

Parallel Session 13: Lessons on PCST history

**LESSONS ON PCST HISTORY
INJECTION DRUG USE AND CONSTRUCTIONS OF RISK**

Caroline Jean Acker, Ph.D.

*Department of History, Carnegie Mellon University, 5000 Forbes Avenue,
Pittsburgh PA 15206, USA. Ph: 412-268-6040, fax: 412-268-1019.
E-mail: acker@andrew.cmu.edu*

Abstract

American injection drug users today use injection methods and respond to opiate overdose with methods similar to those used by physicians in the mid-nineteenth century--methods consistent with nineteenth-century medical theory. Their isolation from sources of public health knowledge has in effect left them in a nineteenth-century medical world. Ironically, this fact affords the historian better understanding of how physicians understood and responded to risks associated with injection in the past. Needle exchange programs seek to bring injection drug users into the twenty-first century.

Key Words: injection drug use, history, public health

Text

The standard insulin syringe, made of steel and plastic, is a precision engineered instrument, yet it is mass produced and disposable. It costs seven and a half American cents. The hypodermic syringe symbolizes medical technological prowess made mundane. Yet the syringe is also a charged object, as it pierces the skin. The heroin injector emerged in the twentieth century as a symbol of deviance.

The hypodermic syringe also symbolizes a clash between American drug policy and the public health imperative to control infectious disease. Laws passed in the 1970s and 1980s to prohibit possession of devices used to consume illicit drugs typically included syringes in their lists of banned items. Yet the sterile syringe affords a cheap and effective way to prevent HIV transmission among a high-risk population.

The American junkie has symbolized obduracy as he willfully practices dangerous behaviors. But needle exchange workers have found that injectors readily adopt a range of risk-reducing behaviors at the same time that they find addictions and related problems difficult to manage and either struggle with or reject a health care system that often treats them badly: with hostility; or with ignorance about managing the health consequences of drug use, or managing other disease in the presence of opiate addiction.

Thus, drug injectors and needle exchange activists, like historians of science, realize that the development and implementation of public health knowledge is complex. Developing effective public health knowledge is not just a matter of translating scientific findings into prescriptive statements; the flow of knowledge is not just from the experts to target groups. Any encountered difficulties do not just represent unreasoning resistance or ignorance.

Rather, science does not simply provide ever more accurate views of the world. In a dynamic process, we continually reshape the world to make science work in it. For example, Tomes (1998) has shown how many aspects of daily life, from hand washing to the design of furniture and clothing, were transformed in order for ordinary people to act in ways consistent with germ theory.

When their friends overdose, opiate injectors immerse the person in water, shock the soles of the feet with electric cords, or inject the person with salt or bleach. Similarly, the first generation of physicians to use hypodermic syringes to inject morphine treated overdose with cold water, electric shock, and injection of coffee, whiskey, or other substances. Similarities also appear in injection technique: William Burroughs (1977) and mid-nineteenth-century physicians both dissolved morphine in spoons, heating the drug over a flame (Kane 1880).

Nineteenth-century physicians identified all the risks associated with injection--overdose; contamination or spoilage of injected solution; abscesses; disease transmission; tissue damage from repeated injection. Medical management of the risks associated with the syringe itself falls into three periods. In the nineteenth century, physicians, individually and through collective means such as journal and textbook writing, developed techniques and refinements to reduce harms to the patients they injected. For the first half of the twentieth century, these risks were primarily managed through the labor and skill of nurses and through hospital systems for sterilizing and maintaining equipment. Finally, with the advent of the disposable syringe in the early 1960s, engineering and manufacture brought the risks under control.

In the nineteenth century, the medical and nonmedical were not sharply divided. From the earliest deployment of the syringe, many people injected themselves with morphine or other drugs. When the 1914 Harrison Narcotic Act banned nonmedical use of opiates, and when physicians in the 1920s defined junkies as psychological defectives and undesirable patients, opiate injectors were closed out of the medical advances that continued to improve the syringe. Thus, nonmedical injectors became increasingly isolated from the world of medical progress. Yet, like other laypeople, they absorbed the broader currents of medical advance and used this knowledge to reduce the risks they perceived. In addition, as members of what was increasingly defined as a deviant subculture, they communicated what they knew (or believed) among themselves and in this way established norms of practice that were handed down over time.

Clinical records of narcotic ward patients in Philadelphia in the 1920s reveal some of these practices. (Acker 2002) Many addicts sterilized their needles; one wiped the skin with iodine before injecting. Addicts typically used 4-6 needles a month;

since opiate addicts typically inject 4-6 times a day, this meant using a needle up to 30 times.

Nineteenth-century physicians developed methods of managing patients' addiction to morphine that also resemble later practice. One practice is described in 1880 (Kane 1880), 1926,¹ 1951 (Burroughs), and 1990². Each describes the same dose reduction tactic--replacing withdrawn drug solution with an equal volume of fluid containing no drug. Thus, the 1990 junkie bought and dissolved month's worth of heroin. Each time he withdrew a syringe-full, he replaced it with a syringe full of water. Such similarity suggests transmission of knowledge across 110 years.

1. Records of the Philadelphia Committee for Clinical Study of Opium Addiction, Library of the College of Physicians of Philadelphia, Philadelphia, vol. 19 case 26-8.

2. Anonymous heroin addict, personal communication.

Acker, C. (2002) *Creating the American Junkie*. Baltimore: Johns Hopkins.

Burroughs, W. (1977) *Junkie*. New York: Penguin.

Kane, H. (1880). *The Hypodermic Injection of Morphia*. New York: Bermingham.

Tomes, N. (1998) *The Gospel of Germs*. Cambridge: Harvard.

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