol use in the United States are estimated to be $86 billion, whereas the annual costs of prohibiting illegal drug use (including enforcement and incarceration) are $58 billion (17, 18). The social costs of tobacco use are estimated to be $65 billion annually (17). If one of the goals of a drug policy is to reduce the harm to society that results from drug use, then alcohol and tobacco must be a top priority within this strategy.

Considering the number of users of illegal and legal drugs in the United States and the trends in the rates of use from 1985 to 1991 (Table 1), it becomes apparent that prohibitive drug policy has actually maintained low levels of use compared with the wide availability of habituating substances. Equally important are the rates of illicit drug use, which have decreased faster than the rates of legal drug use (19).

Substantial progress was made in reducing adolescent drug use from 1978 to 1992 (Table 2). That success was due to a relatively clear national message and broad-based antidrug efforts in both the public and private sectors. Since 1992, adolescent drug use has increased, and attitudes toward drug use have become more accepting (20). Although these changes have many causes, the reduction of government and media antidrug efforts and increases in media campaigns promoting drugs have played a role.

Harm Reduction

Although reducing the harm caused by drug use is a universal goal of all drug policies, policy proposals called "harm reduction" proposals include a creative renaming of the dismantling of legal restrictions against the use and sale of drugs. The essential components of legalization policies are couched within this concept. Much of the driving force behind the harm reduction movement also centers on personal choice and "safe" habits for drug use (21).

Paradoxically, some public policy attempts at reducing the harms associated with the use of alcohol and tobacco involve tightening restrictions on intoxicated driver legislation and smoking restrictions (22), whereas current harm reduction proposals generally involve softening the restrictions on the use of illegal drugs.

The current harm reduction proposals for drugs other than tobacco or alcohol focus heavily on reducing or eliminating criminal penalties for drug offenses, softening sentencing guidelines, providing addict maintenance programs and needle exchange programs for intravenous drug users, and removing work-place drug testing programs (23). The efficacy of these proposals has not been established.

As it is represented in the current policy debate, harm reduction policy also attempts to mitigate the negative effects of nonmedical drug use without reducing the use of illegal drugs. The policy is based on the assumption that most of the harm caused by nonmedical drug use is the result of the societal efforts to stop drug use rather than the result of drug use itself. Those harms are generally considered to be associated with arrests from and legal consequences of illegal behavior and with incarceration (24). Advocates of harm reduction contend that essentially innocent drug users are targeted by prohibition; however, only 2% of federal inmates are incarcerated for possession-related crime compared with 48% incarcerated for drug trafficking. Despite the clear deterring effect of legal penalties, some positive outcomes can be attributed to the criminal justice system. For example, 35% of persons imprisoned for drug-related offenses are treated for drug addiction while incarcerated (25).

In the Netherlands, an international model for decriminalization and harm reduction, decriminalization has been associated with an increase in crime and drug use.

Table 2. Rates of Marijuana Use in High School Seniors*

Frequency of Use	Year							
	1978	1986	1987	1988	1991	1992	1993	1994
	← % →							
Last 12 months	50.2	39	36	33.1	23.9	21.9	26	30.7
Last 30 Days	37.1	23.4	21	18	13.8	11.9	15.5	19
Daily	10.7	4.0	3.3	2.7	2.0	1.9	2.4	3.6

* Adapted from reference 20.

From 1984 to 1992, cannabis use among students in the Netherlands increased 250%. Between 1988 and 1993, the number of registered addicts increased 22%. Also reflecting the decriminalization of marijuana, the number of marijuana addicts increased 30% from 1991 to 1993 alone. As we see in the United States, the harms of increased drug use go beyond those to the user alone. Since the tolerant drug policy was instituted in the Netherlands, shootings have increased 40%, hold-ups have increased 69%, and car thefts have increased 62% (Gunning KF. Personal communication).

In the United States, we experimented briefly with the decriminalization of marijuana. That temporary softening of drug policy resulted in a statistically significant increase in the reported number of marijuana-related visits to emergency departments compared with metropolitan areas in which marijuana use was not decriminalized (26).

The current and still dominant drug policy seeks to curb drug use and the associated harms by using the legal system and other methods such as work-place drug testing and treatment to reduce nonmedical drug use. In contrast to the advocates of harm reduction or legalization, supporters of the current restrictive drug policy emphasize that most drug-related harm is caused by drug use and not just by drug prohibition (27).

The two groups find some common ground in the support of drug education and treatment. Supporters of restrictive drug policy teach complete avoidance of nonmedical drug use, and harm reductionists support teaching "responsible use" of currently illegal drugs. Many proponents of harm reduction admit that they seek the ultimate legalization of illegal drugs, especially marijuana. Some harm reduction supporters advocate this policy because decriminalization would relieve the legal pressure on their own drug use. These persons seek to manipulate drug policy to justify their own drug-using behaviors.

Clearly, all forms of legalization, including harm reduction, are strategies ultimately aimed at softening public and government attitudes against nonmedical drug use and the availability of currently illegal drugs.

Costs of Drug Policy

Advocates of legalization correctly point out that prohibiting the use of our currently illegal drugs is expensive. The sources of overall costs produced by the use of legal drugs compared with costs of illegal drug use are listed in Table 3. These data also show that restrictive drug policy shifts the costs of drug use related to health and productivity to the criminal justice system.

Augmenting a restrictive drug policy by broadening the drug treatment available to addicts may be beneficial and cost-effective. A recent study by RAND (28) estimates that the current societal costs and actual costs of controlling cocaine use alone total $42 billion annually ($13 billion for control costs and $29 for societal costs). This study also estimated that the net control and societal costs related to cocaine could be reduced to $33.9 billion by maintaining our current enforcement policies and adding to it the treatment of all addicts. The RAND study concluded that the treatment is effective in reducing the costs to society not only by reducing the demand for drugs but also by removing the addict from drugs for sustained periods of time.

Table 3. Economic Costs of Addiction in the United States in 1990*

Variable	Illicit Drugs	Alcohol	Tobacco
Total cost, $	66.9	98.6	72
Medical care, $ (%)	3.2 (4.8)	10.5 (10.7)	20.2 (28)
Lost productivity, $ (%)	8.0 (11.9)	36.6 (37.1)	6.8 (9.0)
Death, $ (%)	3.4 (5.1)	33.6 (34.1)	45 (63.0)
Crime, $ (%)	46.0 (68.8)	15.8 (16.0)	0.0 (0.0)
Acquired immunodeficiency syndrome, $ (%)	6.3 (9.4)	2.1 (2.1)	0.0 (0.0)

* Adapted from reference 17. Costs are expressed as billions of dollars.

Supporters of restrictive drug policy must acknowledge that prohibition alone does not eliminate either the use of prohibited drugs or the high cost to society that results from the use of these drugs. Furthermore, drug prohibition achieves its goals at a substantial cost in the form of maintaining the criminal justice system and restricting personal choice. Prohibiting the use of some drugs is undeniably costly; however, because the overall level and total societal costs of drug use are reduced, this prohibition is well worth the cost.

Drug Policy Options

Given the range of options available within legalization and drug prohibition policies, it is important to look at the overall picture of drug policy. We must ask whether prohibiting the consumption of some drugs is effective in reducing social costs, or "harm," and whether restrictive policy is cost-effective. Two models for drug policy help answer these questions.

The first model examines life in the United States 100 years ago, a time when habituating drugs were sold like toothpaste or candy. At the end of the 19th century, Americans considered the problems with freely available habituating drugs unacceptable. In the context of today's debate on drug policy, it should be recalled that prohibition policies resulted from a nonpartisan outcry over the serious negative effects of uncontrolled drug use. In other words, the prohibition of marijuana, heroin, and cocaine did not cause widespread drug use in the United States. Rather, widespread use of those drugs use caused their prohibition. Furthermore, prohibition of nonalcohol drugs was successful in reducing drug use and was almost universally supported by all political parties in the United States and throughout the world for half a century.

While it lasted, alcohol prohibition was also largely successful from a health perspective. For example, the number of deaths from cirrhosis of the liver decreased from 29.5/100 000 persons in 1911 to 10.7/100 000 persons in 1929. Admissions to state mental hospitals for alcohol psychosis decreased from 10/100 000 persons in 1919 to 4.7/100 000 persons in 1928 (29). The main failure of alcohol prohibition was its attempt to remove the availability of alcohol from the public after it had been legal, accepted, and deeply integrated into society for many years. Currently illegal drugs do not share that same level of acceptance and integration.

The second model for drug policy compares the costs

Table 4. Prevalence of Drug Use in U.S. High School Seniors, 1993*

Drug	Lifetime Use	Last 30 Days
	%	
Any illicit drug	43	18
Marijuana	35	16
Cocaine	6	1.3
Alcohol	87	51
Cigarettes	62	30

* Adapted from reference 20.

generated by the drugs that are now legal for adults with the costs of those that are not. This entails comparing the social costs resulting from the use of alcohol and tobacco (legal drugs) with costs of using marijuana, cocaine, heroin, and other illegal drugs. Alcohol and tobacco produce more harm than all of the illegal drugs combined because they are so widely used, and they are more widely used because they are legal. As legal substances, they enjoy greater social acceptance, widespread advertising, and glorification. The national experience with alcohol and tobacco does not represent an attractive alternative to the prohibition of drug use as it is currently practiced in the United States and other countries.

Because alcohol and tobacco are deeply integrated into society, prohibiting their use is politically unrealistic. However, major constraints on the use alcohol and tobacco, such as total elimination of advertising, high taxation, restriction on smoking locations, designated driver programs, and product liability by the manufacturers and distributors of these products, show some promise in reducing the harm produced by these legal drugs (23).

Recommendations

The relevant policy question is whether legalization or reducing the restrictions on the availability of drugs would increase the number of drug users and total social harm produced by the use of currently illegal drugs. The available data show that legalization would increase the use of currently prohibited drugs (3, 20, 27).

Legalization or decriminalization creates a particular risk among young persons, whose social adaptation and maturation are not yet complete. This fact can be shown by comparing the levels of the use of currently legal drugs by young persons (alcohol and tobacco) with the levels of illegal drug use. The use of all of these drugs is illegal for young persons, but the drugs that are legal for adults are more widely used by youths than the drugs that are illegal for both adults and young persons (Table 4).

What is needed today is not the dismantling of restrictive drug policies. Rather, a strong national policy should seek to reduce the harm of drug use through harm prevention (for example, by creating drug-prevention programs) and harm elimination (by implementing broader interdiction and rehabilitation efforts) (30–32). This new policy should strengthen efforts to reduce the use of alcohol and tobacco as well as currently illegal drugs. In so doing, this policy should take aim at especially vulnerable persons in the community, with a special emphasis on the young.

If persons who seek to reform drug policy and harm reduction are sincere in their intent, they would focus their efforts on alcohol and tobacco, substances for which "harm reduction" is greatly needed, and leave the currently illegal drugs illegal. Unless those who subscribe to the notion of harm reduction move ahead to prevention and elimination of harm, the global costs associated with any form of drug use will continue to increase. Relaxation of the restrictive policies on the use of currently illegal drugs should only be considered in the context of programs that can first prove drastic and lasting reductions in alcohol and tobacco use. Real harm reduction involves prohibiting illegal drugs while concurrently working to prevent and treat their use. We do not need new experiments to tell us what we have already learned from legal alcohol and tobacco. Those experiments have already been done at the cost of great human suffering.

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In Search of an Effective International Drug Policy

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The question facing us today is whether or not U.S. drug policy can be effective on both the domestic and international fronts, and whether and how international counter-narcotics efforts can contribute to reducing drug abuse.

International drug policy faces a critical juncture in terms of fundamental policy decisions, which could reduce drug use on one hand or, conversely, risk increases of drug use and its inherent harms on the other. Our careful assessment of drug policy options suggests that restrictive drug policy in which both traffickers and users are held accountable affords the greatest potential to reduce drug use and its harms to society. This policy focuses its law enforcement efforts on the drug trafficking chain; and, while it does not advocate locking up every first-time user of drugs, it does hold users accountable for their actions through a range of penalties and sanctions. Dubbed "prohibitionist" policy by its detractors, restrictive drug policy seeks to find a balance between drug education and prevention, abstinence-based rehabilitation, law enforcement, and supply reduction.

At the other extreme of drug policy is drug legalization. This type of policy draws its support from several constituencies. The broadest group supports the notion that drug use is a personal choice and that people should have the right to whatever intoxication and self-abuse they so desire. Much of the drive of that group is to allow personal gratification through drug use and even trafficking. Many legalization proponents hide under the shield of political activism to gain protection for their own illegal and destructive habits and activities. A second group largely consists of libertarians who consider that intervention against drug use is a violation of personal liberties. Some take a cynical view of drug use as a Darwinian phenomenon. They mistakenly consider drug use as a victimless event. A third group are those who have neither studied nor understand the phenomena associated with drug use, and who consider legalization a fashionable alternative to fighting a concerted drug war. Their claim is that legalization will reduce both crime and drug abuse.

A new version of legalization policy is the drug-policy option referred to as "harm reduction." The basic orientation of harm reductionists is that more harm comes to society from the restrictive drug policy than from drug use itself. Harm reduction policy had its origins with those who were frustrated with some of the failures of modern policy, but it also has supporters from the legalization movement. Finding that society would not accept the broad legalization of drugs, legalization proponents have moved into a perceived middle ground. This policy shift has had the net effect of breaking permissive drug policy into component parts and then selling them piecemeal to the public.

The philosophy of the harm reduction movement is well summarized by Ethan Nadelman of the Lindesmith Center—funded by billionaire George Soros—who is considered the godfather of the movement to legalize drugs:

> Let's start by dropping the "zero tolerance" rhetoric and policies and the illusory goal of drug-free societies. Accept that drug use is here to stay and that we have no choice but to learn to live with drugs so that they cause the least possible harm. Recognize that many, perhaps most, "drug problems" in the Americas are the results not of drug use per se but of our prohibitionist policies....[1]

It is noteworthy that those advocating legalization rarely speak or write about the details of the regime they envision replacing zero-tolerance policies. This is primarily because their theory involves making currently illegal legal drugs widely available and cheap in order to "take the crime out of drugs" and supposedly undermine criminal trafficking networks by taking away their profits.

The Drug War

We believe that the use of the "drug war" metaphor is quite appropriate both in terms of domestic and foreign policies. Wars incite public opinion and action and focus attitudes on a problem. They require mobilization and the marshalling of assets and funds and strengthen political will toward the elimination of a common threat. Some criticize the drug war mentality as exerting unnecessary violence on a medical problem. Police who face the violence of crack houses and methamphetamine labs understand that we are facing a war. Drug Enforcement Administration agents in South America and the policymakers and judges in countries like Colombia understand that we are waging a war as well.

Domestic Efforts

We should first consider the successes and perceived failures of domestic drug policy. Consistently, drug culture advocates assert that the curent drug policy has failed and is extremely costly. This is calculated strategy to demoralize the public and turn public sentiment against restrictive poiicy. But, has restrictive policy actually failed? To determine cost effectiveness we can compare the costs to society of legal versus illegal drugs. Estimates from 1990 suggest that the costs to society of illegal drugs were $70 billion as compared to that of alcohol alone at $99 billion and tobacco at $72 billion. Estimates from 1992 put the costs of alcohol dependence at $148 billion and all illegal drugs, including the criminal justice system costs, at $98 billion.

According to the National Household Survey data from 1998, there were 13.6 million current users of illicit drugs compared to 113 million users of alcohol and 60 million tobacco smokers. There is one difference: the legal status of the drugs. The Monitoring the Future Survey data of high school seniors suggest that in 1995, 52.5 percent of seniors had been drunk within the last year as compared to 34.7 percent who had used marijuana. Yet, alcohol is illegal for teenagers. The difference is, again, the legal status of the two substances. One can safely make the assumption that legalized—and readily available—marijuana (even if illegal for teenagers) would be used by a far higher percentage of teenagers.

Permissive drug policy has been tried both in the United States and abroad. In 1985, during the period in which Alaska legalized marijuana, the use of marijuana and cocaine among adolescents was more than twice as high as other parts of the country. In 1979, during the height of permissive drug policy in the United States, the daily use of marijuana was 11 percent among high school seniors. Thirty-seven percent of high school seniors had used marijuana in the prior 30 days. These use-rates dropped respectively to 1.9 percent and 11.9 percent, an all-time low, by 1992 after the institution of no-tolerance and no-use policy. Baltimore has long been heralded as a centerpiece for harm-reduction drug policy. Interestingly, the rate of heroin found among arrestees in Baltimore was higher than any other city in the United States. Thirty-seven percent of male and 48 percent of female arrestees were positive as compared to 6–23 percent for Washington, D.C., Philadelphia, and Manhattan.

Clearly, better advances need to be made at broadening drug prevention with a focus on eliminating or delaying intoxicant use. The current availability of effective programming is woefully inadequate. Drug Abuse Resistance Education (DARE) for example, has been criticized in some arenas, yet it is almost always a highly circumscribed and limited effort existing with other fragmented efforts. Often, DARE is the only prevention effort that upholds a "no-use" message.

Treatment availability is also inadequate, and treatment is often little more than a revolving door. It is clear that abstinence-based treatment works, but it is largely unavailable to some of the most severe addicts who fail or rapidly relapse after treatment. Our system does not readily allow for suspending civil liberties to mandate treatment for the most severe addicts. Sweden, on the other hand, has developed creative means to coerce treatment. Hopefully, current efforts to enhance cooperation between the criminal justice system and the treatment community will improve treatment availability to those drug users involved in crime. Unfortunately, some advocates of so-called drug-policy reform are willing to cave in to these limitations by handing out needles or even handing out heroin to addicts.

The International Scene

Fighting the drug war on the international front is in many ways more difficult than in the domestic arena. We can influence, but not control, the efforts of other governments. Corruption and violence in a number of drug-producing and transit countries undermine the political will of governments to tackle powerful trafficking organizations. Since drugs flow across borders without regard to sovereignty, multilateral cooperation is necessary to stem their flow, but the mechanisms and will to do so are often lacking. Finally, there is such an overproduction of drugs worldwide that the losses our and other countries' efforts inflict on the drug traffickers often seem marginal.

The United States made steady progress in reducing drug use through the 1980s and early 1990s; despite a disturbing increase in teenage drug use since 1992, overall drug use is down in this country. Unfortunately the trend is not as encouraging in some other countries. In particular, cocaine use in Europe and Russia is steadily rising as increasing U.S. resistance has turned the traffickers' eyes to the European market, traditionally a high-use heroin area. Policy shifts that have entailed higher tolerance of so-called soft drugs have resulted in huge increases in drug use. Holland has suffered an increase in marijuana use since the softening of their marijuana policy. The Dutch are also now one of the major exporters of Ecstacy. Several countries are considering accepting marijuana for medicinal purposes despite clear evidence of problems associated with smoking for medicinal applications. Since the liberalization of the marijuana enforcement policies, Holland has found that marijuana use among 11- to 18-year-olds has increased 142 percent between 1990 and 1995. Crime has risen steadily to the point that aggravated theft and breaking and entering occur 3–4 times more than

in the United States.

Australia is also suffering widespread activism geared toward softening drug policy. As a result of such soft policy changes, major problems are developing. This is most dramatically represented in comparison to Sweden, a country that employs a successful restrictive drug policy (figure 1). Lifetime prevalence of drug use in Australia in 16- to 29-year-olds is 52 percent as compared to 9 percent in Sweden, a country with restrictive drug policy.

This difficult situation should not cause us to abandon our international efforts. Over the past 10 years, more countries have come to realize that drug trafficking and abuse are not just an American issue, and that their own societies are suffering the consequences of their previous denial that they had a problem. European countries are now more vigorous in their efforts abroad both bilaterally and through UN programs, often in cooperation with the United States. The body of international law, particularly the 1988 Anti-Trafficking convention, which the United States sponsored and pressed forward, has brought a stronger anti-drug ethic to international affairs, which only outlaws and outlaw-states ignore. The UN Drug Control Program has become more pervasive and effective, and even formerly resistant agencies like the World Bank and the UN Development Program are beginning to understand that drugs undermine development as well as democracy.

The Reasons for International Efforts

While developments in the international drug arena present a decidedly mixed picture, there are good reasons for the United States to have a strong country narcotics component in its foreign policy.

First and most obvious, our efforts to reduce demand for illegal drugs in the United States will be undermined if an unrestricted flow of these drugs comes across our borders. Illegal drugs will be cheaper, purer, more widely available and consequently more abused. Even if we cannot cut off the flow of narcotics, we can continue to work with other countries to contain it and make it more difficult for the drugs to get to the street. There is, in fact, good evidence of a correlation between heightened drug control efforts overseas and the price, availability, and use of drugs in the United States. Without a strong supply reduction effort, prevention and education programs will suffer.

Similarly, helping other countries reduce their own demand can make an important contribution to building international resistance to drug use. Virtually every

	Sweden	Australia
Lifetime prevalence of drug use in		
16- to 29-year-olds (Sweden) and 14- to 25-year-olds (Australia)	9%	52%
Use in the previous year, as above	2%	33%
Estimated dependent heroin users per million population	500	5000–16,000
Percentage of dependent users aged under 20	1.5%	8.2%
Methadone patients per million population	50	940
Drug-related deaths per million population	23	48
Percentage of all deaths at age under 25	1.5%	3.7%
Drug offences per million population		
Average months in prison per drug offence	20	5
Property crimes per million population	51,000	57,000
Violent crimes per million population	6600	1230
Cumulative AIDS cases per million population	150	330

country in the world has obligated itself to fighting drugs through the ratification of the 1961, 1971, and 1988 drug conventions. International cooperation to stem drug abuse will help make international laws and the obligations stemming from them a reality. Conversely, allowing drug use to grow without counter-efforts will simply provide more markets for drug traffickers and make them more powerful.

A broader reason to attack the drug trade lies in the fact that the illegal drug industry undermines our broad foreign policy goals of building democracy and responsible, effective governments worldwide in order to promote global peace and stability. Drug organizations corrupt civil institutions through bribery and intimidation, while drug use attacks the basis of democracy—an alert, enlightened and involved citizenry. Besides, the proceeds of illegal drugs undermine economies throughout the world through devices such as money laundering, ownership and management of financial institutions, and the skewing of exchange rates and financial flows.

Increasingly the illegal drug trade is seen by a number of governments as a national security threat, which attacks the moral fiber of society and undermines civil institutions. This is particularly true in our hemisphere, which is at once the host to major drug trafficking organizations and the victim of their activities. A closer look at the situation in the Americas is warranted.

Western Hemisphere

Several other factors must also be taken into account:

- Our hemisphere has become a network of nodes for the illicit drug industry.
- Drug production, transport, and money laundering schemes are pervasive. Every country has become enmeshed in the network.
- In virtually every country the drug lords have created their own mini-networks of gangsters, hired assassins, in some cases "guerrilla fighters" (especially Colombia), chemists, financial experts, and middle-men to make purchases of legal property and enterprises with illegal money.
- This structure threatens the institutions of most of these countries, intensifying graft and corruption and creating dishonest public officials, judges, legislators, police, and military.
- The threat to democracy and effective government in the hemisphere is obvious.

The Western Hemisphere presents a complex picture. As with so many segments of the drug war, successes and setbacks are prevalent throughout the area.

Latin America is the only producer and supplier for cocaine in the world. Three countries—Colombia, Peru, and Bolivia—grow and produce virtually all of the coca and refined cocaine. Some successes have been seen in choking off cocaine production substrates from Peru and Bolivia. This has resulted in a decrease of nearly 50 percent in the coca crop. Unfortunately, Colombia has picked up most of the production; when coca supply dropped, Colombian traffickers and their hired-hand guerrillas began to have their own coca planted locally. Colombian traffickers also increased opium poppy and heroin production as a means of diversification.

Mexico is a traditional producer of opium/heroin while Colombia has only been a producer since the early 1990s, but it is gaining a hold on the U.S. eastern seaboard market. Most of the cocaine for the U.S. market comes across the Mexican border. Corruption and violence in Mexico is rooted in the illegal drug trade.

A number of other countries in the hemisphere play important roles in transporting the product to the United States. The so-called transit countries—Brazil, Argentina, Guyana, Suriname, and the countries of Central America and the Caribbean—are also sources for the chemicals needed to produce cocaine and heroin and often provide offshore banking facilities for laundering drug money.

Canada presents another serious enigma. While being a close trade partner, efforts are underway throughout Canada to undermine drug policy. Industrial hemp has been widely accepted and is now presenting an importation issue for U.S. Customs

officials and law enforcement. In Vancouver in 1988, HIV prevalence in IV drug addicts was only 1–2 percent. In 1997 it was 23 percent after widely adopting harm reduction policies. Vancouver has the largest needle exchange in North America. Marijuana decriminalization and legalization is being widely considered. The steady increases in drug use in Canada present a considerable problem to the United States in light of the huge and virtually open border.

Here again, despite the apparently bleak situation, there is a brighter side to the picture. Peru and Bolivia have improved their counter-narcotics programs considerably. Peru's policy of shooting down drug trafficker aircraft has severely damaged the coca airbridge from Colombia. Bolivia and Peru have finally begun to decrease coca-growing areas through both repression and programs of inducement to coca farmers. While, as a consequence, coca cultivation has moved to Colombia, the U.S. Congressional pressure on the Clinton administration to substantially increase anti-guerrilla and anti-drug assistance to that country offers the hope of major inroads into the cocaine trade.

U.S. Policy Approaches

We strongly believe the best U.S. approach toward the global drug program is to first concentrate on reducing the demand for drugs in our country, the world's largest drug market. To continue our international leadership in the war against drugs, we must keep our own house in order. This means an intensification and broadening of primary prevention, abstinence-based treatment, and rigorous law enforcement. Increased drug screening in such venues as schools would improve our efforts. Exposing and combating the efforts of the legalizers, "harm-reducers," and others pressing for tolerance toward drug abuse or "responsible" drug use is absolutely critical.

We must also promote a seamless drug policy in which our international law enforcement and supply reduction efforts work together with demand-reduction programs in an effective, coordinated manner. Increasing our cooperation with—as well as keeping the pressure on—the drug-producing and transit countries will help advance the goal of worldwide zero tolerance. We adamantly oppose the current administration's efforts to weaken the drug certification laws and "multilateralize" the performance evaluation process. Such a development would only lower performance standards and cause slippage in the U.S. goal of strengthening the anti-drug political will in other countries.

Above all the United States must adopt a stronger stance of leadership in the global war against drugs. And at home, American political leadership needs to send out a more clear and consistent message of zero-tolerance of drugs as well as to work more vigorously with Congress, the states, and local communities to combat drug trafficking and abuse.

NOTES

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EUROPEAN JOURNAL OF PUBLIC HEALTH 2003; 13: 252–255

HIV

Legal access to needles and syringes/ needle exchange programmes versus HIV counselling and testing to prevent transmission of HIV among intravenous drug users

A comparative study of Denmark, Norway and Sweden

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Background: Countries have adopted different strategies to prevent the transmission of HIV among intravenous drug users. Legal access to needles and syringes/needle exchange programmes as part of such a strategy has been heavily debated. HIV counselling and testing has also been part of prevention strategies. The objective of this study was to discuss the effectiveness of legal access to needles and syringes/ needle exchange programmes versus HIV counselling and testing among intravenous drug users (IDUs) as part of HIV prevention strategies. Methods: Differences in HIV prevention strategies in Denmark, Norway and Sweden among IDUs are described. Outcome variables of effectiveness were HIV incidence rates over time. These were estimated by back calculation methods from 1980 through 1996, using data from the national HIV and AIDS registers. Results: A comparison of HIV prevention strategies in Denmark, Norway and Sweden suggests that a high level of HIV counselling and testing might be more effective than legal access to needles and syringes/needle exchange programmes. Sweden and Norway, with higher levels of HIV counselling and testing, have had significantly lower incidence rates of HIV among IDUs than Denmark where there was legal access to needles and syringes and a lower level of HIV counselling and testing. In Sweden there was no legal access to drug injection equipment. Conclusion: Promotion and accessibility of HIV counselling and testing among intravenous drug users should be considered in countries where such a strategy is not adopted or has low priority.

Keywords: AIDS, HIV, incidence, intravenous drug users, prevention

The efficacy of HIV counselling and testing (HIV CT) and needle exchange programmes (NEPs) on HIV risk behaviours and HIV incidence among intravenous drug users is well documented.[1–7] The effects of HIV CT and legal access to clean injection equipment among intravenous drug users (IDUs) in actual use (effectiveness) are more difficult to establish.[8] The effectiveness of NEPs has been studied with an ecological design including 82 cities worldwide.[9] On average seroprevalence increased in cities without NEPs and decreased in cities with NEPs.

The Scandinavian countries – Denmark, Norway and Sweden – have some difference in HIV CT promotion and a striking variation in legal access to sterile needles/syringes.[10] Otherwise the countries have many similarities with respect to other health promotion factors like social and cultural factors, health system organization and welfare systems.[11] Data from the countries' HIV and AIDS registries have been used in back calculation models to estimate the true number of new HIV infections over time, including undiagnosed HIV cases. This enables calculation of HIV incidence rates. Thus the Scandinavian countries have an ideal setting for a study on how HIV CT and legal access to needles and syringes/ NEPs as part of HIV prevention strategies may affect the HIV epidemic.

The aim of this study was to describe how different combinations of HIV CT and legal access to needles and syringes/NEPs might have affected the development of the HIV epidemic among IDUs in the Scandinavian countries. The outcome variable was estimated incidence rates for 1980 to 1996.

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MATERIALS AND METHODS

Description of prevention strategies

The overview of HIV prevention strategies in Scandinavia for IDUs was found through a study of literature from many sources, mainly reviews,[10,12–14] but also separate

studies.[15–20] Governmental and other public reports as well as scientific material from national and international research databases were used.

Registered data

New cases of diagnosed HIV and AIDS among IDUs from registries in Denmark, Norway and Sweden are shown in *table 1*. The AIDS registries were established in 1983. The HIV registers in Norway and Sweden were established in 1985/85. These registries also include earlier known cases. The Danish HIV registry was established in August 1990. The inclusion criterion included persons who reported injection of drugs as the route of infection as well as a small group of men who did not know whether drug injection or sex with men was the primary cause of infection. The data were drawn from each registry up until 31 December 1996.[21–23]

Table 1 Annual number of IDUs diagnosed with HIV and AIDS in Denmark, Norway and Sweden. 1980–1996

	Denmark		Norway		Sweden	
Year	HIV[a]	AIDS	HIV	AIDS	HIV	AIDS
1984	0	0	1	0	0	0
1985	0	0	77	1	143	0
1986	0	1	104	0	209	0
1987	0	6	66	2	98	0
1988	0	8	32	1	45	6
1989	0	9	29	4	46	5
1990	17	19	21	13	45	9
1991	38	16	15	16	31	20
1992	53	18	11	8	30	22
1993	25	24	12	13	28	33
1994	28	25	11	17	32	27
1995	37	31	11	7	20	29
1996	26	19	8	8	23	24
Total	224[b]	177	400[b]	90	750[b]	175

a: The HIV register in Denmark started on 1 August 1990.
b: The Danish figures include 12 men (5%) who did not know whether sex with a man or drug injection was the means of HIV transmission. Comparable figures for the same time period were 11 men (12%) in Norway and 14 men (7%) in Sweden.

Susceptible populations

Susceptible populations of IDUs have been estimated over time (*table 2*).[24] The Norwegian studies used a definition of heavy drug abuse that was closest to injecting drug use. The last study, in 1996–98, was evaluated as better for the purpose of estimating injecting drug use than the other two from the same period.[24] The Danish studies, except for the early one from 1975, used definitions and methods that yield figures for IDUs biased towards being both too low and too high. The Swedish definition of heavy drug use includes persons using only cannabis, estimated to 10%. The size of the susceptible populations of IDUs in the study period in Denmark was set to 5,200 in 1980 and 13,960 in 1991–1996 (an average of the four studies). In Norway it was set to 4,300 in 1980–1988 and 10,500 in 1996. In Sweden it was set to 13,500 in 1980, 17,100 in 1992 and 23,400 in 1998. Figures for the intervening years were found by interpolation, assuming a linear growth from one half-year to the next.

In Denmark, heroin was the predominant injected drug. In Norway, heroin was the common drug but amphetamine was also used. In Sweden, approximately 50% used amphetamine, 30% heroin and 20% alternated between these two drugs. Studies from Sweden suggest that amphetamine users have been less susceptible to HIV than heroin users.[25]

Model calculations of absolute rates

Back calculation models were used to estimate new HIV infections per half-year (absolute rates[26]) from 1980 to 1996 in each country. These absolute rates also include infected persons that have not been diagnosed through the study period. The model, a nine-stage Markov model, has been described and applied to data for men infected

Table 2 Estimates of the susceptible population with heavy drug abuse based on case-finding, drug-related deaths, reporting from local/regional health service, case-finding with capture-recapture and drug-related deaths combined with other information

Denmark[a]		Norway[b]		Sweden[c]	
Year	Figure	Year	Figure	Year	Figure
1975[d]	6000			1967[g]	6000
1970–80[e]	5200	1985–88[h]	3800–4800	1979[d]	15000 (13500–16500)
1991–96[e]	13600			1992[g]	19000 (17000–20500)
1996[f]	12500–13000	1996[d]	12200		
1996[g]	14600	1996–98[g]	8100–10800		
1996[g]	14800	1996–98[h]	9000–12000	1998[g]	26000 (23500–28500)

a: Definitions: Injection of opiates or injection of other 'hard drugs' in 1975, otherwise no other definition than heavy drug abuse.
b: Definitions: Active injection of drugs or active injection of heroin.
c: Definition 1979–98: Injection of drugs within the last year or daily abuse for the last 4 weeks.
d: case-finding
e: drug-related deaths
f: reporting from local/regional health service
g: case-finding with capture-recapture
h: drug-related deaths combined with other information

through sex with men.[27] The statistical basis has been described in Aalen *et al*.[28] The given parameters in the model were incubation time distribution, effect of HIV treatment from 1987 to 1996 and death rates before AIDS. Parameter values were chosen from Scandinavian and international literature to describe the situation among IDUs in the Scandinavian countries.[29–32] Sensitivity studies of change in incubation time distribution and death rates before AIDS showed small impacts on the absolute rates, especially during the period 1991–96.[12,27] Highly active antiretroviral therapy was not widely introduced until the middle of 1996 and its effect was therefore not included.

Semi-annual incidence rates for the three countries were calculated by dividing semi-annual absolute rates by the size of the susceptible populations. Prevalence in each country was calculated as the prevalence pool[26] of HIV divided by the susceptible population. The prevalence pool of HIV/AIDS at a point in time was calculated as the sum of absolute rates until that point in time minus an estimate of the number of persons dying before AIDS and minus the registered number of dead IDUs with AIDS.

Method for measuring effectiveness

The study of effectiveness was done by comparing estimated incidence rates of HIV 1991–96 for different levels of HIV CT and legal access to needles and syringes/NEPs. The result was discussed with respect to other relevant factors. A study with three observations (three countries) will not be conclusive.

RESULTS

The literature study of prevention strategies showed that the central health authorities in Norway and Sweden allocated the first funds to HIV/AIDS prevention in 1985–86, while similar actions were taken in Denmark early in 1987. In all three countries, strategies for prevention and control of HIV were combined with campaigns aimed at reducing unnecessary fear and anxiety and avoidance of discrimination and stigmatization in the general public and among health workers.[10,12–20]

A short summary of the differences in HIV prevention strategies is presented in *table 3*.

Access to sterile equipment

Access to sterile equipment has been legal in Denmark and Norway and illegal in Sweden except for two NEPs in low HIV prevalence areas. In Denmark and Norway pharmacies sold needles and syringes. IDUs in Norway have reported, however, that some pharmacists refused to do so. Automatic vending machines were placed in high-use areas in Denmark and Norway. In 1988 a NEP was located in downtown Oslo, Norway, where IDUs could get needles and syringes during late evenings and weekends. Until 1993 there was no requirement for return of needles/syringes. Later distribution was limited to 10 units for no return and 30 for one or more units returned. In Sweden both sales and the carrying of drug injection equipment have been prohibited. Illegal access has been primarily through drug dealers. Health personnel, persons with diabetes and to some extent travels to other countries may have been sources for some.[12] NEPs started in 1986 in Lund and in Malmö late in 1987 on a trial basis, both cities in low HIV prevalence regions in Sweden.[19] In these programmes IDUs had to register and to return used units to get new needles/syringes. No scientific evaluation of the programmes has been carried out, but it is a considered opinion that the trials are inconclusive with respect to their effects on the HIV incidence rates in the region.[33]

Drug injection equipment has not been allowed in any prison in any country. Bleach has been allowed in prisons in Norway while not in Sweden. In Denmark bleach was allowed in prisons on a trial basis beginning in 1996.

HIV testing and counselling

Easy access to HIV testing and counselling was offered in all three countries.[16,17] HIV testing was regularly offered to IDUs in prisons in Norway and Sweden, and IDUs took the test both inside and outside prisons. HIV testing was not regularly offered to prisoners in Denmark. In 1987 a study showed that 30% to 50% of the inmates refused to take an HIV test.[15] Outside prison settings, a clinic in Copenhagen also reported a decline, beginning in 1987, of the proportion of IDUs taking an HIV test.[18]

The literature gave no information about the type of HIV-related counselling provided to IDUs.

Legislation

Legislation regarding HIV testing, professional confidentiality and personal privacy, hospital admittance and isolation, and reporting of HIV infection to central government has been different in the three countries.[10,13]

In Denmark, Parliament decided in 1987 that the strategy for HIV prevention should be based on voluntariness, anonymity, openness, direct and honest information and

Table 3 Summary of HIV prevention strategies in Denmark, Norway and Sweden

	Denmark	Norway	Sweden
Legal issues	Liberal	Medium	Strict
Proportion of IDUs in rehabilitation and treatment 1990–93	Highest	Lowest	Close to highest
Legal access to clean drug injection equipment	Legal	Legal	Illegal, but two cities had NEPs on a trial basis
Contact tracing	Voluntary, no special funding	Obliged, no special funding	Obliged, funded
Use of HIV test among IDUs	Reduced testing after 1987	High	High

safety for the individual in contact with the health care system. HIV was not referred to the existing law governing matters related to sexually transmitted diseases (STD) and no law regulating any aspect of HIV was established. All treatment and rehabilitation of drug users were also based on voluntary action. A national surveillance registry of anonymous HIV-diagnosed persons was established in 1990.[23]

In Norway the law governing matters concerning STD also governed the matters concerning HIV. Thus a patient diagnosed with HIV was obligated to seek treatment and comply with the doctor's orders. The physician had an obligation to notify health authorities and trace contacts, but additional funding was not provided for such activities. If an infected person did not comply, or was liable to infect others, the person could be detained in hospital. In Norway two of 400 HIV-diagnosed IDUs were isolated for a short period of time. Treatment for drug use was based on voluntary participation. HIV has been notifiable since 1985 and an anonymous national registry of HIV-diagnosed persons was established.[21]

Sweden referred HIV to The Communicable Disease Act in 1985. Thus persons infected were obliged to seek treatment and name possible sources of infection. The treating physician was obliged to trace contacts and to report the index to a public health inspector/infectious disease officer. A network of health officers or 'contact tracers' was established throughout the country. An anonymous register of HIV-diagnosed persons was established.[22] Laws regulating drug treatment or rehabilitation of IDUs comprehended voluntary participation. The Communicable Disease Act could be used, however, to detain HIV positive patients in isolation. About 50 out of the total of 750 HIV positive IDUs were detained for some time until 1996.

Drug treatment and rehabilitation of IDUs

Drug treatment and rehabilitation programmes with or without housing were expanded in all three countries around 1990. There were usually waiting lists for entry to these programmes and drug use was prohibited. Denmark had the highest level of IDUs attending rehabilitation and methadone programmes in 1990–93. Approximately 18% of the IDUs in Denmark, 10% in Norway and 16% in Sweden participated in programmes of different types.

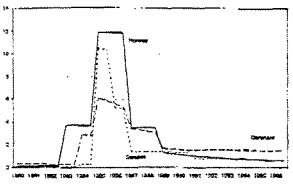

Figure 1 HIV incidence rates per 1000 IDUs, per half-year 1980–1996; Denmark, Norway and Sweden

Among IDUs in drug treatment and rehabilitation, 80% were in methadone maintenance programmes in Denmark, compared to 7% in Norway and 24% in Sweden.

HIV incidence and prevalence

HIV among IDUs was introduced earlier in Denmark than in Norway and Sweden *(table 4)*. Incidence rates followed the same main profile in all three countries *(figure 1)*. From 1991 to 1996 Norway and Sweden had significantly lower incidence rates than Denmark. Incidence rates stabilized in Denmark from 1991 at 1.49/1000 IDUs [CI: 1.07–2.09]. In Norway incidence rates decreased from 0.92/1000 IDUs [CI: .73–1.16] in 1991 to 0.58/1000 IDUs [CI: 0.46–0.73] in 1996. In Sweden incidence rates decreased from 0.77/1000 IDUs [CI: 0.63–0.94] in 1991 to 0.58/1000 IDUs [CI: 0.48–0.71] in 1996.

In Denmark and Norway the main drug injected was heroin. In Sweden half the IDUs injected only heroin, 30% only amphetamine and 20% both types of drug.[25] A recalculation to incidence rates for heroin users in Sweden gives incidence rates of 1.07 in 1991 dropping to 0.81 at the end of the study period. The recalculation was based on a 50–50 % distribution of heroin and amphetamine users among IDUs and a 67–33% distribution of heroin and amphetamine users among HIV positives.[24] The incidence rates among heroin users in Sweden are

Table 4 Estimated absolute rates of HIV per half year among IDUs in Denmark, Norway and Sweden, 1980–96; 95% confidence intervals (CI)

Denmark			Norway			Sweden		
Period	Absolute rate (95% CI)		Period	Absolute rate (95% CI)		Period	Absolute rate (95% CI)	
1980–83	1.8	(0.8–4.0)	1980–82	0.5[a]	(–)	1980–83	1[a]	(–)
1984	24.1	(11.1–52.2)	1983–84	15.9	(7.9–32)	1984	3.9	(0.0–190.0)
1985–86	56.1	(40.7–77.3)	1985–86	51.0	(41.7–62.4)	1985	157.7	(130.2–191.0)
1987–88	37.4	(20.0–69.6)	1987–88	14.9	(10.6–21.0)	1986	80.3	(55.5–116.6)
1989–96	20.8	(14.9–29.1)	1989–96	6.1	(4.8–7.7)	1987–90	22.0	(18.0–26.8)
						1991–96	13.0	(10.7–15.9)

a: Values were estimated as zero but given starting values as shown here.

higher than the Norwegian rates but still lower than the Danish rate of 1.49.

Figures for the susceptible populations in each country are measured with uncertainty. A least favourable situation for the differences shown between incidence rates occurs if the susceptible population in Norway and Sweden is too large and the susceptible population in Denmark is too small. Significant differences in incidence rates 1991–96 between Denmark and Sweden were still present with a 10% larger susceptible population in Denmark and a 10% smaller susceptible population in Sweden. With a similar 15% change, the significant difference was still present in 1993–96 and present in 1995–96 with a 20% change. The significant differences between Denmark and Norway were still present in 1993–96 with a 10% change, present in 1994–96 with a 15% change and present in 1995–96 with a 20% change.

Prevalences of HIV among IDUs are shown in *figure* 2.

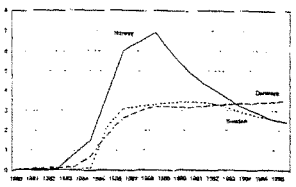

Figure 2 HIV prevalence per 100 IDUs, 1980–1996; Denmark, Norway and Sweden

Effectiveness

Sweden and Norway, with higher levels of HIV CT, had significantly lower incidence rates of HIV among IDUs 1991–1996 than Denmark where there was legal access to drug injection equipment and a lower level of HIV CT. In Sweden there was no legal access to drug injection equipment except for two NEPs in low HIV prevalence areas. In this study a high level of contact tracing and strictness in legal issues were linked with a low level of HIV incidence rates (Sweden). A low level of contact tracing and no strictness in legal issues were linked with a high level of HIV incidence rates (Denmark). A high proportion of IDUs in rehabilitation and drug treatment was linked with both a high (Denmark) and a low (Sweden) level of HIV incidence rates.

DISCUSSION

A comparison of HIV prevention strategies and incidence rates in Denmark, Norway and Sweden suggests that a high level of HIV CT might be more effective to prevent HIV transmission than legal access to needles and syringes/NEPs.

The data and the model

The procedures for reporting HIV and AIDS cases to the registers ensure completeness and high quality data. Late reporting, underreporting or double reporting of HIV-diagnosed cases pose only minor problems in the data.[21–23] Persons with injection marks at time of death have as a rule been tested for HIV at autopsy.[10] Cases of undiagnosed HIV among dead IDUs were therefore detected.

The data sets were too small to estimate semi-annual absolute rates. Time partitions dividing the study period into longer time intervals of constant rates were found during the estimation process to depict a situation closest to the real situation in each country.[27]

The differences in HIV incidence rates 1991–96 are fairly robust since significant differences are still partly present in the unlikely situation that the Danish susceptible population was 20% larger and the Norwegian and Swedish were 20% smaller. Recalculation to incidence rates for Swedish IDUs injecting heroin is given without statistical uncertainty due to lack of estimates. The ratio of estimated incidence rates for heroin users in Denmark and Norway was 2.57 (1.62) in 1996 (1991) and likewise 1.84 (1.39) in Denmark and Sweden.

Not all IDUs share needles or syringes regularly. The susceptible population may therefore be smaller than the number of IDUs at each time interval. Studies of the sharing of used or non-sterile drug injection equipment have been performed but comparisons between countries are difficult.[20,25,35] A common strategy among Norwegian IDUs was to let known HIV positives be the last persons to use the equipment in a sharing situation.[36] With high testing rates, such behaviour may be effective in reducing transmission.

Do differences in incidence rates depict differences in risk behaviour?

The preferred outcome variable in this study would be change in risk behaviour. HIV incidence rates depend on risk behaviour, but also on mixing patterns between infected and non-infected and infectivity. Since prevalences (*figure 2*) and the average infectivity (data not shown) are fairly equal in 1991–1996, the differences in incidence rates between two countries will tend to reflect differences in the number of persons with whom an HIV-infected has risk contacts.[37] This is true in a simplified situation with homogenous mixing and a constant infectivity. The actual situation might be more complex.

Effectiveness of national HIV prevention strategies

A comparison of HIV prevention strategies in Scandinavia suggests that a high level of HIV CT can be more effective in keeping HIV at a low level than legal access to needles and syringes/NEPs. The lower incidence rates in Sweden and Norway than in Denmark may be caused by other factors than differences in the levels of HIV CT and legal access to drug injection equipment/NEPs. In Sweden, a higher level of contact tracing and strictness

on legal issues may have contributed to lower incidence rates. Norway had low incidence rates combined with a medium level of contact tracing and a medium level of strictness on legal issues. Studies support good effects of contact tracing and good effects of strictness on legal issues.[38,39] But strictness on legal issues may counteract and lead to more risk activity.[40]

The same level of the proportion of IDUs in drug treatment and rehabilitation were linked both with low and high HIV incidence rates. This may be accidental in a very small sample, it may be due to historical differences in methadone treatment for IDUs in the three countries and there may be other explanations.

CONCLUSION

Further investigation of the effectiveness of HIV testing and counselling compared to legal access to drug injection equipment is necessary. Other factors, as part of a total strategy, should be included. How and why IDUs adopt the HIV CT strategy is also an essential study topic. While waiting for further studies, the level of HIV CT should be increased in countries where such a strategy towards HIV infections among IDUs either is not adopted or has low priority.

The Norwegian Ministry of Health and Social Affairs, University of Oslo, the Norwegian Institute of Public Health and the Norwegian Institute for Alcohol and Drug Research financed this work.
We thank the Swedish Institute for Infectious Disease Control, Stockholm, Sweden and the Department of Bacteriology, Norwegian Institute of Public Health, Oslo, for the data from Sweden and Norway.

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Received 24 October 2001, accepted 27 May 2002

WASHINGTON / BALTIMORE HIGH IMPACT DRUG TRAFFICKING AREA (W/B HIDTA) 2004 THREAT AND NEEDS ASSESSMENT

I. Executive Summary

> At 19, Sara decided that since using marijuana every day for two years hadn't killed her, she'd snort, smoke or shoot up any other drug she could get her hands on. That's when she got hooked on heroin, and before long her whole existence was wrapped up in scraping together enough money for the next fix. . . . 'It's kind of like the new thing to do around here anymore,' said Sara . . . 'I know a lot of people who you wouldn't expect to be doing it who are on it. Poor kids, rich kids, it doesn't matter.' . . . 'Alcohol is very hard to get when you're underage. Heroin you can get. They don't ID you for that,' said 23-year-old Ann, who began using at 18.
> The Capital, Annapolis, Maryland, April 6, 2004.

> WHEN FIVE BULLETS slammed into Beldin Dillard on Feb. 13, 2003, he became another statistic, another casualty of the violence on Baltimore streets. A 36-year-old heroin dealer, Mr. Dillard was trying to reclaim his old corner, offering free samples to customers. His murder could be dismissed as one drug dealer's version of beating the competition. But it deserves attention because it illustrates the nexus between Baltimore's narcotics trade and the violence on city streets, the prevalence of drug activity by murder victims and suspects and the difficulty in halting the cycle of violence.
> *The Sun*, Editorial, March 17, 2004.

The HIDTA 2004 Threat and Needs Assessment document is an annual compilation of drug related threats facing our citizens in a given HIDTA region. Its purpose is to specifically identify the nature of each drug threat; identify and quantify the type or types of drugs involved; identify and discuss organizations that are active in manufacturing, transporting, acquiring or distributing illicit drugs; describe any associated money laundering activities; and assess the harmful consequences of such illicit drug activity. Following are highlights from the 2004 Threat and Needs Assessment:

- During CY 2003, W/B HIDTA Initiatives identified 141 Drug Trafficking Organizations (DTOs) operating in the W/B HIDTA region. Most of these illegal organizations were trafficking in two or more illegal drugs, suggesting that multi-drug activity is becoming commonplace.[1]

- All but 15 of the 141 DTOs have been specifically targeted by W/B HIDTA initiatives going forward into CY 2004.[2]

- Sixty-nine DTOs, or almost one-half of the total, were determined to be violent. Of the DTOs with such violent proclivities, 31 operated principally in the Baltimore Metro area. Sixteen operated in Washington, D.C. Together, Baltimore and Washington accounted for 47 violent DTOs, or over half of the drug-related violence in the entire W/B HIDTA region.[3]

- New York City (NYC) was by far the largest single source for illicit drugs transported into the region. W/B HIDTA initiatives reported that at least 34 DTOs received illegal drugs from NYC. Seventeen such DTOs were active in the Baltimore Metro area.[4]

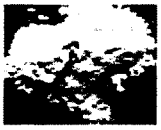
- Six DTOs were involved with money laundering as a primary enterprise, but 13 others were involved as a secondary activity. Historically, money laundering in the W/B HIDTA region was confined to one or two DTOs. These findings suggest that the incidence of money laundering may be increasing.[5]

- Thirty-nine DTOs had international connections; 36 operated at the national level; 37 had a regional scope in that they operated within both the W/B HIDTA region as well as in surrounding states and counties; and 28 DTOs were strictly local in their operational scope. Two DTOs were of unknown scope. As can be seen from these data, most DTOs within the W/B HIDTA region also have operational capacity and involvement outside the region.[6]

- Heroin is abused throughout Maryland but is most problematic in and around the city of Baltimore. Baltimore boasts higher numbers of heroin addicts and heroin-related crime than almost any other city in the nation, and those problems tend to spill over into adjoining counties where many heroin distributors maintain residences. The enormous demand for heroin in the Baltimore metropolitan area led to an increase in the drug's abuse among teens and young adults, who routinely drive into the city to obtain heroin for themselves and for other local abusers. In the Baltimore metropolitan area, heroin is sold almost exclusively by street name and packaged in gelatin capsules. Highly pure heroin - "raw" - marketed toward suburban users is sometimes packaged in vials (much like crack cocaine).[7]

- Within the W/B HIDTA region, 24 out of 141 DTOs were involved with heroin as their primary drug of choice for trafficking. Fourteen of the 24 heroin traffickers were located in the Baltimore Metro area.[8]

- Cocaine and crack abuse and distribution pose a significant threat throughout the W/B HIDTA region, particularly in cities situated near Washington, DC. Law enforcement sources in cities and towns located along the Eastern Shore and in Western Maryland also cite crack cocaine as the primary drug threat in their areas. Violence continues to accompany the cocaine trade in the state. Wholesale levels of cocaine are readily available via suppliers in New York City and the southwestern U.S.[9]



- Within the W/B HIDTA region, 89 out of 141 DTOs trafficked in cocaine. Thirty-seven of the DTOs trafficking in cocaine were located in the Baltimore Metro area. The second major geographic area for cocaine trafficking was Southern Maryland, where 18 DTOs dealing in cocaine were identified.[10]

- The most widely-abused drug in Maryland, marijuana remains easily available in every part of the state. Low levels of marijuana cultivation occur primarily in western Maryland and along the Eastern Shore, where private farmland and public parkland are conducive to growers' concerns for anonymity.[11]

- Within the W/B HIDTA region, 22 out of 141 DTOs were involved in marijuana trafficking.[12]

- The transport of marijuana in the United States occurs mostly overland in commercial and private vehicles, trains, and buses, although commercial and private aircraft and watercraft are used as well. Using mail services appears to be routine and growing. Data from the U.S. Postal Service (USPS) indicate that marijuana is the drug most commonly seized from parcels, and reporting from several law enforcement agencies indicates growing use of this method. DEA and W/B HIDTA reporting identifies mail services as one of the most common means to transport marijuana in Connecticut, Delaware, and the Baltimore-Washington, D.C., area.[13]

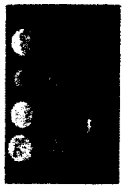
- Marijuana shipments transported through mail services typically range from five to 40 pounds per parcel. During transport, the methods used to conceal wholesale and midlevel quantities of marijuana often consist of compressed bricks wrapped in cellophane and tape—and can range from elaborate, remotely triggered false compartments installed in vehicles to burlap sacks. Marijuana shipments of 1,000 pounds or more frequently are intermingled with legitimate goods such as furniture and produce, and transported in cargo containers or refrigerated compartments. According to law enforcement reporting, multi-pound quantities have been transported in plastic- or canvas-wrapped bales (50–75 lb), in duffel or hockey bags (40–100 lb), and inside tires, television sets, and stereo speakers.[14]

- Methamphetamine is not in high demand nor is it widely available in the state of Maryland.

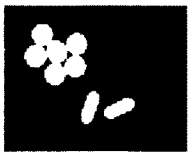
Although clandestine methamphetamine laboratories have been seized in the state in the past few years - one of which was large enough to receive classification by EPIC as a "super-lab" - the problem overall is minimal. Drug users in western Maryland, near West Virginia, and young adults involved in the Washington, D.C. rave scenes are the primary audiences for methamphetamine.[15]

- According to the W/B HIDTA DTO survey, only three W/B HIDTA initiatives reported any DTO involvement with methamphetamine. Two such DTOs operated in Northern Virginia and the third in the Baltimore Metro region.[16]

- Baltimore, Maryland maintains a thriving rave and nightclub scene in which club drugs, usually MDMA, are abused. Club drugs such as Ketamine, GHB and others do not carry the same demand nor availability as MDMA. Notable, however, are recent statements by law enforcement sources that MDMA has become a drug of choice among young, inner-city drug dealers in Baltimore and among young, primarily blue-collar individuals in the western part of the state. A sizeable PCP laboratory was recently seized in the city of Baltimore.[17]



- PCP-related admissions to Maryland treatment programs have more than tripled since FY1999 (from 281 to 1,016 in FY2003).[18]



- Until recently, Maryland experienced high levels of pharmaceutical diversion primarily in association with Baltimore's open-air drug markets. OxyContin, however, has become the drug of choice among pharmaceutical drug abusers. Maryland, and particularly the city of Baltimore, is becoming a source area for OxyContin abusers in Virginia and West Virginia, likely due to the enormous scrutiny the drug is under in those two states.[19]

II. Introduction

The Director, Office of National Drug Control Policy (ONDCP), designates regions with critical drug trafficking problems adversely impacting the United States as High Intensity Drug Trafficking Areas (HIDTAs). By design, HIDTA activities are located in areas exhibiting the highest volume and intensity of illicit drug behavior, hence its name . . . HIGH INTENSITY DRUG TRAFFICKING AREA. The national HIDTA program, composed of 28 individual HIDTAs spread throughout the nation, is uniquely situated to counteract this illicit activity. Each HIDTA, however, is atypical when compared to most federally sponsored agencies. An individual HIDTA has no agenda other than to help local, regional and national law enforcement agencies, treatment/criminal justice programs, and prevention initiatives successfully reduce illicit drug trafficking and drug recidivism.

W/B HIDTA has fostered cooperative and effective working relationships with over 100 federal, state and local agencies in its quest to eradicate illicit drug trafficking and reduce its harmful consequences. As will be discussed in greater detail later in this document, HIDTAs nationally have adopted three specific goals to be achieved in meeting the drug challenge. Each HIDTA fashions an individual strategy to meet local drug threats according to its individual needs, but three national goals guide all HIDTA initiatives and activities throughout the United States:

HIDTA Goals

Goal 1: Reduce drug availability by eliminating or disrupting drug trafficking organizations;

Goal 2: Reduce the harmful consequences of drug trafficking; and

Goal 3: Improve the efficiency and effectiveness of law enforcement organizations and their efforts within HIDTAs.

W/B HIDTA success is measured by results, and each initiative is fully accountable for its success or failure in meeting its objectives. The W/B HIDTA approach is to co-locate law enforcement personnel in order to foster enhanced information and resource sharing. These law enforcement initiatives also share a common strategy with W/B HIDTA Treatment/Criminal Justice and Prevention initiatives . . . to provide mutual support to achieve common goals. The

extent of information sharing and inter-agency cooperation fostered by the W/B HIDTA approach proves that Law Enforcement, Treatment/Criminal Justice and Prevention initiatives are working together effectively and efficiently.

This Washington /Baltimore HIDTA Threat and Needs Assessment offers a clear picture of the impact that drug abuse, drug trafficking and violent crime have on the jurisdictions that make up the W\B HIDTA region. Furthermore, it presents a strategic perspective on the region, outlining potential challenges that HIDTA initiatives and its participating agencies will face in the upcoming year. The Threat and Needs Assessment will discuss the drug problem in the context of the three primary HIDTA Program Goals stated earlier. In this fashion, the reader may directly compare the existing drug threat with the objectives planned by HIDTA to address it. Later, with appropriate input from local and regional law enforcement, these objectives will form the basis for a HIDTA Strategy document setting forth in detail the drug enforcement plan for the coming year. Ultimately, each HIDTA produces an Annual Report to document its enforcement activities and discuss its successes or failures for the preceding year.

Journal of Substance Abuse Treatment, Vol. 17, No. 4, pp. 331–335, 1999

0740-5472/99 $–see front matter

PII S0740-5472(99)00046-X

PERSONAL PERSPECTIVE

The Swiss Heroin Trials

Scientifically Sound?

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Abstract—*The objective of this article is to critique a study conducted by the Swiss Federal Office of Public Health to evaluate Switzerland's heroin maintenance project. Heroin abusers (N = 1,146) were enrolled in 18 research clinics. Subjects were recruited into three study arms—heroin, morphine, or methadone maintenance, but randomization was unsuccessful, and all received heroin. Medications were self-administered by injection on site. Patients were interviewed at intake and 6-month intervals up to 18 months. A review of the study revealed design weaknesses, including the absence of control groups, lack of corroboration of self-reports, failure to control for the influence of social services on outcome, and the absence of follow-up on those who left the trial prematurely. The program's ability to avert human immunodeficiency virus (HIV) transmission could not be fully evaluated because patients did not consistently submit to HIV testing. The Swiss trials of supervised heroin prescription trials do not withstand scientific scrutiny.* © *1999 Elsevier Science Inc. All rights reserved.*

Keywords—heroin maintenance; heroin addiction; opiate clinics, Swiss heroin maintenance program; drug policy.

INTRODUCTION

SWITZERLAND'S HEROIN MAINTENANCE project has made headlines around the world. The dramatic announcement of its success in the summer of 1997 seemed to promise an unconventional but effective way to treat heroin addiction. In this country, the Associated Press reported, "Switzerland declared its novel experiment with state-distributed heroin a success, saying the drug giveaway slashed crime, misery and disease associated with hard-core drug addiction" (Associated Press, 1997). Favorable commentary in the prestigious op-ed pages of the *New York Times* (Lewis, 1998) and the *Washington Post* (Shenk, 1997), and on the national evening news (ABC World News Tonight, 1997) urged policy makers to consider heroin maintenance here.

Frustrated by prior efforts to curb use, the most visible failure being the squalid deterioration of Zurich's Platzspitz Park and subsequently the Letten railway station—areas designated by the government for open air drug use—the Swiss Federal Office of Public Health instituted the Swiss Scientific Studies of Medically Prescribed Narcotics to Drug Addicts (hereafter the "Swiss Heroin Trials"). The Federal Office of Public Health conducted the trials from January 1, 1994 to December 31, 1996 and published the results in July 1997, proclaiming success (Uchtenhagen, Gutzwiller, & Dobler-Mikola, 1997). The trials attracted enthusiastic attention from the international health authorities and media, which hailed heroin prescription based on the government's report of high retention rates, improved social in-

The authors would like to acknowledge the Program on Medical Science and Society of the Ethics and Public Policy Center, Washington, DC.

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Received December 4, 1998; Revised February 3, 1999; Accepted March 3, 1999.

tegration, and reduced crime among the enrolled heroin abusers (Nadelmann, 1998a; Olson, 1997; *Report of the International Narcotics Control Board for 1997*, 1998; "Swiss Heroin Experiment Yields Positive Results," 1997). One Swiss newspaper described a growing interest in adding cocaine distribution to the heroin project: "Kokain—der nachste Streitpunkt" ["Cocaine—the Next Point to Be Disputed"] (1997) the headline read.

The Federal Office of Public Health issued its detailed German-language outcome report last summer, yet as early as 1996, the trials' principal investigator and project directors traveled throughout Switzerland and other countries, such as Australia, Austria, Germany, the Netherlands, and the United States, promoting what they interpreted to be its positive results. In Switzerland, the Federal Office of Public Health plans to triple enrollment next year, to about 3,000, and in the year 2004, the Swiss Parliament is scheduled to vote to decriminalize consumption, possession, and sale of narcotics for personal use (*Federal Council of Switzerland Asks for Opinion*, 1997).

Several weeks ago, the International Narcotics Control Board of the United Nations—the quasi-judicial organization that monitors international drug treaties—expressed concern over this trend. The Board worried that, "before (completion of) the evaluation by the World Health Organization (WHO) of the Swiss heroin experiment, pressure groups and some politicians are already promoting the expansion of such programmes in Switzerland and their proliferation in other countries" (*Report of the International Narcotics Control Board for 1997*, 1998) Earlier this year, the Netherlands, mindful of the Swiss experiment, initiated a trial of heroin administration. Drug policy experts and advocates in Australia, Belgium, Germany, Luxemburg, and Norway, all citing the Swiss experience, have urged their governments to establish heroin distribution trials or projects (Bammer, 1994; Farrell & Hall, 1998; Central Committee on the Treatment of Heroin Addicts, 1997). In the United States, prominent constituents of the harm reduction and legalization movements championed the Swiss project (Nadelmann, 1998b). Thus, numerous policy debates are being influenced by the outcome of the Swiss study.

A careful review of the study, however, reveals critical design weaknesses that challenge enthusiastic claims about the superiority of heroin maintenance over conventional opiate treatment for heroin abusers, such as oral methadone maintenance and residential, or abstinence-oriented, care. Awareness of the Swiss trials' methodological limitations is critically important for medical researchers, political leaders, and other parties who may be contemplating major changes in drug policy based upon the Swiss experience.

SWISS HEROIN TRIALS

The Swiss study sought to answer several questions. What are the effects of prescribed opiates on health, drug use, and social functioning? Is heroin administration suitable for heroin abusers whose previous treatment had been unsuccessful? Is heroin effective compared with other therapies?

Initially, achieving abstinence from drugs was identified as the primary clinical aim of heroin prescription programs. As the study progressed, however, other priorities took its place, including recruitment into the program, retention in the program, and improvement in medical and social functioning (Uchtenhagen, 1993, 1996). Beginning in January 1994, subjects were recruited into three study arms: heroin, morphine, or methadone maintenance. These medications were self-administered by injection on site at the clinic. Eligibility was restricted to individuals at least 20 years old who were dependent on opioids for a minimum of 2 years, had failed at least two previous treatment attempts (residential care and/or oral methadone maintenance), or who were deemed unlikely to respond to available treatment, and who displayed evidence of social, physical, and psychological disintegration.

The original plan of randomly assigning 250 patients to the heroin administration group, 250 to morphine, and 200 to methadone had to be abandoned during the first year, due to subject's strong preference for heroin as well as problems with side effects (histamine-induced hives from morphine and vascular irritation from intravenous methadone). Target recruitment was subsequently revised twice so that the heroin arm would contain 800 patients and the others 100 each (Uchtenhagen, 1996).

Overall, 1,146 patients were enrolled in the 18 participating research clinics, but most of the data that appeared in the final Swiss report were drawn from a smaller sample of 385 patients—the first cohort recruited to the study prior to sample size revision. Patients were interviewed at intake and 6-month intervals up to 18 months. Outcome measures included self-report of drug use, health status, psychological symptoms, social functioning, and crime. Urine toxicology screening, human immunodeficiency virus (HIV) testing, and examination of police records were allowed only with permission of patients; thus, efforts to verify self-reports were sporadic at best.

The average daily intravenous heroin dose was 490 mg. No attempt was made to correlate magnitude of dose with outcomes. Patients self-administered heroin under sterile conditions at the clinic three times per day, 7 days per week, and received oral methadone overnight to reduce any breakthrough withdrawal symptoms. Patients were also permitted heroin cigarettes, long-acting heroin pills and suppositories, intravenous methadone, and intravenous or oral morphine to complement the study medication, intravenous heroin. Extensive counseling, social assistance (welfare benefits, public housing, medical care), and psychiatric services, none mandatory, were offered as needed.

Results based on the initial cohort of 385, all of whom received heroin, showed that retention was 89% at 6

months, 76% at 12 months, and 69% at 18 months. Anyone who kept attending the program, even intermittently, was reported as a retained participant. Of the 128 patients who did not complete the 18-month study period, 50 sought standard oral methadone maintenance, 20 sought abstinence-oriented treatment, 15 dropped out, and 7 died. Other than disposition, outcome data on these 128 patients were not reported. Three features were directly associated with drop out: duration of addiction to heroin; severity of cocaine consumption; and HIV-positive status. Thus, patients who left the trial tended to be those with the most serious addiction-related problems, the very group for whom heroin administration was intended (Uchtenhagen, 1996).

The Swiss Federal Office of Public Health report presents outcomes as a pre- and posttreatment analysis of the 266 patients who completed at least 18 months. According to their self-report, 81% (not 100%) said they used illicit heroin at admission, while 52% admitted to illicit heroin consumption at 18 months. One in five claimed to be unemployed at 18 months, down from almost half (44%) at admission. Employment was defined by the project managers as having a contract with an employer, regardless of whether this meant working a few hours a week or maintaining a full-time job. Homelessness declined from 12% to 1% and stable housing increased from 49% to 69% (as noted earlier, housing was provided by the government).

The percentage of individuals claiming that they supported themselves with illegal income went from 70% to 10%, permanent employment increased from 14% to 32%, and the number supported by welfare increased from 18% to 27%. At admission, 82% of completers reported cocaine use (intensity undefined) at admission, compared to 52% at 18 months. Patients suffering from psychiatric symptoms declined from 36% to 18% during the 18-month period while "somatic state" (undefined) improved from 79% to 86%.

SCIENTIFIC SOUNDNESS OF THE SWISS TRIALS

The above results are intriguing, but unfortunately they are not the product of an experimental outcome study. Failure to meet scientific standards for a controlled clinical trial was also noted by an independent evaluator from the World Health Organization, who assessed the experimental plan of the Swiss project (Hall, 1997). First, there were no comparison groups. Although the study contained two other groups, methadone and morphine, plus a newly added cohort of 350 who were to receive oral methadone, data from those subjects were reportedly unavailable for comparison with the heroin group at the time of the final Swiss report. This is key, since the study has been promoted by the Swiss government and some foreign observers as evidence that heroin prescription is better than methadone maintenance or abstinence-oriented treatment; the latter was not even included in the original design.

A second issue is the validity of outcome measures. Optimally, self-reports of illicit drug use, crime, and employment should be corroborated, especially if the results are to be used to undergird major policy decisions. However, the urine collection was unreliable; timing was not random, but rather was mutually agreed upon by clinic and patient. Even then it was not routinely collected under observation, nor were police records and employment records systematically examined.

A third methodological problem was the failure to control for the influence of social services on outcome. According to the director of a Zurich clinic (Locher, 1996), the heroin trials spent almost five times more per patient for social services than standard methadone treatment spends on its patients. Thus, even if outcome data are valid, it is unclear whether they are attributable to a stabilizing effect of heroin, to the social services provided, or to an interaction between the two.

Fourth, only individuals who completed 18 months were included in the outcome data analysis. Data on those who left the trial prematurely were not collected, yet, with over half of them going into other treatment programs, it is possible they improved as well, perhaps as much or more than the completers.

It should also be noted that the Swiss Heroin Study was intended for "severely addicted" individuals, yet it appears that the baseline condition of many abusers was not so dire. For example, 74% of patients were rated by interviewers as being in "good or very good health" and 80% as having "good or very good nutrition." A large percentage, 76%, experienced between zero and five withdrawal episodes in a lifetime; a relatively small number of total withdrawals, given the sample's 10-year mean duration of dependence. In addition, 14% were only occasional users of heroin and 4% did not use heroin at all, even though eligibility required 2 continuous years of dependence on heroin.

There is also clear evidence that heroin administration diverted patients from enrolling in abstinence-oriented treatment. Swiss residential programs—which generally operate at full capacity with waiting lists—were able to fill only half their slots after the project began operating, according to a number of treatment providers in Zurich (Belengungsrueckgang bei Drogentherapiehausern [Attrition in Residential Drug Treatment], 1997). In addition, 61% of the participants came to the trial directly from oral methadone maintenance programs. It would have been useful to track this subgroup of patients to note differential improvement, if any, after switching to heroin prescription.

At the same time, however, these instances of patient diversion and migration, coupled with the study's recruitment problems described earlier, show why it is difficult to conduct a randomized trial with heroin: when given the option of being assigned to heroin prescription, subjects will often reject other assignments. This raises

the question of whether heroin treatment will give some abusers an incentive to fail conventional treatments.

Finally, one of the major justifications for the Swiss heroin program—averting HIV transmission—could not be fully evaluated, as there was no requirement that patients submit to HIV testing. The final report does not mention how many were tested. Although it notes that three new cases of HIV were identified, it failed to compare pre- and posttreatment seroconversion rates among heroin recipients to at-risk individuals in the general population or to samples in methadone treatment, thus making the HIV data extremely difficult to interpret.

A major original intent of the study was to move patients to abstinence directly or through referral to abstinence-oriented treatment. According to this criterion, the project had a success rate of only 5.2% (20 of the 385 patients transferred into abstinence treatment). But, according to the criterion of retention, which was 69% at 18 months, the study was heralded as an achievement. At first glance, 69% appears high, compared to retention in conventional treatments, but it is not especially surprising that heroin abusers would continue to come to a site where they could get pharmaceutical-grade heroin at no or low cost. In addition, the definition of "retention" was extremely loose. Standard threshold definitions of retention—for example, 75% attendance in a 30-day period, or showing up for two out of three injection times per day—were not employed.

Furthermore, many individuals continued to commit crime and use illicit drugs while receiving heroin. When their social situations improved—and it is unclear whether the abusers' situations improved as much as was claimed, since their self-reports were not consistently verified—the study design made it impossible to determine how much improvement was a function of heroin prescription per se, and how much could be attributed to the social services provided.

DISCUSSION

The Swiss Heroin Trials cannot be considered a valid experiment. They failed to randomly assign patients to comparison groups and to account for the effect of social services on outcome. Heavy reliance on self-report renders even the outcome data questionable. Instead of an experiment, the trials resembled more a demonstration project and, in this regard, they were deemed "feasible" by an independent WHO evaluator who cited minimal problems with diversion, heroin overdose, and neighborhood disruption (Hall, 1997).

Surprisingly, there has been little critical appraisal of the project in the popular press abroad and virtually none in this country, although the United Nations' International Narcotics Control Board "is concerned that announcement of the (heroin project) results . . . have led to hasty conclusions by some politicians and the media in several European countries" (Report of the International Narcotics Control Board for 1997, 1998). One would presume that such a controversial undertaking would be submitted to rigorous scientific evaluation before being used as the basis for a policy change. Yet the Swiss government has already expressed its intention to regard heroin administration as a recognized therapy ("anerkannte Therapie") for heroin addiction (*Federal Council of Switzerland Asks for Opinion*, 1997).

An historical look at the administration of morphine and heroin shows that it has been largely ineffective in helping opiate abusers achieve abstinence. In the United States, "narcotics clinics" were established in the early part of the century after the U.S. Treasury Department outlawed maintenance prescribing as part of a vigorous effort to crack down on "dope" doctors. By 1920, approximately 40 clinics were scattered across the country to dispense morphine; only the New York City clinic offered heroin. However, the federal government closed most of these clinics after only a year or two of operation because of a Supreme Court decision that allowed the prosecution of any physician who prescribed narcotics for addiction maintenance (Musto, 1998).

Some clinics, like the one in New Haven, CT, were well-run, but others were not (Musto & Ramos, 1981). The New York City clinic was shut down by the city's health department because of massive diversion of distributed heroin by many of the nearly 10,000 enrolled heroin abusers. Treating such a large number of heroin abusers was costly and, in the end, almost all of them reverted to illicit narcotics after they had been detoxified (Musto, 1998). In 1920, the American Medical Association issued a resolution condemning the narcotics clinics ("Report of the Committee on the Narcotic Drug Situation in the United States," 1920), though in the early 1970s, the American Bar Association rekindled the debate by suggesting that heroin maintenance was feasible as a way to reduce crime and disease associated with heroin addiction (American Bar Association Special Committee on Crime Prevention and Control, 1972).

In the 1920s, the decade in which the United States discontinued its clinics, Great Britain officially endorsed the ongoing activity of treating addicted individuals with opiate drugs if previous efforts at withdrawal had failed. In the 1960s, when the number of addicted individuals on prescription heroin and cocaine abruptly increased, special treatment clinics were established in London and elsewhere. By 1970, about one fifth of England's 2,600 opiate abusers were receiving prescription heroin or morphine (Lewis, 1973). Today, roughly 340, or less than 1% of England's 150,000 heroin abusers, are maintained on heroin, despite the fact that some 100 physicians are permitted to prescribe it (Strang & Sheridan, 1997). By comparison, about 16,500 (11%) are enrolled in oral methadone maintenance. This strongly suggests that British physicians do not find heroin useful.

Only one random design outcome study of the so-called British system has been published. Hartnoll et al.

(1980) randomly assigned 96 treatment-seeking heroin abusers to treatment with injectable heroin or oral methadone. At 12 months, 88 subjects remained available to interviewers. Despite the greater retention of the heroin sample (74%, compared to only 29% of methadone recipients), follow-up revealed that the minimal improvements in employment status, health, and consumption of nonopiate drugs were comparable between the two groups.

Clearly, enormous frustration with drug problems, both here and abroad, fuels much of the interest in innovative remedies. If heroin maintenance could be shown, through rigorous comparison with conventional treatment, to eliminate crime, illness, and drug use in intractable opiate abusers, it might justify consideration as a form of therapy to be weighed against the political and economic costs. However, the recent Swiss trials of supervised heroin prescription trials do not withstand scientific scrutiny.

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Re-printed from the Daily Mail Monday 30th July 2001

Legalisation or Zero Tolerance?

In a major investigation, Mail writer David Jones visited Europe's drug capital, Amsterdam, and hardline Sweden. His findings utterly changed his views on legalising cannabis.

THE CANNABIS DEBATE by David Jones

Senior politicians have suggested the laws on cannabis should be revised after a new survey for the Department of Health shows drug use among children is soaring. But should cannabis be legalised? On Saturday in the Mail we asked people from all walks of life for their opinion – and intriguingly it was those in medicine and law enforcement who warned against liberalisation. Today, we publish a special investigation comparing two very different policies on drug use in two European countries to see which is most effective.

The unmarked police patrol van suddenly brakes and two plain clothes officers step briskly on to the pavement, blocking the path of a group of teenagers wandering, apparently innocently, through their leafy suburban housing estate.

"Hi, kids, how are things going?" begins Inspector Alex Hermansson. His tone is affable, but the youths, aged between 15 and 18, are apprehensive, for they know full well that this is more than a friendly chat.

As Hermansson engages them in conversation, his colleague, Lars-Hakan Lindolm, checks each one for signs of drug abuse. First he looks into their eyes. Are the pupils dilated?

Then he examines their jaws: is anyone chewing excessively – a classic symptom of Ecstasy use – or grinding their teeth, as amphetamine takers often do?

This time, all the friends appear 'clean' and within a few minutes they are

allowed to walk on. Yet the merest hint that they had taken any drug would have seen them arrested, their urine or blood tested, and brought before the courts.

Contrast this scene with another, which I had witnessed a few days earlier, in an equally respectable looking residential area only a few hundred miles away.

It was a warm summer's evening and children were playing in the streets, but all around the Lucky Luke 'coffee shop' the air was redolent of sticky sweet marijuana fumes.

In theory, the people who go there to get legally stoned or buy their takeaway cannabis supplies – characters ranging from jobless hippies to smart business executives – are not supposed to smoke their reefers out of doors.

However, in practice, several of the licensed dope den's customers casually lit joints, knowing the police would admonish them at worst, but would more likely smile and wave them on their way.

This is a tale of two countries whose attitude towards drugs could not be farther apart.

The first, Sweden, is hell-bent on creating a drug-free society. Its relentless pursuit of this seemingly unattainable ideal is taking the fight against drugs to tough new levels, unprecedented in the Western World. The second, Holland, has – willingly or not – won a reputation as Europe's drugs capital.

Hordes of tourists go there to take advantage of its liberal cannabis laws, which could soon be relaxed still more to allow production and bulk sales, as well as personal use.

In recent weeks, Britain has been lurching ever closer towards the Dutch model, with politicians to the left and right supporting the growing clamour to legalise cannabis.

The question is: which of these two contrasting societies would you prefer to live in/

The statistics might help you to make up your mind. In Sweden, only 2 of every 100 people aged between 15 and 25 are likely to have smoked cannabis in the past year; in Holland it is about seven times more (and a staggering eight times more in Britain).

Surely not coincidentally, the use of hard drugs, such as heroin, cocain, ecstasy and amphetamines, is appreciably lower in Sweden, too. So is the prevalence of drugs-related crime, though this is rising in both countries.

In Sweden, the mass production of drugs remains negligible, while Holland – which churns out up to 80% of the worlds ecstasy and truckloads of powerful 'Nederweed' cannabis – has been branded the drug baron of Europe.

Despite these alarming facts, I leaned towards legalisation before embarking on this comparative study.

The prospect of a few hash cafes seemed unlikely to threaten the fabric of society. And the casual use of cannabis is imbued so deeply in British youth culture that decriminalisation seemed, if not desirable, wearily inevitable.

Ten days touring Holland and Sweden has changed my thinking completely.

The trail began with Amsterdam and the Grasshopper, a vast neon-lit dope-fiends' mecca that shimmers invitingly in the vice-ridden part of the city. As I arrived, I was instantly disabused of the myth trotted out by Dutch drugs policy apologists.

If we listen to them, the tolerance of cannabis in a controlled environment has succeeded in separating the hard and soft drugs market.

When you buy hashish in a 'coffee shop', the accepted wisdom runs, at least you're not being hassled to buy something worse, such as heroin.

This is nonsense. Even before I had paid my taxi driver I was being harassed by a scruffy Middle Eastern pusher who tried to press sugar-cube sized rocks of crack cocaine into my hand – something that has never happened to me in Leicester Square or Piccadilly.

Such dealers target the major cannabis cafes, where stoned youths provide easy pickings.

Away from the squalid red light area, smaller coffee shops such as Dutch Flowers, a quaint canal-side establishment, can mislead the first-time visitor into thinking Holland's dope houses are no more dangerous than the Rovers Return.

As I perused a menu, featuring Spirit of Amsterdam (a Dutch grown favourite) and Morocco Unique (a medal winner in the annual cannabis cup), Marcel, the friendly manager, smoked the profits and extolled the virtues of Holland's approach.

The cafes were largely peaceful and well run, he said. Bosses such as his own, who runs four coffee shops, upheld strict licensing laws that banned anyone under 18 and restricted the amount a customer could buy to five grams – sufficient for perhaps five strong joints.

Listening to Marcel talk, and watching his young customers – some British dope tourists – quietly smoke themselves into a stupor, it all seemed rather harmless. But then, as the weed loosened his tongue, a darker picture began to emerge.

The law states that the cafes can keep only a kilogram of cannabis on their premises at any time. On busy days, this stash can run out several times. But the production and large scale supply of cannabis remains illegal – so where did replenishment come from?

"It's a real back-door story," Marcel said, lowering his voice. "Mostly we buy from middle men. Much of it is smuggled in from Morocco or Afghanistan. Let's just say we have to be very discrete."

The 'back-door story' has been one of Europe's great untold scandals since Holland relaxed its cannabis laws more than 25 years ago.

Ridiculously, the country allows cannabis to be sold in approved outlets (currently, 800 are licensed by local authorities), yet everything else to do with the drug is illegal – from growing it to importing it. Anyone who cultivates or imports cannabis is committing a criminal offence.

This double standard has been exercising the Dutch parliament, and MPs recently voted to end the

hypocrisy by regulating the entire cannabis market, from plant to pipe.

So far, however, the government refuses to sanction these proposals. Even it is not sufficiently laid back to risk the international outcry that would result.

While the debate goes on, the shadowy figures who control the Dutch trade thrive.

The following day, I discovered just how easily they make their fortunes, right under the noses of the authorities, when I crossed the famous wartime 'Bridge too Far' and entered Arnhem. There, at the Lucky Loop coffee shop, I met an amiable, attractive couple, both 21, Denis Holdyk and Krysta Slykhuis.

Though they shared the strongest joint on offer – the mind-blowing White Widow – they remained remarkably lucid, their tolerance bolsted by smoking cannabis almost every day since they were 13.

Somewhat recklessly, Holdyk soon disclosed that he was one of around 500 cannabis growers who supply the cafes in and around the city.

He began business three years ago, with five plants, but was now renting two apartments as cannabis nurseries, and reckoned to make around £80,000 a year.

One day, he said, he would leave Holland and launder the money. "Then I will retire to my yacht and get high all day," he smiled.

My first reaction, I confess, was one of muted admiration. After all, here was a young man who seemed to believe in what he was doing, and had turned a small (albeit illegal) business into a roaring success.

As the evening wore on, however, I realised that Holdyk and his girl friend were not the earnest, untroubled entrepreneurial couple they presented. Both suffered recurring psychiatric problems, and it was impossible to believe their blind insistence that smoking huge quantities of cannabis (and, in Krysta's case, taking almost every other drug) was not to blame.

They also boasted of helping a jailed associate to smuggle drugs into prison.

"We wrapped a big piece of hash inside some silver paper and he swallowed it," said Holdyk. "that man became the richest guy in the prison".

If I still needed proof that the great Dutch drugs experiment has failed, I found it in the Southern frontier town of Venlo.

Two decades ago, this 90,000 strong community supported just one licensed coffee shop selling cannabis. Today, there are more than 60, but of that number only five have licenses – the rest are illegal.

And, to the horror of its citizens, Venlo has become a drugs cash-and-carry for droves of German shoppers, who need to drive only three miles across the border. To stroll along the River Maas, even at lunchtime, is like stepping into some oriental opium bazaar.

The peddlers, almost exclusively Turkish, urge you inside seedy shops selling cannabis paraphernalia. But many offer harder drugs, too.

Parking my car opposite these dubious shops, I glanced through the window of a grubby, white van. Inside, a middle-aged man was smoking heroin from silver foil. Small wonder that most parents have banned their children from walking beside the river.

Belatedly, the burghers of Venlo are endeavouring to reclaim their once safe town. With the backing of the Dutch government, they have launched Operation Hector, a £25 million project aimed at shutting down the drugs denizens.

Andre Rouvoet, an MP for the small Christian Unison party, is among the small number of Dutch politicians who wish they could turn back the clock.

Asked what he thought might happen if Britain were to legalise cannabis, he said:"Let me give you some good advice. Don't. Just don't."

And so to Sweden. A generation ago, this fiercely independent nation of nine million souls might easily have gone the way of Amsterdam, but at the height of the bohemian Sixties, something went wrong. The Swedish government had empowered certain named doctors to prescribe narcotics to anyone claiming to be addicted.

The system was widely abused and one of the junkies supplied an overdose to his fiancée, who died. The story caused a national scandal.

At roughly the same time, a Swedish professor, Nils Begerot, published a major study of drug misuse. He concluded that soft drugs invariably let to harder ones and that abuse was akin to an epidemic, which spread inexorably through the population.

Thus was Sweden's hardline policy born. The first laws were drafted in 1968, but they have been sharpened over the years, so that now all narcotics, from cannabis upwards, are regarded seriously, and even their presence in the bloodstream is punishable with prison.

The police camp on the doorsteps of known drug sellers and users, continually stopping and searching them. No drugs offence, however petty, is overlooked.

Even small-time cannabis smokers can expect to be arrested and fined, over and over again. If they don't kick the habit, they might be sent for compulsory treatment in an addiction centre. Some are jailed.

Constantly badgered like this, even hardened habitual offenders throw in the towel. In Malmo's central prison I spoke to Faruk Haliti, 25, who started using drugs at 14 and later joined a notorious, violent Gothenburg gang.

Tired of being hounded, he has opted to end his latest sentence – two years for possessing a machine gun and cocaine – in a therapy unit.

"I've been in prison maybe ten times and I've had enough," he said "I'm going to try to straighten myself out."

The Swedes are determined to prevent more children from growing up like Haliti. To that end, school pupils are required to fill in questionnaires about their drug habits, and where there is evidence of abuse, action is swiftly taken.

I saw the evidence of the programme's efficacy when I ventured into Rosegarde, Malmo, one of Sweden's

toughest high-rise estates, where 70% of its largely immigrant population are jobless.

If this were Peckham, say, or Moss Side, a smorgasbord of drugs would have been on offer. Yet all the teenagers I spoke to there were horrified when I asked whether they smoked cannabis to ease their boredom. "None of our friends takes anything like that," said Petric Takiri, 15, a Kosovan. "We value our health".

Whether the Swedish model could ever succeed in Britain is open to question. It would demand huge resources and require a monumental cultural shift.

According to Malmo police chief Thomas Servin, it is already too late. "I would like Britain and all the EU countries to follow our example, but I don't think it will happen," he said.

"In your country the attitude is different. They sell cannabis openly, and you have this liberal view."

Perhaps he is right, but I have returned home convinced that we should seriously consider giving Swedish-style zero tolerance a try.

Because, faced with the choice of raising my children in dope-fugged Holland or squeaky clean Sweden, I know which country I would choose.

Volume 22, Number 4 2003 ISSN: 1055-0887

NEXT ISSUE: NEW VOLUME

Journal of Addictive Diseases™

the official journal of

ASAM
American Society of Addiction Medicine

HP *Published by* The Haworth Medical Press®

A Peek into Pandora's Box: The Medical Excuse Marijuana Controversy

Eric A. Voth, MD, FACP

ABSTRACT. The smoking of marijuana for medicinal applications is a volatile and difficult issue for the medical and regulatory communities which has reached the forefront of discussions of public policy.

Any consideration of this issue must take into account the substantial toxicity, impurity, and morbidity associated with marijuana use. Several states have passed ballot initiatives or legislation that allow a medical excuse for possession of marijuana. These initiatives bypass the Food and Drug Administration process of proving safety and efficacy, and they have created serious regulatory dilemmas for state regulatory boards. Several examinations of the issue have consistently drawn question to the validity of smoking an impure substance while voicing concern for the well being of patients in need. The historical, social, medical, and legal issues are examined.

KEYWORDS. Marijuana, cannabis, medicinal marijuana

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The author appreciates the assistance of the following individuals: Members of the Institute on Global Drug Policy and the Lenora Kinsey Stormont Vail Health Care Health Sciences Library.

Journal of Addictive Diseases, Vol. 22(4) 2003
http://www.haworthpress.com/store/product.asp?sku=J069

10.1300/J069v22n04_04

HISTORY

In 1972, the Department of Justice Drug Enforcement Administration (DEA) was petitioned to reschedule marijuana from a Schedule I drug (unable to be prescribed, high potential for abuse, not currently accepted for medicinal use, and lack of safety of the drug) to a Schedule II drug (high potential for abuse, currently accepted for medical use, but able to be prescribed).[1]

This rescheduling petition was initiated by the National Organization for the Reform of Marijuana Laws (NORML), Alliance for Cannabis Therapeutics (ACT), and the Cannabis Corporation of America. It is significant that these organizations lobby for the legalization of marijuana and have neither a medical base, nor do they represent any accredited or respected medical entity.

Because of continued controversy surrounding the rescheduling of marijuana, Administrative Law Judge Francis Young was retained by the DEA in 1988 to rule on the merits of rescheduling marijuana to Schedule II. Judge Young ruled that marijuana should be rescheduled to Schedule II for nausea associated with cancer chemotherapy and spasticity.[2] He concluded, however, that insufficient evidence existed to warrant use of crude marijuana for glaucoma or other applications.

The administrator of the DEA ultimately denied the petition to reschedule. In the face of extensive expert testimony provided to the DEA which opposed the rescheduling of marijuana, the marijuana lobby only produced evidence consisting of anecdotes and testimony of a handful of physicians with limited or no clinical experience with the medical areas in question. During the rescheduling hearings it became clear that crude, especially smoked, marijuana had not been accepted as a medicine by any reputable medical entity.

The denial of the rescheduling petition by the DEA resulted in an appeal by marijuana advocates to the United States Court of Appeals for the District of Columbia. In a decision handed down in February 1994[3] the Court set forth the guidelines that only rigorous scientific proof can satisfy the requirement of "currently accepted medical use" (Table 1). Crude marijuana does not meet these guidelines.

TABLE 1. Criteria for Designation for a Drug to Be Considered a Medicine[91]

1. The drug's chemistry must be known and reproducible.
2. There must be adequate safety studies.
3. There must be adequate and well-controlled studies proving efficacy.
4. The drug must be accepted by *qualified* experts.
5. The scientific evidence must be widely available.

Several voter initiatives have been undertaken by marijuana advocates to circumvent the FDA process and the DEA scheduling rules. While not actually legalizing marijuana for medical use, the initiatives create a "defense to possession" for those possessing a medical recommendation to use marijuana. The ballot initiatives were heavily financed by individuals and organizations who seek the legalization of marijuana and other drugs (Table 2, and Appendix 1). The funding bought media consultants, airtime, and legal expertise. While the initiatives were promoted as being "compassionate" for suffering patients, they also created legal protection to those claiming medical ailments as justification for possession and personal use.

The danger of such ballot initiatives is that they create an atmosphere of "medicine by popular vote" rather than the rigorous processes required by federal law that all medicines must undergo. There also exists great concern that the movement to accept marijuana for medicinal applications is having the secondary effect of softening public attitudes on marijuana use. In the 2002 election cycle, initiatives in Florida, Michigan, and Ohio ostensibly sought to

TABLE 2. Examples of Funding for State Marijuana Ballot Initiatives

Proposition 215 California
(California Secretary of State)

George Soros	$550,000
Peter Lewis	$500,000
John Sperling	$200,000
George Zimmer	$100,000
Life AIDS Lobby	$344,750
TEAMSTERS	$195,000
(ILLEGAL CONTRIBUTION)	
TOTAL	$1,889,750

Proposition 36 California

George Soros	$983,080
Peter Lewis	$1,026,337
John Sperling	$1,066,337

Proposition 200 Arizona
(Arizona Secretary of State)

George Soros	$430,000
Drug Policy Foundation	$200,000
Peter Lewis	$330,000
John Sperling	$430,000
Social Policy Reform	$100,000
TOTAL	$1,490,000

Arizona-2000, HB 2518
(Arizona Secretary of State)

As of 11/4/99	
George Soros	$105,000
Peter Lewis	$105,000
John Sperling	$105,000

Massachusetts-Initiative P H4976
(Mass. Secretary of State)

As of December 31, 1999	
Peter Lewis	$122,500
George Soros	$122,500
John Sperling	$122,500

Arizona 2002 Proposition 203

Soros	$406,467
Sperling	$590,383

Ohio Drug Treatment Initiative 2002

Bogus treatment intiative	
Soros	$271,276
Sperling	$271,276
Lewis	$271,276

Nevada 2002
$1.6 million raised, $184,000 of this from small donors.

require treatment for drug-related arrests. Underlying what would be perceived as a positive change, however, were no controls on what drugs nor what criminal acts would be eligible for treatment. Furthermore, the definitions of "treatment" were generally quite loose. Even literacy or vocational training could have qualified for hard core felons with long-standing drug problems. The Florida and Michigan propositions did not require drug abstinence even during treatment. All three created a situation where criminal addicts would have statutory preference for treatment over none-criminals and were deemed unconstitutional.

This year, proposals in San Francisco and San Diego would require the cities to provide marijuana to individuals with medical excuses. This type of action puts the cities in the difficult situation of assessing the validity of excuses, the purity of the marijuana, and the potency of the marijuana. It also raises the question as to what legal risks the cities would be exposed to if complications such as accidents, infections, or other problems which might arise from the marijuana provided.

Recently, the Justice department filed an injunction in United States District Court against the Oakland Cannabis Buyers Cooperative in an attempt to close down the apparent open dealing of marijuana. This injunction was overturned upon appeal. A subsequent appeal to the United States Supreme Court has set the legal tone for the medicinal marijuana issue. The Supreme Court[4] ruled on May 14, 2001 that the Controlled Substances Act may not be violated by the sale of marijuana for medicinal purposes, and that there is no medical necessity exception to the Controlled Substances Act's prohibitions on manufacturing and distributing marijuana. The Supreme Court decision will likely have a chilling effect on future legislation and litigation regarding the use of marijuana for medicinal purposes.

Serious regulatory questions have also been raised regarding the standard of care that have not been adequately dealt with by ballot initiatives (Table 3). These questions may serve as a template for regulatory boards who are faced with the medical excuse marijuana issue. Unfortunately, regulatory agencies have also been handed a difficult situation to assess.

MEDICINAL APPLICATIONS OF THC OR MARIJUANA

Several medical surveys have examined physician attitudes regarding the use of marijuana for medicinal purposes. Kleiman and Doblin reported[5] that 48% of the respondents would prescribe marijuana if rescheduled for legal prescription. Upon closer review, the survey had a low response rate of approximately 40%. Respondents only accounted for 9% of practicing oncologists. Sixteen percent of those surveyed felt that marijuana was effective in 50% or

TABLE 3. Standards to Consider Before Recommending Marijuana (adapted from reference 92)

- Is there documentation that the patient has had failure of all other conventional medications to treat his or her ailment? Have you counseled the patient (documented by the patient's signed informed consent) regarding the medical risks of the use of marijuana–at a minimum to include infection, pulmonary complications, suppression of immunity, impairment of driving skills, and habituation?
- Has the patient misused marijuana or other psychoactive and addictive drugs?
- Do you periodically provide drug testing of the patient who has been prescribed marijuana, and have patients been excluded from being prescribed marijuana who are found to be using other illicit drugs? Who does the drug testing and by what means?
- Is the use of smoked marijuana part of a study and/or will the monitoring of that use be under the supervision of an investigational review board?
- Have you carefully reviewed exactly which patients should be allowed to use this drug medicinally and for how long?
- Do you carefully examine and consistently follow up patients who use smoked marijuana as a medical treatment, including pulmonary function testing, evaluation of immune status, and the presence of any super infection?
- Have you exercised due care in assuring the standardization of the tetrahydrocannabinol potency content of the marijuana to be considered for medicinal use and whether it is free of microbial contaminants?
- Because marijuana is a federally controlled substance, has a system been established in the state to track all patients and their source of marijuana, as with other controlled substances? Are you complying with such requirements?
- Will you be required to be licensed by the state or federal government?
- Have you shown knowledge, training, or certification in addiction medicine? Do you have demonstrable knowledge of the physiologic effects of marijuana, its side effects, and its interaction with other drugs before prescribing it?

more of patients. Unfortunately, inaccurate interpretations of this survey were widely released, widely publicized by the media, and incorrectly gave the impression that *about half* of oncologists generally want smoked marijuana available as medicine.

The author of this survey, Rick Doblin, was a student at Harvard at that time. He is also the President of the Multidisciplinary Association for Psychedelic Studies (MAPS). MAPS specializes in trying to gain legal access and status for psychedelic substances and marijuana. Doblin has openly admitted that this study was initiated so that the results could be used in the marijuana rescheduling suit against the DEA.

Concurrent with Doblin and Kleiman, Schwartz surveyed oncologists in the Washington D.C. area[6] and determined that pure THC in pill form ranked ninth in preference for the treatment of mild nausea and sixth for the treatment of severe nausea. It is important to recognize that this form of THC is not smoked marijuana.

Only 12% had recommended THC (by prescription or illegally) for more than 50 patients. It was felt that nausea was relieved in only 50% of patients and that 25% had adverse side effects.

Because of the exclusion of newer antiemetics from the two earlier surveys, Schwartz and Voth[7] surveyed 1500 clinical adult oncologists in 1994 with a 75% response rate. Over 88% of respondents had never recommended crude marijuana to patients. Twelve percent had ever recommended a marijuana cigarette, and 1% of the respondents estimated that they had recommended crude marijuana more often than 5 times per year. Only 9% said that they would prescribe crude marijuana more than ten times per year. In contrast, the median annual use of the antiemetics ondansetron (Zofran) and granisetron (Kytril) was 250 prescriptions. Furthermore, the support of making crude marijuana available to patients was strongest among physicians who also supported the concept of general legalization of marijuana for recreational use.

In 1993, Grinspoon published a compilation of anecdotes[8] which now serves as the bible of the "medical excuse marijuana" movement. He suggests that marijuana should be used for nausea associated with cancer chemotherapy, glaucoma, wasting in AIDS, depression, menstrual cramps, pain, and miscellaneous ailments. His anecdotes contained no controls, no standardization of dose, no quality control, and no independent medical evaluation for efficacy or toxicity

The discussion of historical uses of marijuana cited in Grinspoon's book include such cultures as India, Asia, the Middle East, South Africa, and South America and are considered by the medical excuse marijuana movement as evidence of appropriate medical uses of the drug. The Chinese allegedly used marijuana to "quicken the mind, induce sleep, cure dysentery, stimulate appetite, relieve headaches, and cure venereal disease." One of Grinspoon's references from 1860 states marijuana provided beneficial medical effects "without interfering with the actions of the internal organs." Such folk medicine applications of marijuana from the 1700s and 1800s are referenced by the authors as evidence justifying the modern medical applications.

The field of medicine in those earlier years was fraught with potions and herbal remedies. Many of those were absolutely useless, or conversely were harmful to unsuspecting subjects. This situation gave rise to the development and evolution of our current Food and Drug Administration and drug scheduling processes.

Advocates of marijuana contend that the smoking of marijuana has the advantage of providing a rapidly absorbed, titratable dose of THC. While rapid absorption could be an advantage in some arenas, neither anecdotal nor controlled studies have delineated whether anti-emetic qualities appear before, after, or concurrent to the intoxicating effects. Indeed, the therapeutic end point for successful administration of smoked marijuana has not been established.

Research on the utility of THC has demonstrated some effectiveness of the purified form of the drug in treating nausea associated with cancer chemotherapy or appetite stimulation, but even researchers are cautious about using smoked substances. Tramer[9] evaluated the state of the research on cannabinoids and concluded that in selected patients they may be useful as mood enhancing agents, but serious adverse side effects will likely limit their usefulness. They also stated,

> These results should make us think hard about the ethics of clinical trials of cannabinoids when safe and effective alternatives are known to exist and when efficacy of cannabinoids is known to be marginal. (p. 6)

An example of the therapeutic benefits of cannabinoids for nausea was work by Sallan et al.[10] who dealt with pure THC in the treatment of chemotherapy-associated nausea, not smoked marijuana. Chang[11] tested THC and then followed treatment failures with marijuana, thus conclusions regarding effectiveness cannot be readily attributed to either THC or crude marijuana. Levitt et al.[12] actually determined that purified THC was more effective than smoked marijuana.

Vinciguerra et al.[13] found that smoked marijuana had some beneficial effect for nausea in patients who had failed other conventional forms of antiemetic therapy. Responders tended to have had prior marijuana experience. This study was uncontrolled and patients' self-evaluated results. Smokers were required to inhale deeply, hold the smoke for ten seconds, and then smoke four cigarettes completely each day of chemotherapy. Twenty-five percent refused to smoke the marijuana. Over 20% of the subjects dropped out of the smoking group prior to the end of the study and 22% of the remaining subjects reported no benefit from smoking marijuana. Dosing was also variable because of the fact that the dose was rounded to the nearest one-fourth marijuana cigarette and no THC levels were checked for consistency of dose response.

Mattes et al.[14] evaluated oral and rectal suppository preparations of THC in comparison to smoked marijuana for appetite stimulation. All of the study subjects were experienced marijuana users thus accounting for a relatively high drug acceptance. Smoked marijuana was no more effective than suppository THC in stimulating appetite as measured by caloric energy intake. Rectal suppositories and oral THC were dosed at 2.5 mg twice daily. Smoking marijuana

required the subjects to inhale over 3 seconds, hold the smoke deeply in their lungs for 12 seconds, and then continue the process until the cigarette was smoked to a stub. The plasma THC levels peaked more quickly with the inhaled THC, but also fell more quickly, whereas the suppository THC maintained a more sustained level.

Several comprehensive reviews have been undertaken to assess the potential medical uses of marijuana. Voth and Schwartz extensively reviewed available therapies for chemotherapy associated nausea, glaucoma, multiple sclerosis, and appetite stimulation[15] and concluded that no compelling need exists to make crude marijuana available as a medicine for physicians to prescribe. They recommended that the most appropriate direction for cannabinoid research is to research specific cannabinoids or synthetic analogs rather than pursuing the smoking of marijuana as a way to deliver THC.

Former Assistant Secretary of Health Lee[16] at the request of Congress solicited opinions from investigators at the National Institute on Allergy and Infectious Diseases, who commented on the AIDS wasting syndrome; the National Cancer Institute which commented on the use of marijuana as an antiemetic in cancer chemotherapy; the National Eye Institute which commented on marijuana's use in glaucoma; and the National Institute for Neurological Disorders and Stroke which commented on marijuana's role as an antispasticity drug in multiple sclerosis.

The summary opinion stated:

> This evaluation indicates that sound scientific studies supporting these claims are lacking despite anecdotal claims that smoked marijuana is beneficial. Scientists at the National Institutes of Health indicate that after carefully examining the existing preclinical and human data, there is no evidence to suggest that smoked marijuana might be superior to currently available therapies for glaucoma, weight loss associated with AIDS, nausea and vomiting associated with cancer chemotherapy, muscle spasticity associated with multiple sclerosis, or intractable pain.

The National Institutes of Health reconsidered this issue in 1997[17] and has called for further research into alternate delivery systems for pure THC as well as research into the comparative efficacy of marijuana with newer available medicines which have added heightened efficacy to medication regimes. The summary also expressed concern over pulmonary, neuro, and immunotoxicity of cannabis.

In 1997 the White House Office of National Drug Control Policy commissioned the National Academy of Science, Institute of Medicine (IOM) to evaluate the utility of marijuana for medicinal applications.[18] The study concluded (Table 4) that the challenge for future research will be to find cannabinoids

TABLE 4. Institute of Medicine (IOM) Recommendations[93]

Recommendation 1: Research should continue into the physiological effects of synthetic and plant-derived cannabinoids and the natural function of cannabinoids found in the body. Because different cannabinoids appear to have different effects, cannabinoid research should include, but not be restricted to, effects attributable to THC alone. Scientific data indicate the potential therapeutic value of cannabinoid drugs for pain relief, control of nausea and vomiting, and appetite stimulation. This value would be enhanced by a rapid onset of drug effect.

Recommendation 2: Clinical trials of cannabinoid drugs for symptom management should be conducted with the goal of developing rapid-onset, reliable, and safe delivery systems.
The psychological effects of cannabinoids are probably important determinants of their potential therapeutic value. They can influence symptoms indirectly which could create false impressions of the drug effect or be beneficial as a form of adjunctive therapy.

Recommendation 3: Psychological effects of cannabinoids such as anxiety reduction and sedation, which can influence perceived medical benefits, should be evaluated in clinical trials.
Numerous studies suggest that marijuana smoke is an important risk factor in the development of respiratory diseases, but the data that could conclusively establish or refute this suspected link have not been collected.

Recommendation 4: Studies to define the individual health risks of smoking marijuana should be conducted, particularly among populations in which marijuana use is prevalent.
Because marijuana is a crude THC delivery system that also delivers harmful substances, smoked marijuana should generally not be recommended for medical use. Nonetheless, marijuana is widely used by certain patient groups, which raises both safety and efficacy issues.

Recommendation 5: Clinical trials of marijuana use for medical purposes should be conducted under the following limited circumstances: trials should involve only short-term marijuana use (less than six months); be conducted in patients with conditions for which there is reasonable expectation of efficacy; be approved by institutional review boards; and collect data about efficacy.
If there is any future for marijuana as a medicine, it lies in its isolated components, the cannabinoids and their synthetic derivatives. Isolated cannabinoids will provide more reliable effects than crude plant mixtures. Therefore, the purpose of clinical trials of smoked marijuana would not be to develop marijuana as a licensed drug, but such trials could be a first step towards the development of rapid-onset, non-smoked cannabinoid delivery systems.

Recommendation 6: Short-term use of smoked marijuana (less than six months) for patients with debilitating symptoms (such as intractable pain or vomiting) must meet the following conditions:

- failure of all approved medications to provide relief has been documented;
- the symptoms can reasonably be expected to be relieved by rapid-onset cannabinoid drugs;
- such treatment is administered under medical supervision in a manner that allows for assessment of treatment effectiveness;
- and involves an oversight strategy comparable to an institutional review board process that could provide guidance within 24 hours of a submission by a physician to provide marijuana to a patient for a specified use.

which enhance therapeutic benefits while minimizing side effects such as intoxication and dysphoria. Useful delivery systems for isolated or synthetic cannabinoids could include nasal sprays, metered dose inhalers, transdermal patches, and suppositories. The future for medicinal applications of cannabinoids and whether cannabinoids are equal or superior to existing medicines remains to be determined, but the IOM evaluation is particularly clear on the smoking of marijuana:

> If there is any future for marijuana as a medicine, it lies in its isolated components, the cannabinoids and their synthetic derivatives. Isolated cannabinoids will provide more reliable effects than crude plant mixtures. Therefore, the purpose of clinical trials of smoked marijuana would not be to develop marijuana as a licensed drug, but such trials could be a first step towards the development of rapid-onset, non-smoked cannabinoid delivery system.

The advocates for marijuana would have the public and policy makers incorrectly believe that crude marijuana is the only treatment alternative for large populations of patients who are inadequately treated for the nausea associated with chemotherapy, glaucoma, multiple sclerosis, and other ailments. Numerous effective medications are however currently available for conditions such as nausea. To date, no compelling data substantiates the existence of significant numbers of marginally treated or untreated patients for the maladies which marijuana is advanced.

MEDICAL COMPLICATIONS OF MARIJUANA USE

Marijuana continues to be widely used in our society. While its use declined in the late 1980s and early 1990s, a trend toward increasing use has recently be seen in high school students[19] (Table 5). Marijuana remains the most frequently used illegal drug. The chronic use of marijuana has now been demonstrated to be associated with higher utilization of the health care system and associated cost,[20] a long suspected phenomenon.

The negative side effect profile of marijuana far exceeds most of the other effective agents available. In the studies performed to examine THC for chemotherapy-associated nausea, elderly patients could not tolerate the drug well. Chronic, daily doses of the drug would be necessary to treat many of the proposed medical conditions. This would unnecessarily expose the patients to the toxic effects.

Mental, affective, and behavioral effects are the most easily recognized consequences of acute and chronic marijuana use. Concentration, motor coordination, and memory[21-25] are all adversely impacted.

TABLE 5. Drug Use Rates–Marijuana[94]

PERCENT OF HIGH SCHOOL SENIORS USE OF MARIJUANA

	1978	1986	1987	1988	1991	1992	1993	1994	1995	2000
LAST 12 Mo.	50.2	39	36	33.1	23.9	21.9	26	30.7	35	36.5
LAST 30 DAYS	37.1	23.4	21	18	13.8	11.9	15.5	19	21.2	21.6
DAILY	10.7	4.0	3.3	2.7	2.0	1.9	2.4	3.6	4.6	6.0

The ability to perform complex tasks, such as flying[26-27] is impaired even 24 hours after the acute intoxication phase. The association of marijuana use with trauma and intoxicated motor vehicle operation is also well established.[28-33] Evaluations[34] of the effect of marijuana on driving have determined that the combination of blood alcohol concentrations (BAC) of 0.07 and marijuana at 100 µg/kg gave effects similar to BAC alone of 0.09. Blood alcohol concentrations of 0.07 and marijuana levels of 200 µg/kg demonstrated effects similar to a BAC alone of 0.14 when measuring reaction time, on-road performance, and vehicle following. The study concluded, "Under marijuana's influence, drivers have reduced capacity to avoid collisions if confronted with the sudden need for evasive action." A second related study found that BAC of .05 combined with moderate marijuana had significant drop in the visual search frequency. This is of central importance in an ambulatory environment where patients may smoke marijuana and then drive automobiles.

Several biochemical models have demonstrated abnormal changes in brain cells, brain blood flow, and evidence of brain wave changes.[35-36] Pathologic behavior such as psychosis is also associated with marijuana use.[37-39] Solowij et al. reported that the ability to focus attention and filter out irrelevant information was progressively impaired with the number of years of use, but was not related to the frequency of use.[40] Solowij also determined in a separate report that even among ex-cannabis smokers, the inability to reject complex irrelevant information persisted despite a mean abstinence of two years from marijuana use.[41]

In an examination of college students,[42] daily use of marijuana was associated with impairment of "executive functions" such as learning of lists, perseverations, and attention. In that study, heavy use was defined as use only 29 out of the last 30 days which could have actually been as little as one time daily.

Positron scanning[43] of subjects whose mean use of marijuana was 17 times per week for last 2 years found lower blood flow in a large region of the posterior cerebellum. Not only does this have implications on motor coordination

and function, but also cognition, timing, processing sensory information, and attention.

Despite arguments from marijuana advocates to the contrary, marijuana is a dependence-producing drug. Strangely, in the course of the DEA rescheduling hearings, the marijuana petitioners admitted that "marijuana has a high potential for abuse and that abuse of the marijuana plant may lead to severe psychological or physical dependence" (2). This dependence and associated "addictive" behaviors have been well described in the marijuana literature.[44-49] Marijuana dependence consists of both a physical dependence (tolerance and subsequent withdrawal) and a psychological dependence. Withdrawal from marijuana has been demonstrated in both animals[50] and humans.[51]

The gateway effect of marijuana along with tobacco and alcohol is also well established in research.[52,53] The use of cocaine and heroin is virtually always preceded by marijuana. Kandel and co-workers have pioneered research in this area and continue to find clear evidence of a gateway phenomenon.[54,55] Golub and Johnson contends that the importance of marijuana as a gateway drug has actually increased in recent years.[56]

While the dependence producing properties of marijuana are probably a minimal issue for chemotherapy associated nausea when treatment is required short term or sporadically, it is a major issue for the chronic daily use necessary for glaucoma, AIDS wasting syndrome, and other alleged chronic applications.

The respiratory difficulties associated with marijuana use preclude the inhaled route of administration as a medicine. Smoking marijuana is associated with higher concentrations of tar, carbon monoxide, and carcinogens than are found in cigarette smoking.[57] Marijuana adversely impairs some aspects of lung function and causes abnormalities in the respiratory cell lines from large airways to the alveoli.[58-66] Marijuana smoke causes inflammatory changes in the airways of young people that are similar to the effects of tobacco.[67] In addition to these cellular abnormalities and consequences, contaminants of marijuana smoke are known to include various pathogenic bacteria and fungi.[68-70] Those with impaired immunity are at particular risk for the development of disease and infection when these substances are inhaled.

The effects of marijuana on the unborn were long suspected after original studies in Rhesus monkeys demonstrating spontaneous abortion. While these are insignificant issues for terminal cancer patients, they are serious issues for young women potentially using marijuana for migraines or dysmenorrhea.

Exposure to marijuana during pregnancy,[71-76] is associated with changes in size, weight, and neurologic abnormalities in the newborn. A very alarming association also exists between maternal marijuana use and the development of non-lymphocytic leukemia in offspring.[77-78] Additionally, hormonal function in both males and females is disrupted.[79-83] The potential for hormonal abnormalities in the unborn is undetermined, but real. Day et al. identified a negative effect on intelligence parameters among three year olds when mothers used marijuana during the first and second trimesters of pregnancy.[84] Dahl et al. have discovered sleep disruption among three year olds when exposed during pregnancy.[85] Consistent with the reports of delayed performance, Fried[86] reported that children exposed in utero demonstrate increased behavioral problems, language comprehension, sustained attention, and memory at age 4.

One of the earliest findings in marijuana research was the effect on various immune functions, which is now evidenced by an inability to fight herpes infections and the discovery of a blunted response to therapy for genital warts during cannabis consumption.[87,88] Abnormal immune function is, of course, the cornerstone of problems associated with HIV. The use of chronic THC in smoked form for AIDS wasting not only exposes the patient to unnecessary pathogens, but also risks further immunosuppression. Evaluation of the effect of THC on NK-kB has suggested a possible effect on the HIV genome.[89] In chronic use or use in populations at high risk for infection and immune suppression, the risks are unacceptable.

LOOKING TOWARD THE FUTURE

Bypassing the usual safety and efficacy process of the FDA is a dangerous and unnecessary precedent which widely enhances the availability and acceptance of marijuana. Smoking an impure and toxic substance is of questionable value in the modern medical armamentarium. It is no more reasonable to consider crude marijuana a medical treatment than it is to consider tobacco as medicine.

If marijuana is to be examined for medicinal applications, rigorous research protocols should be focused on pure THC or other cannabinoids rather than crude forms of marijuana. Examples could include the formulation of rectal suppository or aerosol forms, nasal inhalers, or transdermal delivery systems of dronabinol. An exciting new arena of THC analogs and synthetic cannabinoids may yet produce cannabinoid-like substances which enhance efficacy while having minimal or no toxicity.[90] Naturally occurring substances with medicinal value are well known to medicine. Substances such as Digitalis are found in foxglove plant, but modern medicine either purifies or synthesizes such substances to create pure and reliable medicine. The same can be done for the therapeutically beneficial cannabinoids found in marijuana.

While recognizing that there may exist a small group of inadequately treated patients for whom isolated or synthetic cannabinoids may be beneficial, the general use of crude or leaf marijuana for medicinal purposes cannot be supported except in highly circumscribed, controlled, research settings.

Regulatory agencies have a critically important role in the examination of the use of marijuana. They have, unfortunately, been handed a difficult problem to monitor, which has emerged from an atmosphere of "medicine by popular vote." The use of marijuana in states who allow it needs to be tempered by careful patient selection and monitoring. Unless marijuana were approved as a safe and effective treatment by the FDA, allowing it to be used as a medicine is a step backward to the times of potions and herbal remedies.

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APPENDIX 1. States Adopting Medical Excuse Marijuana

Arizona*	Nevada***
Alaska	Oregon
California**	Washington
Colorado	Hawaii****
Maine	Maryland*****

* Arizona Proposition 203 (a follow up to prop 200) in 2002 was voted down. It decriminalized up to 2 ounces of marijuana possession. If an individual could produce a recommendation from any type of health-related provider, the department of public safety (i.e., state police) would have been required to produce marijuana out of seized stores.

** Proposition 215 allows marijuana to be used with a recommendation from a physician. The subsequent initiative, Proposition 36, prohibits incarceration of first **and** second offenders. The California initiative will only allow 30 days in jail maximum for offenders beyond the first and second offense. Prop. 36 specifically prohibits any funding for drug testing, choosing instead to trust drug addicts to hold themselves accountable; prohibits payment for any treatment over 12 months; does not provide funding for treatment programs to help addicts in California prisons. Since the initiation of Prop 36, courts have been flooded with addicts electing "treatment." Forty percent of the defendants who opted for rehabilitation failed to appear or dropped out of treatment programs in the first 6 months of the initiative.

***Nevada 2002 voters rejected an initiative to legalize marijuana possession.

****Hawaii legislature passed defense to possession legislation.

***** May 22, 2003. The new law was passed by the legislature and does not legalize marijuana, but reduces the penalty to a maximum $100 fine with no jail time if defendants convince a judge they need marijuana for medical reasons.

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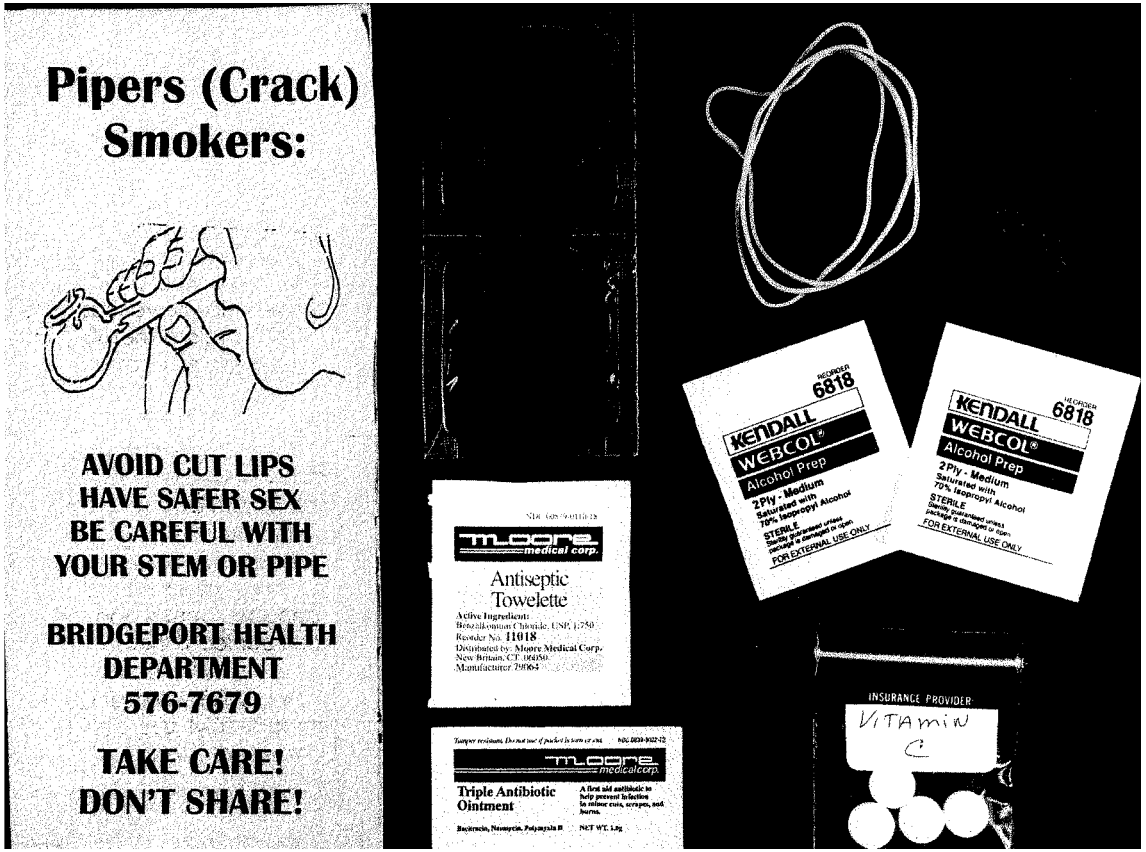
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A first aid antibiotic to help prevent infection in minor cuts, scrapes, and burns.
NET WT. 1.5g
REORDER 6818
KENDALL
WEBCOL®
Alcohol Prep
2 Ply - Medium
Saturated with 70% Isopropyl Alcohol
STERILE
FOR EXTERNAL USE ONLY
REORDER 6818
KENDALL
WEBCOL®
Alcohol Prep
2 Ply - Medium
Saturated with 70% Isopropyl Alcohol
STERILE
FOR EXTERNAL USE ONLY
INSURANCE PROVIDER
VITAMIN C

Other Suggestions:

- **If your pipe or stem is unsafe (broken mouth piece or hardened choy) wrap a matchbook cover or rubber band to secure it. You can also make a pipe from a plastic bottle or a can using cigarette ashes as a filter. Beware, cans and tin foil can get very hot!**
- **If it tastes wrong, don't smoke it! Everything that looks like crack , isn't!**
- **If you smoke indoors, make sure it is ventilated. Poorly aired rooms can be risky for tuberculosis (TB) Cover your mouth when coughing.**
- **If you have problems breathing or are coughing up dark stuff, slow down or stop smoking for a while! See a doctor is it continues!**
- **If you think that you have a sexually transmitted disease, come to the free clinic, get tested.**
- **Come to any of our sites for more information. If you are looking for detox or rehab, we can connect you with our drug treatment advocate.**

Needle Exchange Program
Programa de Intercambio de Agujas

Monday-Lunes

10:15 - 11:45	PT Barnum Apts. (Taylor Dr.)
12:00 - 1:15	Downtown -Middle Street
1:30 - 2:00	Beardsley Terrace
2:15 - 2:45	East Main Street & Arctic St.
3:30 - 4:30	Marina Village
5:00 - 6:15	PT Barnum Apts.
6:30 - 7:15	Fairfield Ave.
7:30 - 8:30	Green Apts.
9:00 - 9:30	James St. & Harral Ave.

Tuesday - Martes

10:30 - 12:00	PT Barnum Apts.t
12:15 - 1:30	Downtown- Middle Street
1:30 - 2:30	Marina Village
3:30 - 4:30	PT Barnum Apts.
5:00 - 6:30	Stratford Ave.
6:45 - 7:30	East Main Street
7:45 - 8:30	Marina Village
8:45 - 9:30	Iranistan Ave & Fairfield Ave.

Wednesday - Miercoles

10:30 - 12:00	PT Barnum (Taylor Drive)
12:30 - 2:45	Downtown-Middle St. (Women's Grp)
3:15 - 3:45	Evergreen Street
4:00 - 5:15	PT Barnum
5:30 - 6:30	Marina Village
6:45 - 7:30	East Main Street
7:45 - 8:30	Catherine Street
8:45 - 9:30	James St. & Harral Ave.

Thursday - Jueves

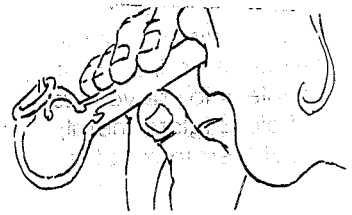
10:30 - 12:00	PT Barnum
12:00 - 1:15	Downtown - Middle Street
1:30 - 2:00	Marina Village
2:15 - 2:45	East Main Street

Friday - Viernes

10:30 - 12:00	PT Barnum Apts

Drug Treatment Services
576-7238
funding provided by Drug Policy Foundation

Pipers (Crack) Smokers:



AVOID CUT LIPS
HAVE SAFER SEX
BE CAREFUL WITH
YOUR STEM OR PIPE

BRIDGEPORT HEALTH DEPARTMENT
576-7679

TAKE CARE!
DON'T SHARE!

"Crack" or **"Rock"** cocaine may lead to sexually transmitted diseases (STDs) such as HIV/AIDS, syphilis, or gonorrhea as well as other diseases like tuberculosis (TB). By engaging in unsafe practices and/or unsafe sex, people who use various types of pipes (glass, metal) can put themselves at risk for these diseases.

Don't get cut lips!

Cuts caused by sharp or hot pipes can expose "pipers" and others to infectious diseases, especially when you have oral sex without a condom, dental dam or a latex barrier. If there is blood or saliva on your pipe or stem, thoroughly wipe it off immediately! Use a pipe or stem with a taped or rubber covered mouthpiece.

SAFER USING

1. Use a glass or metal stem with mouthpiece. DON"T get cut lips.
2. Don't share your stem or pipe. If you do, wipe the mouthpiece before using.
3. Use a clean choy or copper wire. Pipe screens are best.
4. If using a plastic bottle for a pipe, remember to change the foil. Keep clean ashes. Wipe mouth holes before using.
5. Try not to binge!! Take time between hits.
6. Drink water as often as possible. Try to eat something.
7. Get rest.
8. Let pipe or stem cool down before taking next hit to prevent burning or cutting lips.
9. Have safer sex! Always use latex

UNSAFE USING

"THINGS NOT TO DO!"

1. Smoking from a pipe or stem that doesn't have a rubber covered mouth piece.
2. Smoking from a hot pipe.
3. Smoking form a cracked pipe.
4. Not wiping the stem pipe when you share.
5. Giving or receiving "shotguns."
6. Using plastic bottles as pipe without changing tin foil or keeping fresh ashes.
7. Smoking with cracked lips
8. Having sex without latex condoms or dental dams, especially when on a binge.

http://www.baltimoresun.com/news/local/bal-md.needles14sep14,1,937155.story

Reaching out to the fringes

Baltimore's needle exchange program has been deemed an overall public health success. But most younger drug users aren't participating, and the city's worried.

By Alec MacGillis
Sun Staff

September 14, 2005

The young redhead with the stylish black backpack and heart-shaped earrings had come a long way to be standing at Monroe and Ramsay streets in Southwest Baltimore, waiting her turn outside the big white van. For years, she'd put off this moment: signing up herself and her husband for the city's needle exchange program.

The couple -- their street names are Pebbles and Bam-Bam, a nod to the Flintstones television characters -- have been injecting heroin since they were 17, she said. They've been sharing used syringes with others and attempting to clean them with water and bleach between uses, rather than coming to the exchange for new ones, even though they were aware of the serious health risks in sharing.

"I always think, 'I'm going to get clean, so I don't need to [join the exchange],' but then we don't get clean, and we don't accept the fact that we're using," said the 21-year-old woman, who is from southwestern Baltimore County. "So just today, I said, 'We're going.' I've been thinking about getting clean, but if I'm going to keep living this lifestyle, then I ought to at least do this."

At a time when heroin remains Baltimore's leading drug scourge, city officials wish more addicts like the couple would make use of the exchange program -- a key tool in efforts to curb the spread of HIV. But despite growing up in the shadow of AIDS, or acquired immune deficiency syndrome, most younger drug users are not participating, a problem especially acute among whites in their teens and 20s.

A recent study by researchers at the Johns Hopkins University Bloomberg School of Public Health found that only 10 percent of people who started injecting drugs in the past five years rely on the exchange as their main source for syringes. An additional 18 percent of the 294 users surveyed, most of whom were interviewed in Southwest Baltimore, said they were mainly obtaining their syringes from pharmacies, where a 10-pack costs about $2.50.

But most users said they bought needles on the street -- a risky practice because they can't be sure the needles are new -- or shared them.

While the study found that addicts were more likely to visit the exchange as they grew older, Susan G. Sherman, the lead author, said "it's really important" to attract users soon after they first start on drugs.

"Habits get established very early," she said.

There are no reliable statistics for what proportion of drug injectors of all ages rely on the needle exchange, which the city instituted 11 years ago after overcoming opposition from some state lawmakers and other critics who argued it would encourage drug use. The exchange has registered more than 15,000 people since it began and has about 325 visitors a week, many of whom are believed to distribute or sell the needles they obtain to other users.

Overall, the program, which costs just under $500,000 a year, has been deemed a public health success: Every week, the exchange's two vans distribute about 6,500 syringes and other injecting equipment (swabs, cookers, bottles of water and bleach) in exchange for dirty needles at a dozen sites around the city. The vans also offer HIV tests and drug treatment information. Since the program's inception, the rate of new HIV cases attributed to intravenous drug use has dropped by a fifth, to about 40 percent of cases.

But Monique Glover Rucker, the city Health Department's senior adviser on HIV/AIDS and harm reduction programs, acknowledged the problem identified by the Hopkins study. Only 6 percent of those the program has enrolled since it began were younger than 25, she said, and the number of younger addicts registering with the exchange has remained flat even as the program has expanded its number of sites.

To address that, the city is applying for a $25,000 grant from the Tide Foundation to improve the exchange's reach among younger users, Rucker said. The grant money would be used to pay younger addicts who use the exchange to do outreach work among other younger injectors and to pay for a new weekly exchange time that would be dedicated to users younger than 30.

The hope is that such measures could increase the comfort level that younger addicts, particularly younger white addicts, feel toward the exchange, Rucker said. Previous studies have shown that heroin addicts in their teens and early 20s in Baltimore tend to be white, whereas blacks tend to start using hard drugs later, in their late 20s and 30s. The exchange's staff is all black, which Rucker speculated could deter some white addicts from using it.

"Ideally, the [exchange's clientele] would be completely representative of [the addict population], but it's not. The users are changing, and we need to make sure we're reaching all of the population," Rucker said

Increasing the program's reach among younger users won't be easy, however. Interviews with about 20 addicts who recently visited the city's exchange site at Monroe and Ramsay revealed a variety of reasons that others stay away.

Some clients said younger addicts were in denial about their addiction or were hiding their drug use from their families. The same feelings of shame, they say, keep many younger addicts from buying syringes from pharmacies, which several years ago were allowed to sell syringes over the counter. (The law gave pharmacists discretion on sales, but addicts say it's not difficult finding stores that sell needles.)

Clients at the van suggested a dedicated exchange site for young people be located in a building or another more secluded location, not at a well-trafficked street like Monroe.

"They're scared that somebody walking by will see them and will tell their family, 'I seen so and so by the van,'" said Chris Morcek, a 36-year-old construction worker in a black T-shirt from Arbutus who recently visited the van.

Devon, a tall, blond 26-year-old prostitute raised in Essex and Middle River, said an outreach effort by younger addicts who use the exchange would also be a good idea because many young addicts, some of whom hail from outside the city like herself, didn't necessarily know about the exchange sites. Just that day, she said, she had persuaded a friend to come with her to the exchange for the first time because the friend had tested positive for hepatitis C.

"I'm not letting her use my tools," said Devon, who, like some others interviewed, would not give her full name because she didn't want to expose her addiction.

Several younger addicts who use the exchange program said it took them a while to start coming simply because they were too busy "running the streets" looking for drugs and money to pay for them and not thinking clearly enough to get themselves to the site on time.

A 23-year-old addict, a West Virginia native who gave only her first name, Amy, came rushing up to the van with her black purse full of syringes to exchange, just moments after it had closed for the afternoon -- the second time that had happened to her, she said.

"I didn't realize what time it was," said the rail-thin brunette, as a middle-aged man waited for her in a car across the street. She said he supported her $75-a-day heroin habit. It took her about a year of injecting before she even started coming to the van at all, she said. "It's being lazy about it. I had the time, but I didn't want to take the time."

To some older addicts who have been coming to the van for years, the reluctance of younger users is just another sign of the foolhardiness of youth.

"They think, 'It can't happen to me.' That's the way they are," said Mark Bartlett, a native of Southwest Baltimore who has used heroin since his teens and looks much older than his 32 years. "To them, [the exchange] is a waste, a joke. Anything dealing with their health is a waste of time. It's, 'I'm young; I'm going to live forever.'"

A related recent Hopkins study of a similar population of addicts found that more than 90 percent of younger addicts interviewed knew about the risks of contracting HIV or hepatitis C from shared needles. (In both studies, about 5 percent of addicts interviewed tested positive for HIV, while the rate of hepatitis C infection ranged from a third in one study to more than half in the other.)

But Sherman, the author of both studies, said addicts' awareness about disease risk doesn't always translate into prudence when users are craving heroin.

"By 11 o'clock in the morning you're very sick, and you're not thinking about what's going to happen [from sharing]. Your boyfriend shoots up and there's only one syringe, and so what are you going to do? They're not thinking," she said.

Pebbles, for her part, said she and her husband weren't so reckless, even before they decided to come to

the exchange. They tried, she said, to clean shared syringes by dipping them repeatedly in water and bleach, which, if done right, can greatly reduce the risks of disease transmission.

But it got to the point where she deemed even the risk left after cleaning to be too big.

"Who knows? It might be too late," she said. "I might have already caught something."