Overview: Injection drug users and their sexual partners and children represent an increasing proportion of Americans living with HIV or AIDS. Syringe-exchange programs (SEPs), which are based on the theory of harm reduction, are effective in preventing the transmission of HIV and other pathogens through injection drug use. Most programs also serve as gateways to other vital medical services. Yet SEPs remain controversial. This article describes the controversy, considers the evidence, and discusses the nursing implications.

It is indisputable that the HIV and AIDS epidemic has become a global health crisis. Through the end of 2005, an estimated 40.3 million people worldwide (including more than 1 million in North America) were living with HIV or AIDS, according to a report by the Joint United Nations Programme on HIV/AIDS and the World Health Organization. In this country (and some others, including Canada), injection drug users and their sexual partners and children represent an increasing proportion of this population. Regardless of how one feels about injection drug use, its role in HIV transmission makes it a pressing public health concern.

According to the Centers for Disease Control and Prevention (CDC), an estimated 26% of AIDS diagnoses among people age 13 or older through 2003 are associated with exposure to injection drug use. Among women, 57% of all AIDS cases are associated. (Although this article focuses on the association between injection drug use and HIV transmission, injection drug users are also at high risk for contracting hepatitis B and C, as well as parasitic and bacterial infections.)

There are several strategies that can prevent the spread of HIV and other pathogens through injection drug use. One such strategy, syringe-exchange programs (SEPs; also known as needle-exchange programs), remains controversial. Although estimates vary, in 2002 at least 148 SEPs were operating in the United States; collectively, they reported distributing 24.9 million syringes that year. Opponents of SEPs believe these programs are ineffective and may even encourage injection drug use; proponents believe SEPs can effectively reduce HIV transmission rates.

THEORETICAL APPROACHES: PROHIBITION AND HARM REDUCTION

There are two main approaches to the problem of drug abuse in this country. The predominant strategy is commonly known as “the war on drugs.” The term reportedly was first used at a June 1971 press conference by President Richard Nixon, and the war has been raging since. It is an expensive one; in 2004 alone, the federal government poured almost $12.1 billion into the fight. Yet the 2004 National Survey on Drug Use and Health found that about 8% of the population age 12 years or older reported current illicit drug use, a prevalence that has remained virtually unchanged for several years.

The war on drugs relies heavily on criminal law enforcement and incarceration, strategies the Lancet’s editors have called “a largely futile effort to stem the influx of drugs,” one that results in the imprisonment of “hundreds of thousands” of offenders. This, despite the fact that “study after study has shown that treatment and prevention help far more people at far less cost” than do prohibitive and punitive measures. For example, a study commissioned by the Drug Policy Alliance found that
“states like New Jersey that increased their use of prison for drug offenses . . . did not experience less drug use than other states that made more moderate use of prison for drug offenders.” In “Drug Wars,” an installment of the national public television show Frontline that aired in October 2000, almost every interviewed drug enforcement official agreed that current strategies needed to be revamped.5

According to the Lancet, only about one in four Americans who need treatment for substance abuse are in treatment programs.8 A recent study by McAuliffe and Dunn found treatment availability did not meet treatment need in 32 states; the largest gaps were found in southern and southwestern states.10 In U.S. prisons, where drug offenders constitute about 21% of the state and 63% of the federal prison population, the percentage receiving treatment is even lower.11 A 1997 Department of Justice survey among state and federal prisoners found, of those admitting to illicit drug use in the month before their offense, only 15% participated in drug treatment programs while incarcerated, down from almost 37% in 1991.12 Many treatment programs offer outpatient services or short-term stays only or require that clients be drug free on admission; others accept only self-paying clients or clients with private insurance, and few accept Medicaid or Medicare. (To locate a program in any state, visit the Substance Abuse and Mental Health Services Administration’s treatment facility locator at http://dasis3.samhsa.gov.)

In the 1980s an approach based on the idea of harm reduction received increasing attention. As the Harm Reduction Coalition (HRC) (www.harmreduction.org), a nonprofit organization, describes it, this approach accepts that substance abuse exists and, instead of ignoring or condemning it, works toward minimizing its harmful effects.13 The injection drug user is seen as the “primary agent” of harm reduction; community and individual well-being, not cessation of drug use, are the criteria by which the success of an intervention is measured. As Edith Springer, a cofounder of the HRC’s Harm Reduction Training Institute, recently put it, harm-reduction treatment models rely on “a combination of respect for the customer, nonjudgmental stances, compassion, empathy, and practicality.”14 This is in keeping with the ANA’s Code of Ethics for Nurses with Interpretive Statements, which states that the nurse “practices with compassion and respect for the inherent dignity, worth, and uniqueness of every individual, unrestricted by considerations of social or economic status, personal attributes, or the nature of health problems.”14 Current harm-reduction strategies for injection drug users include SEPs, methadone clinics, condom distribution, free screening for HIV and other illnesses, treatment referrals, and counseling.

ARE SEPS EFFECTIVE?

Opponents of SEPs have contended that such programs do not reduce HIV transmission or injection-related risk behaviors. Some believe that SEPs actually lead to increased drug use by making syringes more readily available. Proponents of SEPs argue that they are effective in reducing HIV transmission and risk behaviors and do not lead to increased drug use. Most of the evidence appears to support the latter contentions.

According to the CDC, the one-time use of sterile syringes remains the most effective way to limit HIV transmission associated with injection drug use.3 Although some studies have found little or no reduction of HIV transmission in association with SEPs,15,16 the majority of studies demonstrate significantly reduced rates of HIV transmission and injection-related risk behaviors (such as needle sharing or inconsistent use of bleach for cleaning syringes) among SEPs clients. For example, an analysis of New York State–approved SEPs found that during a 12-month period, an estimated 87 HIV infections were averted as a direct result of the use of SEPs.17 A literature review found “strong support” for the role of SEPs in reducing HIV transmission rates; in one study of 81 cities, the mean annual HIV seroprevalence rate decreased 5.8% in the 29 cities with SEPs, but increased 5.9% in the 52 cities without SEPs.18 A metaanalysis from 47 studies concluded that SEPs effectively reduced injection-related risk behaviors.19 A recent study on the long-term effects of SEPs found that injection-related risk behaviors did not increase among participants over a four-year period despite factors such as homelessness and depression.20 New HIV diagnoses in this country have been declining both overall and among injection drug users in recent years,21,22 and most experts attribute this in part to SEPs and other harm-reduction strategies.

SEPs also function as gateways to other medical services. A 2002 survey conducted by Beth Israel Medical Center in New York City and the North American Syringe Exchange Network found that of
the 126 SEPs surveyed, 77% provided referrals to substance abuse treatment, 72% provided on-site voluntary counseling and HIV testing, and more than two-thirds provided supplies such as bleach, alcohol pads, and male and female condoms. Many also provided screening for hepatitis and tuberculosis and offered on-site medical care. Moreover, many injection drug users who use SEPs will informally provide information about health maintenance and risk reduction to other drug users outside the exchange program. Injection drug users are more likely than nonusers to be homeless, mentally ill, unemployed, or a combination thereof, and some SEPs offer assistance with social services.

Yet, as Human Rights Watch recently reported, “most states continue to restrict access to sterile syringes by enforcing ‘drug paraphernalia’ laws against needle-exchange program participants and regulating the purchase and sale of syringes in pharmacies.” Although the CDC has given SEPs a central place in their HIV Prevention Strategic Plan, many people remain unconvinced of their merit. Some of the main areas of ongoing discussion are outlined here.

**Ethics.** A common assertion is that a desired end, no matter how good, cannot justify the use of ethically reprehensible means. Accordingly, some opponents of SEPs contend that although such programs may result in reduced HIV transmission rates, providing sterile syringes facilitates injection drug use; therefore SEPs are ethically wrong.

But this argument is unsupported by evidence. No studies have shown that, lacking sterile syringes, injection drug users stop injecting; rather, they are likely to inject whether or not sterile syringes are available. As a participant in VanderWaal and colleagues’ study said, “I’ve seen guys pick up needles off the street.” A study by Hagan and colleagues found that injection drug users who use an SEP were more likely to report reduced injection frequency or to stop injecting, and to remain in drug treatment, than those who did not. New SEP clients were also five times more likely to enter drug treatment than those who had never used an SEP.

Another point of contention involves a fundamental tenet of the health care profession: the obligation to do no harm (nonmaleficence). They argue that health care professionals have a responsibility to protect the public health; and by reducing the transmission of HIV and other infectious diseases, SEPs serve that end.

**Public perceptions and fears.** Federal government funding for SEPs has often been withheld on the grounds that the public will perceive such funding as official sanction of illicit drug use. “Just say no” has been the government’s message for years. But is it ethical for the government to fail to support SEPs (and thus fail to prevent many cases of HIV transmission on the basis of public misperception)?

Residents often fear that if an SEP opens in their neighborhood, it will bring with it increased crime. It’s well known that drug abuse and drug trafficking are often linked with community devastation, manifesting in high rates of unemployment, homelessness, and crime. But several studies have demonstrated that neighborhood crime rates do not rise after an SEP opens. Nor does the presence of an SEP increase the number of discarded syringes found in its vicinity.

Strong opposition to the harm-reduction approach has sometimes come from black community leaders. Blacks have been disproportionately affected by the HIV and AIDS epidemic; in 2003 the rate of new AIDS diagnoses in blacks was nearly 10 times that in whites and three times that in Hispanics. In a study that explored barriers to HIV prevention among predominantly black injection drug users, VanderWaal and colleagues stated that many black leaders view SEPs as “quick-fix, low-budget substitutes for much needed drug user treatment programs and economic support.” As one black elected official reportedly stated, “I cannot condone my government telling communities ravaged by twin epidemics of drugs and AIDS that clean needles are the best we can do for you.” And at worst, VanderWaal and colleagues stated, SEPs are seen as an “attempt [by] the white power establishment to weaken or eliminate the black population by supporting continued drug use.” As they note, given the exploitation of black communities by past public health initiatives (such as the Tuskegee Syphilis Study), that distrust isn’t completely unjustified. VanderWaal and colleagues conclude that it underscores the importance of providing reliable, readily accessible harm-reduction services, including SEPs. In the face of opposition, they recommend working with community members and tailoring services and education to the needs of that community.
IMPLICATIONS FOR NURSING
The International Council of Nurses’ *Code of Ethics for Nurses* speaks of the nurse’s responsibility “for initiating and supporting action to meet the health and social needs of the public, in particular those of vulnerable populations,” a category that includes injection drug users. In its position statement on needle exchange and HIV, the ANA states, “nurses support the availability of needle exchange programs [that] include adherence to public health and infection control guidelines, access for referral to treatment and rehabilitation services, and education about the transmission of HIV disease.” Nurses need to identify pragmatic and effective strategies for working with injection drug users. Areas of focus should include provision of care, advocacy, and program development.

**Provision of care.** In addition to educating injection drug users on HIV prevention and risk reduction, nurses can inform them about SEPs and other community resources. The needs and experiences of the individual should be considered. For example, some people may be unable to read or understand English; others may not trust the verbiage of national prevention campaigns or of professionals whom they may view as “sterile entities largely out of touch” with their needs and struggles. Handing out brochures and pamphlets is not enough. Nurses must be able to communicate effectively and comfortably with clients who, for example, may be experiencing withdrawal symptoms or are not adhering to a treatment plan. Participating in a professional workshop or continuing education program on injection drug use may be useful. Family Drug Support, an Australian nonprofit organization, offers a fact sheet on communicating with drug users that may assist health care professionals as well as family members: www.fds.org.au/pdf/FactSheet18_CWDU.pdf. Educating clients and providing referrals to SEPs and other resources can also indirectly foster informal communication and support networks among drug users.

Nurses who work with SEPs can help clients to access other services available at the exchange site. Some SEPs provide lists of emergency shelters, referrals, and food and clothing donations. In areas without SEPs, other harm-reduction programs such as HIV-prevention programs may provide nurses with similar opportunities. For example, in New Hampshire, where one of us (Fogg) resides, SEPs are currently unavailable. Her community-outreach work has included identifying pharmacies that will sell needles without a prescription and informing injection drug users where to purchase them.

**Advocacy.** In order to achieve policy change, nurses may need to educate the general public and public leaders regarding the efficacy of SEPs in decreasing the transmission of HIV and other infectious pathogens. Collaboration with other health care professionals and policymakers can add clout. In April 1989, Seattle became one of the first U.S. cities to legally adopt an SEP, largely because of the joint efforts of local health care workers and public health officials.

Some people may be unable to read or understand English. Handing out brochures and pamphlets is not enough.
efforts, while 44.5% went to treatment and prevention efforts. Public officials should be encouraged to redirect more “antidrug” money into improving and expanding drug treatment programs.

Program development. Many states have limited rehabilitative services for injection drug users. For example, in 1998 Rich and colleagues surveyed patients enrolled in one of the two state-funded detoxification facilities in Rhode Island. Although both facilities offered medical and counseling services, the longest stay permitted was seven days, and the average length of stay was just four and a half days. Twenty-nine percent of patients left before completing treatment; only 53% of those who completed it left with an aftercare referral plan. New models of treatment and detoxification programs are needed. Bed shortages aren’t the only reason more substance abusers aren’t in treatment. Many drug users, realizing one week of treatment will be inadequate to help them overcome long-term addiction, don’t want to enroll in seven-day programs. Some programs aren’t equipped to accept people with certain disabilities. Nurses can collaborate with other health care professionals to develop and run treatment programs that can more realistically meet the needs of long-term drug users.

Nurses can support the development of comprehensive educational programs for nurses and other health professionals regarding drug abuse and related health concerns such as risk behaviors, the harm-reduction approach, and effective treatment and prevention modalities. Being able to interact effectively with injection drug users and helping them to set realistic, attainable goals are essential skills.

Eventually, more effective, less controversial approaches to the problem of HIV transmission associated with injection drug use may emerge. Until then, SEPs and other harm-reduction strategies remain the best approach to curbing the adverse health effects of injection drug use. ▼

REFERENCES


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