Data and Public Health Decision Making on HIV Prevention in Injection Drug Users

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In this issue, Neaigus et al.¹ present interesting data comparing sources of injection equipment, injecting risk behavior, human immunodeficiency virus (HIV) prevalence, hepatitis C virus (HCV) prevalence, and risk behavior among injecting drug users (IDUs) from Newark, NJ, and New York City. Newark is only 10 mi (16 km) from New York City, but at the time of data collection, the two cities had radically different environments with respect to obtaining sterile injection equipment for injecting drugs. At the time of data collection (2004–2006), New York City had both large-scale syringe exchange programs and the Expanded Syringe Access Program through which drug users can legally purchase needles and syringes at pharmacies without a prescription, while Newark had neither syringe exchange nor legal pharmacy purchase.

As expected, IDUs in Newark were much less likely to obtain needles and syringes from guaranteed safe sources (exchanges and pharmacies; adjusted odds ratio [AOR]=0.004, 95% confidence interval [CI]=0.001 to 0.01), much more likely to report receptive syringe sharing (AOR=2.3, 95% CI=1.1 to 5.0), much more likely to be HIV seropositive (AOR=3.2, 95% CI=1.6 to 6.1), and much more likely to be HCV seropositive (AOR=3.0, 95% CI=1.8 to 4.9). These data should be seen as a continuation of differences that emerged with the legal expansion of syringe exchange programs in New York City in the mid-1990s. In a 1996 study, the adjusted hazard ratio of HIV incidence among IDUs attending the exchanges compared to IDUs not attending exchanges in the New York/New Jersey metropolitan area was 3.5 (95% CI=1.3 to 9.1).²

As noted in the article of Neaigus et al.,¹ New Jersey recently passed a law permitting up to six syringe exchange programs in the state. This law included an extra \$10 million for drug abuse treatment programs in the state but did not include any funding for syringe exchange programs. As of March 2008, the New Jersey syringe exchange programs were struggling. Only three had opened, and only one program—Atlantic City—was attracting large numbers of clients.³ The Atlantic City program was relatively well funded, had additional support from a local acquired immunodeficiency syndrome (AIDS) service organization, and was utilizing staff from a nearby drug treatment program.⁴ That most of the New Jersey programs were struggling is also not surprising. In addition to the startup difficulties, the lack of public funding is strongly associated with both fewer syringes exchanged and fewer services offered by syringe exchange programs in the USA.^{5,6}

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IDUS, HIV/AIDS, AND PUBLIC HEALTH DECISION MAKING

In a previous analysis of the diffusion of syringe exchange programs,⁷ I proposed a three-component typology of public health decisions regarding the threat of HIV among IDUs. Consideration of the recent developments in New Jersey suggests that this typology should be updated to include four types of public health decisions regarding HIV and injection drug use.

1. “Missing data” decision making. When the development of the HIV antibody test in 1984–1985 showed the extensiveness of HIV among IDUs, it was clear that prevention programs were urgently needed, but there were no data on outcomes for different programs. Decisions were made on the basis of best guesses as to which programs would be safe and effective.
2. “Data-based” decision making. There is now, of course, sufficient evidence for selecting and implementing safe and effective HIV prevention programs for IDUs.
3. “Data-proof” decision making. Despite the accumulated evidence, some health and political officials continue to refuse to implement effective HIV prevention programs for IDUs. These decisions are not made on the basis of scientific data but on the symbolic value attributed to the programs—do they appear to “condone” drug use? Presenting additional data to these decision makers is generally not an effective change strategy.
4. “Data-compromise” decision making, which combines elements of acting on the best available data with elements that symbolically “disapprove” of continued drug use and/or attempt to control drug users. The New Jersey law that does not provide funding for syringe exchanges exemplifies this type of decision making. Other examples would include prohibition of secondary exchange and the recent decision in the Australian Capital Territory to permit bleach distribution but not syringe exchange in prisons.⁸

“Data compromise” decisions may be among the most common type of decisions in the field of HIV prevention for IDUs. I am not aware of any formal research on data-compromise decision making but would offer the following initial suggestions for persons having to make such compromises.

First, try to obtain enough resources to make a difference in the local HIV epidemic. Second, attempt to minimize stigmatization in the use of the programs. Third, think of the school kids early. The potential effectiveness of the first New York City syringe exchange program was greatly restricted when the mayor made a last-minute decision that no exchange could be within 1,000 ft of a school. This meant that the only available location controlled by the Health Department was quite inconvenient for drug users.⁹ An exchange on Vancouver Island, Canada, is currently experiencing severe community-relations problems because it is across the street from a school.⁸

Fourth and perhaps most importantly, include a serious evaluation component. Serious evaluation should open paths for program improvement in the future. Despite the accumulated evidence regarding HIV prevention among IDUs, it appears that severe stigmatization of IDUs is likely to continue for the indefinite future and that data-compromise decision making may be the only possible strategy in many situations. Systematic health services/operations research on how to optimize data-compromise decision making is clearly needed.

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REFERENCES

1. Neaigus A, Zhao M, Gyarmathy V, Cisek L, Friedman S, Baxter R. Greater drug injecting risk for HIV, HBV, and HCV infection in a city where syringe exchange and pharmacy syringe distribution are illegal. *J Urban Health*. (2008) DOI [10.1007/s11524-008-9271-1](https://doi.org/10.1007/s11524-008-9271-1).
2. Des Jarlais DC, Marmor M, Paone D, et al. HIV incidence among injecting drug users in New York City syringe-exchange programmes. *Lancet*. 1996;348:987–991.
3. Strupczewski L, Sokolic W. *Pointed Difference Between Two Cities Needle-exchange Programs*. Asbury Park, NJ: Asbury Park Press; 2008.
4. Clark M. *Atlantic City's Needle-exchange Program Bucks State Trend*. Atlantic City, NJ: Press of Atlantic City; 2008.
5. McKnight C, Des Jarlais D, Bramson H, et al. Respondent-driven sampling in a study of drug users in New York City: notes from the field. *J Urban Health*. 2006;83(7):i54–i59.
6. McKnight C, Des Jarlais D, Perlis T, et al. Syringe exchange programs – United States, 2005. *MMWR Morb Mort Wkly Rep*. 2007;56(44):1164–1167.
7. Des Jarlais DC, Sloboda Z, Friedman SR, Tempalski B, McKnight C, Braine N. Diffusion of the D.A.R.E. and syringe exchange programs. *Am J Public Health*. 2006;96(8):8–12.
8. Alexander C. Needle exchange not on in new jail. *Canberra Times*. March 15, 2008.
9. Anderson W. The New York needle trial: the politics of public health in the age of AIDS. *Am J Public Health*. 1991;81:1506–1517.