

AMERICAN ACADEMY OF PEDIATRICS

Reducing the Risk of Human Immunodeficiency Virus Infection Associated With Illicit Drug Use

Provisional Committee on Pediatric AIDS

Injection and other illicit drug use plays a major role in the transmission of infection with human immunodeficiency virus (HIV), including cases among infants, children, and adolescents.^{1,2} Transmission to adolescents and adults occurs either directly from contaminated drug paraphernalia, including needles and syringes, or through sexual contact with an infected partner. Transmission to infants occurs transplacentally or perinatally from mothers who are most often either drug users themselves, or who have become infected from sexual partners who are injection drug users. It is therefore clear that a reduction in the transmission of HIV infection secondary to illicit drug use and the use of contaminated injection equipment is a pediatric concern and should be part of any prevention program.

The adverse consequences of illicit drug use are multiple and certainly not limited to the potential acquisition and transmission of HIV infection. Ideally, treatment and prevention programs should seek to reduce drug use itself, not solely HIV infection. However, many users of injection drugs do not enter drug treatment, remain in treatment, or maintain complete abstinence while in treatment. Therefore, promoting safer injection practices can provide an important public health benefit in lowering the risk of HIV transmission, while simultaneous efforts continue to reduce and eliminate drug use.

Initiatives with the singular objective of increasing access to sterile equipment are understandably controversial, as they do not directly address the causes and broader consequences of illicit drug use. In addition, there are continuing concerns that any program increasing access to sterile needles and syringes might actually increase injection drug use by creating the impression of relative safety and tacit community approval for such behavior. Despite these legitimate concerns, increasing evidence demonstrates that access to clean injection drug equipment does not increase drug use.³⁻¹⁵ Although prospective, randomized, controlled trials have not been feasible, and not all programs have been able to demonstrate a protective effect against the spread of HIV infection, the number of studies demonstrating benefits from needle exchange programs, particu-

larly those conducted within the context of comprehensive drug treatment, is now sufficient to state that new cases of HIV infection have been prevented. Notwithstanding these apparent successes, additional research is needed to define the circumstances under which these findings are generalizable to other drug using populations, and which factors promote the benefits and minimize possible adverse consequences.

A Drug Prevention Initiative

Far better than initiatives to treat drug abusers or reduce the consequences of drug dependence would be effective methods for preventing the onset of such behavior. Efforts towards preventing illicit drug use should begin early and be directed at children and adolescents who have not yet established a pattern of drug dependence or injection drug use. Initiatives should be coordinated and broadly based with involvement of the family, schools, and community agencies.

Treatment of Illicit Drug Use

The appropriate level of drug abuse treatment services should be readily available to any individual who becomes drug-dependent.^{16,17} Particular to the concerns of pediatricians would be access to care and attending to the special needs of adolescents, pregnant women, and mothers as these groups continue to encounter barriers to such care.

Risk Reduction Initiatives

Risk reduction initiatives should be viewed as adjunctive to other efforts to have an impact on the multiple consequences of illicit drug use. Reducing the risk of HIV transmission may take many forms, including:

Risk reduction education. Educational initiatives should include community programs to provide information to users of injection drugs and other drugs (eg, crack cocaine) regarding sexual risk behaviors for the transmission of HIV, the relationship between the exchange of sex for drugs and HIV infection, and the protection to be gained from the proper use of condoms. Efforts should be made to encourage cessation or reduction of illicit drug use, promote entrance into drug treatment, and discourage the sharing of drug paraphernalia.

Bleach decontamination of used injection equipment. A significant proportion of drug-dependent individu-

The recommendations in this statement do not indicate an exclusive course of treatment or procedure to be followed. Variations, taking into account individual circumstances, may be appropriate. PEDIATRICS (ISSN 0031 4005). Copyright © by the American Academy of Pediatrics.

als are unwilling or unable to stop injecting drugs and do not have access to new or sterile needles and syringes. Bleach disinfection of injection equipment should be considered as a method to reduce the risk of HIV infection from reusing or sharing needles and syringes when no other safer options are available.¹⁸ Instruction in the proper technique for utilizing household bleach to decontaminate injection equipment can help reduce the risk of transmission of HIV.

Reassessment of drug paraphernalia laws. Many states have laws that establish criminal penalties for the possession of drug injection equipment or make it an offense for pharmacists to sell needles and syringes to anyone without a physician's prescription. To the extent that the perception or enforcement of these statutes discourages risk-reducing behaviors, reevaluation of existing laws should be considered.¹⁹

The provision of clean needles—"needle exchange programs." During the past decade there have been a series of programs in the United States, Canada, Europe, and Australia that have encouraged abusers of injection drugs to exchange used needles for clean, sterile needles. These programs have been initiated in an attempt to decrease the spread of HIV in this population. The exchange of needles is most often accomplished within the context of an organized program that mandates counseling, provides an opportunity for education, and encourages treatment. The provision of clean needles to injection drug users who have access to treatment but are unwilling or unable to enter treatment or remain abstinent while in treatment may facilitate reducing the acquisition or transmission of HIV infection.⁸ Despite evidence that supports the efficacy of needle exchange programs,³⁻¹⁵ arguments against this approach persist. Reasons advanced for opposition to needle exchange programs include: needle distribution gives the appearance of public sanction of illicit drug use; policies that permit access to needles undermine the force and efficacy of laws that prohibit the sale or possession of needles and places the government at odds with itself; and the provision of sterile needles encourages illicit drug use and will exacerbate the problem. Nonetheless, the benefits of improved access to sterile equipment would appear to have clearly established that many cases of HIV infection in children and adolescents can be prevented by incorporating such services as a part of a comprehensive approach to the treatment and prevention of illicit drug use.

CONCLUSIONS AND RECOMMENDATIONS

The adverse consequences of illicit drug use are multiple and are a major factor in the spread of HIV infection to infants, children, and adolescents. The American Academy of Pediatrics believes that initiatives to address these consequences should include:

1) preventing illicit drug use, the ready availability of treatment to individuals who are drug users, and reducing the risk associated with continued drug use.

- 2) programs that improve knowledge about decontamination of injection equipment and provide access to sterile injection equipment thereby can reduce the spread of HIV and prevent new cases of AIDS. These programs should be encouraged and expanded; linked to drug treatment; and conducted within the context of continuing research to document effectiveness and clarify those factors that contribute to desired outcomes.
- 3) a reassessment of laws regarding the possession of needles, syringes, and bleach from a public health perspective with attention to both the desire to minimize the potential that such statutes might discourage individuals from engaging in risk-reducing behavior, and the continuing goal of discouraging illicit drug use.

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