Global Responses to the Opioid Epidemic

Diana M. Robinson MD

University of Texas Southwestern, Department of Psychiatry

The author has no real or potential conflict of interest or received travel support or honoraria from a commercial business to attend this meeting.

Background

Since 2000, over 500,000 people in the United States have died from opioid overdoses (1). The opioid crisis has also impacted many countries with ~ 187,000 opioid overdose deaths per year (2). Consultation-liaison (C-L) psychiatrists commonly are tasked with managing the acute and maintenance management of substance use disorders in inpatient and outpatient C-L settings, as well as serve an important role with connecting patients with appropriate ancillary community SUD treatment. This oral paper will provide an overview of medication assisted treatments, harm reduction strategies including needle exchange programs, supervised injection facilities, and heroin assisted treatment), and policies (including decriminalization) that are being used in other countries to address the opioid epidemic. It will also review the arguments against expansion of opioid use disorder treatment and critically examine the evidence. To reduce morbidity and mortality from opioid use disorder, it is imperative that we advocate for effective policy changes and consider the risks and benefits of possible treatments and harm reduction strategies that may be adapted for use in the United States by the savvy C-L psychiatrist from lessons learned by our global colleagues.

Syringe Services Programs

- In New York City, the epicenter of the HIV epidemic in people who inject drugs (PWID), at least 50% were HIV+ by 1990 (3).
- As syringe services programs (SSPs) were introduced, along with other measures to expand medication treatment, HIV rates fell.
- By 2012, just 3% of people who inject drugs (PWID) were HIV+.
- SSPs helped bring people into treatment and recovery
- They did not prolong drug use or encourage new users to start injecting.
- United States (4,5)
  - As of 2019, there are at least 320 SSPs (**Figure 1**)
  - As of 2019 41 states and DC have operating SSPs (yet only 32 states explicitly authorized SSPs by law)
    - Since 2014: Increase of 14 states
    - Some states require local government +/- local law enforcement approval
- Globally (6)
  - As of 2007, there were at least 22 SSPs (**Figure 2**)

Figure 1: SSPs in the US

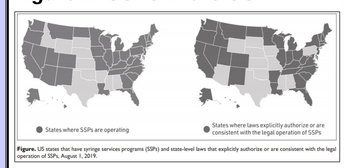


Figure. US states that have syringe services programs (SSPs) and state-level laws that explicitly authorize or are consistent with the legal operation of SSPs, August 1, 2019.

Figure 2: SSPs Globally

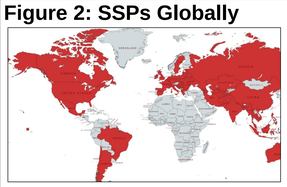
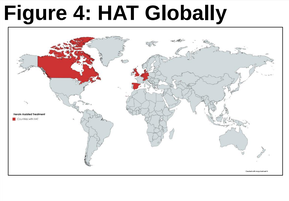


Figure 3: SIFs Globally

Figure 4: HAT Globally



Supervised Injection Facilities

- SIFs are locations that provide a hygienic space for people to inject pre-obtained drugs while observed by trained staff
- Dual aims:
  - Increase the safety of PWID
  - Reduce the public nuisance of having people injecting drugs in public spaces
- Provide:
  - Protected time and space for injecting
  - A non-judgmental environment
  - Appropriate guidance and equipment (e.g. clean needles, naloxone) to reduce harms
  - Proper disposal of used equipment
  - Onsite or linkage to medical care
  - Substance use treatment
  - Social services
- Global Availability:
  10 countries, 66 cities, 98 facilities (**Figure 3**)
  - United States (since 2014, but isn't legal yet; 7)
- Benefits:
  - Once implemented, these sites have been found to have high community support, which increases over time (8,9).
  - Estimated savings of placing a supervised injection site in a U.S. city would net cost savings of $3.5 million (U.S.) per year (10).
  - Reduce public drug and associate nuisance (11)
  - Provide a safer injecting environment (11)
  - Target difficult to reach population (11)
  - Decreased the incidence of drug-related infection (11)
  - Increased access to social, health, and drug treatment services (11)

Figure 5: Dissuasion Commissions

Figure 6: Decriminalization

Heroin Assisted Treatment

- The provision of injectable diamorphine (aka pure heroin) under medical supervision
- Supervision is key to ensure compliance, minimize risk, and decrease diversion to the illegal market
- Used only in the treatment resistant OUD for whom medication assisted therapy has been ineffective
- Patient selection:
  - Minimum age
  - Minimum duration of opioid use
  - Evidence that other forms of treatment have not been effective
- Patients report to a clinic where they are given injections by a doctor 2 to 3 times each day
  - Due to short half life of diamorphine
  - Facilities are open 365 days per year
- Global availability: 8 countries (**Figure 4**)
- Outcomes:
  - Strong evidence for the efficacy of HAT when compared with methadone for long term PWID who do not respond to other forms of treatment (11)
  - 3 trials considered the economic impacts of HAT
    - HAT was significantly more costly than methadone, but evidence that these costs were compensated for by savings to society due to the effectiveness of treatment in reducing criminality and improving patient's health and social engagement (11)

Dissuasion Commissions/Drug Courts

- People with possession of a small quantity (defined as the amount an average user would consume in a 10-day period) of any illegal drug for personal use is referred to a local Commission for Dissuasion of Drug Addiction
  - For use and possession-only offences no criminal sanctions are applied and police send them to the relevant commission
- Composed of a lawyer, a doctor, and a social worker
- Linked to nationwide network of support services
- Global availability: 5 countries (**Figure 5**)
- Outcomes:
  - Lower rates of reoffending compared with those from criminal courts
  - Less likely to use drugs after completing the program than those that did not complete the program
  - Less likely to reoffend than offenders sentenced to traditional correctional options
  - Net benefits per participant from -$7,108 to $47,852
  - At 18 months were significantly less likely to report a need for employment, educational services, and financial assistance

Decriminalization

- Decriminalization retains the recognition that drug possession is illegal but removes criminal penalties in most cases
- Enforcement against the supply of drugs is a key element
- Lots of variation in how possession offenses are handled:
  - Levels of drug use
  - Outcomes for drug users
  - Police and criminal justice resources
- Global availability:
  - 5 countries (**Figure 6**)
  - Portugal, Czech Republic, Netherlands, Uruguay, Sweden
- Outcomes (ex Portugal):
  - Overall reduction in social costs of drugs (12)
    - After 10 year period there was an 18% reduction mainly driven by the reduction in indirect health costs (29%) indirect non-related health costs (24%), non-health related direct costs (17%)
    - Net savings even after the 9% increase in direct health costs

Drug-related social costs considered.

Type of cost	Direct cost	Indirect cost
Health-related	Treatment, prevention and risk and harm reduction of drugs Health costs associated with the consequences of drug use (hepatitis, HIV/AIDS)	Lost income and production due to drug addiction treatment Lost income and production due to drug-related death
Non-health related	Social rehabilitation Legal system costs associated with drugs	Lost income and production of individuals arrested because of drug-related crimes

Lessons Learned

Program Common Threads for Success:

- Large scale of the problem
- Visibility of the problem
- Significant health morbidity and mortality
- Consensus within a variety of medical, legal, press, and community stakeholders
- Data driven of feasibility and outcomes that are communicated to the medical community and lay press
- Public will (short and long-term)
- Openness to learn from each other's success and failures

REFERENCES

1. Rudd RA, Aleshire N, Zibbell JE, Gladden RM. Increases in drug and opioid overdose deaths – United States, 2000-2014. MMWR Morb Mortal Wkly Rep. 2016; 64 (50-51): 1378-1382.
2. United Nations Office on Drugs and Crime, World Drug Report 2017 (ISBN: 978-92-1-148291-1, eISBN: 978-92-1-060623-3, United Nations publication, Sales No. E.17.XI.6).
3. Des Jarlais DC, Perlis T, Arasteh K, Torian LV, Hagan H, Beatrice S, Smith L, Wethers J, Milliken J, Mildvan D, Yancovitz S, Friedman SR. Reductions in hepatitis C virus and HIV infections among injecting drug users in New York City, 1990–2001. AIDS: October 2005 - Volume 19 - Issue - p S20–S25.
4. Summary of Information on The Safety and Effectiveness of Syringe Services Programs (SSPs). CDC. 2019. Available from: https://www.cdc.gov/ssp/syringe-services-programs-summary.html
5. Fernández-Viña MH, Prood NE, Herpolsheimer A, Waimberg J, Burris S. State Laws Governing Syringe Services Programs and Participant Syringe Possession, 2014-2019. Public Health Rep. 2020 Jul/Aug;135(1_suppl):128S-137S.
6. World Health Organization, UNAIDS & UNODC. (2007). Guide to starting and managing needle and syringe programmes. World Health Organization.
7. Kral AH, Davidson PJ. Addressing the Nation's Opioid Epidemic: Lessons from an Unsanctioned Supervised Injection Site in the U.S. Am J Prev Med. 2017 Dec;53(6):919-922.
8. Thein HH, Kimber J, Maher L, MacDonald M, Kaldor JM. Public opinion towards supervised injecting centres and the Sydney Medically Supervised Injecting Centre. Int J Drug Policy. 2005;16(4):275–280. https://doi.org/10.1016/j.drugpo.2005.03.003.
9. Salmon AM, Thein HH, Kimber J, Kaldor JM, Maher L. Five years on: what are the community perceptions of drug-related public amenity following the establishment of the Sydney Medically Supervised Injecting Centre? Int J Drug Policy. 2007;18(1):46–53. https://doi.org/ 10.1016/j.drugpo.2006.11.010.
10. Irwin A, Jozaghi E, Bluthenthal RN, Kral AH. A Cost-Benefit Analysis of a Potential Supervised Injection Facility in San Francisco, California, USA. J Drug Issues. 2017;47(2):164–184. https://doi.org/ 10.1177/0022042616679829.
11. EMCDDA (2012) Prisons and Drugs in Europe: the Problem and Responses.Available at: http://www.emcdda.europa.eu/attachements.cfm/att_191812_EN_TDSI12002ENC.pdf
12. Gonçalves R, Lourenço A, Silva SN. A social cost perspective in the wake of the Portuguese strategy for the fight against drugs. Int J Drug Policy. 2015 Feb;26(2):199-209.