Harm Reduction in the Continuum of Care for Substance Use Disorders

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Disclosures

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Learning Objectives

• Learn the importance and utility of providing harm reduction services for people with substance use disorders.

• Identify the various types of harm reduction services that are available.

• Determine which harm reduction service will be the most beneficial to your clients.
The words we use matter!

<table>
<thead>
<tr>
<th>Potentially stigmatizing language</th>
<th>More compassionate, person-centered language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addict</td>
<td>Person who uses (or injects) substances</td>
</tr>
<tr>
<td>Substance abuser</td>
<td>Person living with a substance use disorder</td>
</tr>
<tr>
<td>Junkie / Dope fiend / Tecato(a)</td>
<td>Substance use or possibly misuse</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>Currently abstaining; making changes to substance use</td>
</tr>
<tr>
<td>Clean</td>
<td>Patient / Participant / Client</td>
</tr>
<tr>
<td>Doctor shopper / Drug seeker</td>
<td>Medications for addiction treatment</td>
</tr>
<tr>
<td>Replacement / substitution therapy</td>
<td></td>
</tr>
<tr>
<td>You should / shouldn’t</td>
<td>Would you consider? / Can you try to avoid</td>
</tr>
</tbody>
</table>
## DSM-5 Criteria for Substance Use Disorder

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use in larger amounts or for longer periods of time than intended</td>
<td>Severity is designated according to the number of symptoms endorsed:</td>
</tr>
<tr>
<td>Unsuccessful efforts to cut down or quit</td>
<td>0-1: No diagnosis</td>
</tr>
<tr>
<td>Excessive time spent using the drug</td>
<td>2-3: Mild SUD</td>
</tr>
<tr>
<td>Intense desire/urge for drug (craving)</td>
<td>4-5: Moderate SUD</td>
</tr>
<tr>
<td>Failure to fulfill major obligations</td>
<td>6 or more: Severe SUD</td>
</tr>
<tr>
<td>Continued use despite social/interpersonal problems</td>
<td></td>
</tr>
<tr>
<td>Activities/hobbies reduced given use</td>
<td></td>
</tr>
<tr>
<td>Recurrent use in physically hazardous situations</td>
<td></td>
</tr>
<tr>
<td>Recurrent use despite physical or psychological problem caused by or worsened by use</td>
<td></td>
</tr>
<tr>
<td>Tolerance</td>
<td></td>
</tr>
<tr>
<td>Withdrawal</td>
<td></td>
</tr>
</tbody>
</table>

*SUD, substance use disorder

Adapted from Diagnostic and Statistical Manual of Mental Disorders, fifth edition.²³
Most diagnostic standards emphasize a few core components:

1. **Reinforcement and motivation** (initial use and craving).
2. Substance use at the expense of other, personally and societally beneficial activities.
3. Continues use despite significant negative consequences.
4. Escalation of use and inability to limit substance intake.

Shift in reinforcing effects and the time spent
Past Year Illicit Drug Use among People Aged 12 or Older: 2019

No Past Year Illicit Drug Use
218.0 Million People (79.2%)

Past Year Illicit Drug Use
57.2 Million People (20.8%)

Marijuana
48.2M

Rx Pain Reliever Misuse
9.7M

Hallucinogens
6.0M

Rx Tranquilizer or Sedative Misuse
5.9M

Cocaine
5.5M

Rx Stimulant Misuse
4.9M

Inhalants
2.1M

Methamphetamine
2.0M

Heroin
745,000

Note: The estimated numbers of past year users of different illicit drugs are not mutually exclusive because people could have used more than one type of illicit drug in the past year.

Rx = prescription.

Source: Substance Abuse and Mental Health Services Administration. (2020).
Current, Binge, and Heavy Alcohol Use among People Aged 12 or Older: 2019

139.7 Million Alcohol Users

65.8 Million Binge Alcohol Users (47.1% of Alcohol Users)

16.0 Million Heavy Alcohol Users (24.4% of Binge Alcohol Users and 11.5% of Alcohol Users)

Source: Substance Abuse and Mental Health Services Administration. (2020).
How Does Treatment Help?

• A staged treatment and one that combines medication with therapy appropriate for the particular stage may have the best results.

• Cure vs. Management of the (chronic) disease of addiction.
<table>
<thead>
<tr>
<th>Substances for which Pharmacotherapy is Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ Opioids</td>
</tr>
<tr>
<td>▶ Alcohol</td>
</tr>
<tr>
<td>▶ Tobacco (nicotine dependence)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substances for which Pharmacotherapy is Not Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ Cocaine</td>
</tr>
<tr>
<td>▶ Amphetamine-Type stimulants</td>
</tr>
<tr>
<td>▶ Hallucinogens</td>
</tr>
<tr>
<td>▶ Cannabis</td>
</tr>
</tbody>
</table>
QUESTION

What Percentage of People who initiate Methadone or Buprenorphine Treatment relapse within 6 Months?

- 5-10%
- 15-20%
- 50-60%
- 80-90%
CUMULATIVE PROBABILITY OF REMISSION

<table>
<thead>
<tr>
<th>Cumulative probability estimates ↓</th>
<th>Nicotine</th>
<th>Alcohol</th>
<th>Cannabis</th>
<th>Cocaine</th>
<th>Opioids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within first year</td>
<td>3.0%</td>
<td>3.0%</td>
<td>4.7%</td>
<td>8.6%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Within 10 years</td>
<td>18.4%</td>
<td>37.4%</td>
<td>66.2%</td>
<td>75.8%</td>
<td>79.2%</td>
</tr>
<tr>
<td>Lifetime</td>
<td>83.7%</td>
<td>90.6%</td>
<td>97.2%</td>
<td>99.2%</td>
<td>99.4%</td>
</tr>
<tr>
<td>Period for 50% remissions to occur</td>
<td>26</td>
<td>14</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
Everyone is Not Ready for Treatment

• Not all people who use substances want to stop.

• Not all people in recovery have time for treatment due to work and other obligations.

• Fear of stigma.
HARM REDUCTION

- **Harm Reduction**
  - Aimed at reducing negative consequences associated with substance use.

- **Decreases illness, disease and death**
  - Blood borne disease such as HIV and Hepatitis C (HCV)
  - Injection-related infections (abscesses, endocarditis, etc.)
  - Overdose (fatal and non-fatal)

- ** Increases engagement in services and care**
  - Gateway to substance treatment, medical and social services
The main goals of the harm reduction practitioner are:
- To meet the client where they are
- To respect the client’s decisions both for and against change

The key ideology of harm reduction therapy:
- The practitioner’s goals are secondary to what the client wants
COMMON HARM REDUCTION SERVICES

- Syringe Exchange
- Overdose Education and Naloxone Distribution
- Substance Testing
- Safe Consumption
WHAT ARE SYRINGE SERVICE PROGRAMS (SSPS)?

- SSPs provide access to sterile needles and syringes for free.
- They collect and safely dispose of used syringes and other substance equipment.
- SSPs also provide a range of health services, including:
  1. HIV and HCV testing and counseling
  2. Substance treatment counseling
  3. Support groups and drop-in counseling
  4. Referrals to physical and mental health care, substance treatment
HOW DO SSPS HELP THE COMMUNITY?

- SSPs prevent transmission of HIV, HCV and other infections.

- SSPs create a welcoming environment to build trust and engage people who may not be welcome in other settings.

- SSPs are not only for injection substance users…

Sawangjit et al., 2017
Since SSPs were established in New York City (NYC), they have helped reduce HIV and HCV among people who inject substances.

- HIV declined from over 50% in 1991 to 13% by 2001 among people who inject substances. By 2016, just 2% of new HIV cases in NYC were among people who inject substances.

- Hepatitis C among people who inject substances in NYC dropped by 30% from 1990 to 2001.

Des Jarlais et al., 2017, 2020
INDIANA OUTBREAK

Rural Indiana Struggles to Contend With H.I.V. Outbreak

Indiana HIV outbreak, hepatitis C epidemic sparks CDC alert

HIV outbreak in Indiana grows

Indiana Reports More HIV Cases in Outbreak

Health officials confirm 120 HIV cases and 10 preliminary positive cases tied to Scott County

The Wall Street Journal

1 in 10
1 in 10 HIV diagnoses are among people who inject drugs (PWID).

50%
More than half of PWID used a syringe services program in 2015.

1 in 4
Only 1 in 4 PWID got all their syringes from sterile sources in 2015.

SOURCE: Vital Signs, December 2016
HIV-HEPATITIS C VIRUS (HCV) CO-INFECTION

- HCV 4 X the prevalence of HIV
  - 1.8% of US population, ~ 4,000,000
  - IDU account for ~68% of new cases

- HCV is common in HIV patients (approx 25-40% in U.S.)

- HCV is a more serious disease in co-infected patients.

- HCV has become one of the leading causes of death in the HIV+ population.

- HCV co-infection carries significant morbidity, limits Antiretroviral options, decreases quality of life.

Chen et al., 2014, Debes et al., 2016
HIV patients infected with HCV are not as able to suppress HIV viral load and have larger HCV viral loads.

Hepatitis C may be more infectious sexually and from mother-to-infant in HIV co-infected patients.

Hepatitis C also makes it harder to treat HIV, because many substances are metabolized by the liver.

Medications used to treat HIV may further damage the liver.

El-Sherif and Back, 2015; Rockstroh 2015
THE COMING EPIDEMICS

Figure 3: NDTC laboratory monthly cocaine average positive samples, January 2013—June 2017

Cocaine

Methamphetamine
Figure 1 Number of methadone maintenance treatment program admissions over time by route of administration (inhalation versus injection)
Des Jarlais et al Addiction 2010
Surgeon General Urges Americans to Carry Drug That Stops Opioid Overdoses

A kit containing naloxone, the opioid overdose antidote that the surgeon general is advising more Americans to keep nearby. Hiroko Masuike/The New York Times
Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis

Alexander Y Walley assistant professor of medicine, medical director of Massachusetts opioid overdose prevention pilot, Ziming Xuan research assistant professor, H Holly Hackman epidemiologist, Emily Quinn statistical manager, Maya Doe-Simkins public health researcher, Amy Sorensen-Alawad program manager, Sart O’Connor program officer, Al Ozonoff director, design and a

Distribution of take-home opioid antagonist kits during a synthetic opioid epidemic in British Columbia, Canada: a modelling study

Michael A Irvine, Jane A Buxton, Michael Otterstatter, Robert Balshaw, Reka Gustafson, Mark Tyndall, Perry Kendall, Thomas Kerr, Mark Gilbert, Daniel Coombs
NALOXONE (NLX) DISTRIBUTION

- Peer-based distribution of NLX and overdose education has been increasing as an overdose harm reduction tool.
  - http://pdaps.org/datasets/laws-regulating-administration-of-naloxone-1501695139

- All 50 states and DC have expanded access to naloxone.
  - Third-party prescription: Permits prescriptions to people who are likely to encounter an overdose (i.e., given to someone other than the patient).

- Immunity
  - Controlled substance and drug paraphernalia possession protection.
  - Protection for Probation/Parole violations.

- Good-Samaritan Laws: Legal protections for people who seek help in the event of an overdose.
DATA ON NALOXONONE DISTRIBUTION PROGRAMS

Feasibility

• Piper et al. Subst Use Misuse 2008: 43; 858-70.
• Walley et al. JSAT 2013; 44:241-7. (Methadone and detox programs)

Increased knowledge and skills

• Green et al. Addiction 2008: 103;979-89.

No increase in use, increase in substance treatment

• Jones et al., 2017. Addict Bev

Reduction in overdose in communities


Cost-effective

$438 (best)
$14,000 (worst )
per quality-adjusted life year gained

INCREASING NALOXONE ACCESS

- **Standing Orders**

- **Distribution in Pharmacies**
  - Pharmacists can dispense naloxone without a patient-specific prescription from another medical professional.

- **Making Naloxone Over-The-Counter**
  - Prescription Naloxone formulations don’t have consumer-friendly drug facts label (DFL).
  - Food & Drug Administration (FDA) developed a model DFL with easy-to-understand pictograms.
  - First time the FDA has proactively developed and tested a DFL.

Cohen et al., 2020
In New York State how old do you have to be to carry naloxone?

- >13 yrs
- >18 yrs
- >21 yrs
- No age limit
Helps avoid unknown and dangerous adulterants.

First emerged in European “party substance” scene in the 90s.
1. On-site testing at raves and music festivals.
2. Helps control substance quality.

Rapid-response Fentanyl test strips have been distributed by harm reduction sites.
- Is this feasible and will it change substance use behavior?

FORECAST Study (Sherman et al., 2019)
1. 84% opioid users were concerned about Fentanyl.
2. 90% felt substance checking would help them prevent an overdose.
SAFE CONSUMPTION FACILITY (SCF)

- SCF= locations where people can use substances in a hygienic environment with clinical supervision.

- Currently no government-sanctioned SCFs in the U.S.

- 120+ sites exist across Canada, Europe, and Australia (Ducharme et al., 2018).

- Evidence that SCFs:
  1. Prevent fatal overdose.
  2. Decrease infection.
  3. Connect users with social services.
In Philadelphia, Judges Rule Against Opening 'Supervised' Site To Inject Opioids

January 14, 2021 · 12:50 PM ET

FROM NINA FELDMAN

Rhode Island's governor has signed into law a bill authorizing the opening of so-called harm reduction centers where people dealing with addiction can take heroin and other illegal drugs under the supervision of medical professionals.

By Associated Press

July 8, 2021

PROVIDENCE, R.I. (AP) — Rhode Island's governor has signed into law a bill authorizing the opening of so-called harm reduction centers where people dealing with addiction can take heroin and other illegal drugs under the supervision of medical professionals.

The Wednesday signing by Democratic Gov. Daniel McKee makes Rhode Island the first to enact such a statewide measure to combat the opioid epidemic.
HARM-REDUCTION STRATEGIES OF METHAMPHETAMINE-USING MEN WHO HAVE SEX WITH MEN
Acknowledgements

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