The Global Experience with Supervised Injection Facilities

A clinical report

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Introduction:

For 25 years I have been the Medical Director of the County Health Department. I have seen the advent of HIV and the resurfacing of STDs and the advent of highly effective and well tolerated treatments. I was one member of the community consortium that sheparded the first rural syringe exchange harm reduction program in NYS and have been pleased to note its success.

I am eager to hear your comments on this subject. I approached this topic from a neutral perspective and present my findings to date and list unanswered questions in a spirit of scientific inquiry and a desire for action based on evidence based research and practical considerations. I am painfully aware of and acknowledge the issue of scarce resources and also aware of the resources substance addiction costs our community.

Many physicians, addiction professionals, politicians and the public have been perplexed about supervised injection facilities (SIFs). When this concept arose in the City of Ithaca proposal in 2015 to take a new and medically centered approach I, too, was caught without any information to put SIFs into perspective. The initial incredulity which SIF proposals evoke is reminiscent of our reaction to Syringe Exchange Harm Reduction programs in the 1990s. Syringe Exchange has proven to be highly efficacious and brought none of the "normalization of drug use" that its detractors feared. Global data on SIFs refute detractor's arguments also.

This article will share research data and experiences gathered from around the globe over the past 37 plus years. I will group the data and information into categories that are likely to be most important.

Given the severity of the medical problem that opioids present and that there are 97 SIFs globally in 66 cities in 11 countries (but none as of this writing in the United States) and only 2 in North America (both in Vancouver, B.C.) (Safe Drug consumptions Spaces, Sherman et al, The Abell Report, Feb 2017 vol 29, no. 7). we would do well to familiarize ourselves with them. New York State professional groups in NYS have weighed in on the issue. For example, the New York State Academy of Family Physicians has written the NYSDOH announcing its support for pilot facilities in NYS in rural as well as urban settings. Reasons for this step can be gleaned from this article.

What is a SIF? SIFs are sanctioned and supervised physical places for the *self* injection/inhalation of client *pre-obtained* drugs (heroin, other opioids and controlled substances) where trained personnel in a non-judgmental environment are present to: take action in case of an overdose, create a long term relationship with users with the intent of: reducing their risk of infectious disease, supporting their movement from use to recovery as their motivation allows (including referral for medically assisted treatment, counseling, detox), provide medical treatment for injection related illness (e.g. abscesses) and STDs, and provide sterile injection equipment (syringe exchange, clean works) to limit the spread of disease.

Drugs are *not* sold or provided by or within the facility and steps are taken to prevent opioid use from starting there. Chronic users are the clients. Given that users are a diverse population, SIFs will not meet the needs of all socioeconomic demographics but are an important access point for a target group of users. They represent a public health intervention operating as part of a wider, coordinated network of services for people who use drugs, to address the individual risks and community impact of drug use. The SIFs aim to reach underserved and marginalized populations, address health inequities, and resolve public health and safety tensions related to public injection. (ref: Hedrich below)

How does a SIF facilitate the medical model of treatment? Based on the concept of harm reduction SIFs provide a location where an overdose can be immediately addressed. *Frankfurt Germany reports over 191,729 injections on site (about 550 per day) and over 3,180 overdoses resulted in no fatalities. (Schneider, Alternatives to Public Injection, Harm Reduction Coalition, 2016). Sydney Australia reports in over 930,000 injections 5,925 overdoses with no deaths (Goodhew et al. Harm Reduction Journal (2016) 13:29). Insite in Vancouver BC, Canada was responsible for a 35% reduction in fatal overdoses in the area around the program compared to only 9% in the rest of Vancouver (Alternatives to Public Injection, Harm Reduction Coalition, 2016). Globally, "Among tens of millions of supervised injections, only one fatality has been reported in any SIF - in Germany in 2002, attributed to anaphylactic shock." (Hedrich D, European Report on Drug Consumption Rooms, European Monitoring centre for Drugs and Drug Addiction, 2004).*

SIFs provide a portal where the subset of users ready and willing to take the next step to recovery can be referred to Suboxone/methadone treatment, a detox center, inpatient treatment when necessary , and long term counseling and support/rehab services. For the subset not ready to make a change the SIF builds a long term trusting relationship that stands ready to assist the user to change when they are ready; but, it also recognizes that some users will not be able to change. For these the SIF reduces harm by preventing death and reducing the spread of disease.

"People who inject drugs are estimated to comprise 56 percent and 11 percent of all new HCV and HIV infections in the United States (respectively) "(Centers for Disease control and Prevention, HIV Surveillance Report, 2014; Klevens RM , Hu DJ, Jiles R, Holmberg SD, Evolving Epidemiology o hepatitis C Virus in the United States, Clinical Infectious Diseases: An official publication of the Infectious Diseases Society of America, 2012;55 Suppl 1:S3-9).

"Sustained drug therapy and clinical management of these conditions, combined with frequent emergency room visits and inpatient hospital stays associated with skin and soft tissue infections,

have driven medical costs to an estimated USD $6.6 billion annually in the population." (Sterling EE, A businessperson's Guide to the War on Drugs, Business Council for Prosperity and Safety, 2015)

SIFs have been "posited to reduce costs associated with this public health crisis by reducing needle re-use and sharing and, therefore, incidences of HIV/HCV/HEPB and Soft tissue infections; reducing the costs to society of addictions and overdose deaths; and increasing the uptake into addiction counseling services. (IrwinA, Jozaghi E, Bluthenthal RN, Kral AH, A Cost - benefit Analysis of a Potential Supervised Injection Facility in San Francisco, California, USA. Journal of Drug Issues, 0(0): 1 -21) In Vancouver, B.C. "Studies in this setting have estimated that the program incurs negative net costs, reflecting both savings in cost and expected increases in life expectancy, and that annual savings of CAD $500,000 per HIV death and USD $660,000 per overdose death prevented ..." (Andresen MA, Boyd N, A Cost-benefit and Cost-effectiveness Analysis of Vancouver's Supervised injection Facility, The international Journal on Drug Policy, 2010; 21 (1): 70-76) A study estimating costs for an SIF in San Francisco modeled on Insite in Vancouver, B.C. concluded that, "an SIF in San Francisco would be an extremely cost-effective intervention, saving approximately $2.33 for each dollar spent."(Irwin A, et al., A Cost -benefit Analysis of a Potential Supervised Injection Facility in San Francisco, California, USA,)

For SIF participants hospitalized for injection related infections length of stay dropped from 12 days [IQR: 5-33] to 4 days [IQR: 2-7] (Lloyd Smith et al BMC Public Health 2010 10:327)

Do SIFs encourage recovering addicts to relapse? *"SIFs do not increase drug use in the area, nor do they encourage young people to initiate drug use", (Alternatives to Public Injection, Harm Reduction Coalition, 2016*

What about abstinence- based treatment? "Initially (in Vancouver, BC) there was strong opposition to the facility from providers of abstinence- based drug treatment, but engagement turned them into allies over time as they recognized [SIFs] role in referring participants to their treatment programs *(Alternatives to Public Injection, Harm Reduction Coalition, 2016 http://harmreduction.org/wp-content/uploads/2016/05/Alternatives-to-Public-Injection-report.pdf).*

Injecting narcotics is illegal – how have other countries addressed this? In Vancouver, B C, Canada the SIF has operated since 2003 on an exemption from drug control laws through a "Section 56" waiver under a research pilot. It is now considered to be a healthcare facility. *(Alternatives to Public Injection, Harm Reduction Coalition, 2016).* It is annually renewed. In 2011 the Supreme Court of Canada voted unanimously in favor of its existence partly based on its public health impact. (Safe Drug consumptions Spaces, Sherman et al, The Abell Report, Feb 2017 vol 29, no. 7).

In Frankfort, Germany an SIF has been operating for 23 years and is fully licensed. Legal opinion found that the site was a medical intervention, thus, clarifying the role of law enforcement *(Schneider, Alternatives to Public Injection, Harm Reduction Coalition, 2016)*.

In Sydney, Australia their facility initially operated under temporary exemptions requiring biannual re-certifications but now operates under *a change in state law allowing participants to self-administer drugs and possess controlled substances (Jauncey, , Alternatives to Public Injection, Harm Reduction Coalition, 2016)*

There are nearly 100 SIFs in operation in at least eleven countries outside of the United States, *(Alternatives to Public Injection, Harm Reduction Coalition, 2016)* each location and society has found a way to allow for the operation of their SIF when they had the motivation to do so. Often it has involved a combination of efforts on the part of legislatures at the local regional and federal level, community partners, public health and the cooperation of law enforcement.

Why move away from the law enforcement model? "Research has found that the war on drug's policing strategies are associated with increases in HIV transmission risk. The failed war on drugs has also had a deleterious effect on public health. In addition to fueling some of the highest rates of incarceration worldwide, drug war supply-side strategies such as drug raids and crackdowns have had minimal, short-lasting impact and may lead to the displacement of drug activity zones." (Safe Drug consumptions Spaces, Sherman et al, The Abell Report, Feb 2017 vol 29, no. 7). Illicit drug use, particularly via injection in unsafe spaces (e.g., public bathrooms, parts, abandoned housing...), exacerbates the potential for fatal overdose as well as HIV, HEPb and HCV transmission. (IDUHA , Harm reduction in New York City, New York, NY-Injection Drug Users Health Alliance, 2015; Wolfson-Stofko B, Bennett AS, Elliott L, Curtis R, Drug Use in Business Bathrooms: An exploratory study of manager encounters in New York City. The International Journal on Drug Policy, 2016;39:69-77) Injection in a hurried, furtive, unclean manner is not compatible with disease transmission prevention.

SIFs reduce public drug use and are effective at sustaining contact with the most marginalized people who use drugs in public places (Kinnard EN, Howe CJ, Kerr T, Skodt Hass V, G.D.M., Self -reported Changes in Drug Use Behaviors and Syringe Disposal Methods Following the Opening of a Supervised Injecting facility in Copenhagen, Denmark, Harm Reduction Journal, 2014;11(1) : 29

"A large body of evidence-based, peer-reviewed studies has demonstrated the pubic health impacts and cost-effectiveness of [SIFs], owing to significant reductions in the transmission of HIV and HCV, a reduction in other morbidities such as abscesses, and a reduction of fatal overdose deaths."

"the available evidence highlights the range of parameters that must be considered when modeling costs and benefits of an SIF in a new location. These include geographic concentration or dispersion of persons who inject drugs (PWID), prevalence of HIV and HCV, rates of SSTI [skin and soft tissue infections] care-seeking, overdose deaths, and needle -sharing. For example the wider dispersion of PWID combined with the low HIV - incidence rate in Toronto translated to a lower cost-benefit ration for the introduction of a single SIF than in settings like Ottawa or Vancouver."(Safe Drug consumptions Spaces, Sherman et al, The Abell Report, Feb 2017 vol 29, no. 7).

The law enforcement model has failed to effectively move individuals from their addiction to abstinence. It has clogged courts, jails, prisons with users of a diverse background. Police officers are frustrated with the failure of the status quo and embrace a model which offers hope for the individual, reduces the hazard and nuisance of public injection, and refocuses law enforcement efforts on the truly criminal aspects of drug trafficking.

What has Law enforcement said about SIFs? January 2017 in King County (which includes the City of Seattle), Wa. the Sheriff expressed public support for the establishment of two sites in King County. (Safe Drug consumptions Spaces, Sherman et al, The Abell Report, Feb 2017 vol 29, no. 7). In Vancouver, BC the Vancouver Chief of Police has writing a letter supporting harm reduction as a public health intervention and 17% of SIF participants said the police helped them get to the SIF. *(Alternatives to Public Injection, Harm Reduction Coalition, 2016).* In Frankfurt Germany the high court issued a legal opinion that the SIF was a medical intervention, thus clarifying the role of law enforcement and enabling them to exercise discretion on drug possession. In Sydney the SIF provides real time drug market monitoring data that can be used by law enforcement - thus avoiding the two year lag in public health data reporting. To avoid arrests the Sydney SIF obtained exemptions renewed every two years until, after 9 years, they secured a long term exemption. Ongoing training with police and the support of the local police commander was key. *(Alternatives to Public Injection, Harm Reduction Coalition, 2016)*

What about the community – *what do the neighbors say*? Many of the SIFs are in urban environments. The question remains whether SIFs can be successfully scaled to smaller communities (like Ithaca pop. 30,000/ Tompkins County ~100,000). In their urban settings the data shows SIFs remove many users from public injecting, decrease used syringes from the environs. A common concern is whether users are attracted into the community from outside. In Frankfurt, Germany, Vancouver, B C, and Sydney, Australia the SIF reduced noise complaints and public safety concerns in the community without attracting young people or users from places outside of the community. *(Alternatives to Public Injection, Harm Reduction Coalition, 2016)* From polls in communities with an SIF we know that in Sydney support has been increasing over the years. In a large survey in 2014 55% of the general public were in support. *(Alternatives to Public Injection, Harm Reduction Coalition, 2016)*

"Seventy-five relevant articles were found. All studies converged to find that SISs were efficacious in attracting the most marginalized PWID, promoting safer injection conditions, enhancing access to primary health care, and reducing the overdose frequency. SISs were not found to increase drug injecting, drug trafficking or crime in the surrounding environments. SISs were found to be associated with reduced levels of public drug injections and dropped syringes. Of the articles, 85% originated from Vancouver or Sydney."
Drug Alcohol Depend. 2014 Dec 1;145:48-68. doi: 10.1016/j.drugalcdep.2014.10.012. Epub 2014 Oct 23.

"Both the Vancouver and Sydney evaluations found some positive and *no* negative effects on the surrounding community. In both cities, there was a significant reduction in observed instances of public injection in the neighborhood. The numbers of discarded syringes and the amount of injection-related litter in the vicinity also declined substantially. In neither instance was there an increase in crime or drug dealing in the vicinity (although in Sydney there was a slight increase in the negligible level of loitering around the SIF). A series of surveys in Sydney found that area residents and business owners had experienced a sustained decline in exposure to public injection and discarded syringes following the opening of the SIF. Evaluators sought, but did not find, any evidence that the SIFs had encouraged new drug use or discouraged its cessation." (italics mine)

Beletsky L, Davis CS, Anderson E, Burris S. The Law (and Politics) of Safe Injection Facilities in the United States. *American Journal of Public Health*. 2008;98(2):231-237. doi:10.2105/AJPH.2006.103747.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2376869/

Supervised injection services: what has been demonstrated? A systematic literature review.

What is the opinion of public health / medical societies?

The American Public Health Association has said it recommends the the U S: " Expand access to harm reduction interventions: Harm reduction programs including sterile syringe access, supervised injection facilities, and medication-assisted treatment should be scaled up to eliminate HIV and hepatitis C transmission among people who inject drugs.

(https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/08/08/04/defining-and-implementing-a-public-health-response-to-drug-use-and-misuse)

The Canadian Public Health Association has said: " Supervised consumption facilities are one proven way of meeting the health and safety concerns raised by injection drug use."

(http://www.cpha.ca/en/about/digest/37-4/4.aspx)

The Canadian Medical Association (CMA) has reiterated its support for supervised injection sites: "The Canadian Medical Association is here today … to strongly support some of our most vulnerable patients and in support of harm reduction tools as a necessary component of a comprehensive national drug strategy," (https://www.cma.ca/En/Pages/bill-to-govern-safe-injection-sites-disregards-medical-evidence.aspx accessed May 6, 2017)

The City of Montreal is investigating the creation of 4 brick and mortar SIFs and 1 mobile one. The CDC reviewed Montreal's plan and concluded that theirs is a sound public health plan

The Massachusetts Medical Society has endorsed SIFs as of April 2017 (http://www.wbur.org/commonhealth/2017/04/29/supervised-injection-rooms-vote)

The New York Academy of Family Physicians has written the NYSDOH asking it to set up pilot studies in urban and rural settings. (resolution June 2016, letter to NYSDOH December 2016)

What about people who won't use a SIF? Just as diabetics are a diverse group requiring individualized approaches, and care regimens so are users. Naloxone, other medically assisted therapy, detox, rehab, must be available through many portals. Other target groups (such as IDUs who hold down jobs, have families, are professionals) require other approaches to engaging them.

Unanswered or incompletely answered questions:

Questions await further study through SIFs set up to properly collect the needed data as they deliver needed services. We particularly need to know if SIFs "scale well" to less urban communities – to a community the size of our area for example. Are they just as beneficial from cost, community acceptance, and general efficacy aspects as they have been in more urban ones? Scalability is a clinical question as well as a practical question (such as the allocation of resources between treatment strategies). There is no data on this question at present. Only by pilot programs set up to research the issue will we know.

In general, the success of SIFs has resulted in Vancouver expanding its two sites into other cities and integrating them with other facilities. Montreal has been approved for 3 SIFs (http://www.theglobeandmail.com/news/politics/federal-government-approves-three-supervised-injection-sites-in-montreal/article33914459/), Seattle is endorsing two sites, and San Francisco and Baltimore are considering sites.

All of this expansion is the result of data demonstrating the efficacy of moving from a law enforcement model to a medical one, and embracing harm reduction techniques.

The above considerations are among the ones that have led professional groups in NYS to ask the NYS Department of Health to create SIF pilots in urban and rural settings in NYS.

We need:

Expansion of counseling and rehabilitation services

Law enforcement buy in to a medical model of treatment and adoption of LEADs program

A detoxification program locally

Private practitioners, all points of service including urgent care centers and emergency rooms to provide referrals, medication assisted treatment as appropriate

Expansion of the provision of buprenorphine

And to reach the target population of our less well off population who are likely to be homeless, or inadequately housed serious consideration of providing a supervised injection facility.

References

Alternative to Public Injecting, Harm reduction coalition, 2016 (a report of the proceedings of a consultation regarding supervised injection facilities (*Alternatives to Public Injection, Harm Reduction Coalition, 2016 http://harmreduction.org/wp-content/uploads/2016/05/Alternatives-to-Public-Injection-report.pdf).*

Hedrich,D. European Report on Drug Consumption Rooms, February 2004. Available at: http://www.emcdda.europa.eu/attachements.cfm/att_54132_EN_Consuption%20rooms.pdf

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Other references cited within text