A Primer on Harm Reduction and Medications for Addiction Treatment

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Disclosures

The trainers have no conflicts of interest to report
Poll question: Select the option that best describes your role

- Substance use disorder treatment counselor
- Peer recovery specialist
- Clinical supervisor
- Administrator
- Medical staff
- Mental health clinician
- Probation or parole officer, court staff
Training Outline

1. Terminology, data, and trends
2. What is harm reduction?
3. Harm reduction interventions
4. Medications for opioid use disorder
5. Barriers to services
6. Harm reduction and treatment as complements
7. Questions
Terminology, Data, & Trends
## Terminology

<table>
<thead>
<tr>
<th>Use of illicit drugs</th>
<th>Old Terminology</th>
<th>New Terminology</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Substance abuse</td>
<td>Substance use</td>
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<tr>
<td></td>
<td>“clean”/“dirty”</td>
<td>unused/used or substance use/substance free</td>
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<td>Addiction diagnoses</td>
<td>Addiction</td>
<td>Addiction</td>
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<tr>
<td></td>
<td>Drug dependence</td>
<td>Substance use disorder (SUD), no longer</td>
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<tr>
<td></td>
<td>Drug abuse</td>
<td>differentiates between abuse and dependence</td>
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<td></td>
<td>Drug “habit”</td>
<td>Examples:</td>
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<tr>
<td></td>
<td></td>
<td>• Opioid use disorder (OUD)</td>
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<td></td>
<td></td>
<td>• Alcohol use disorder (AUD)</td>
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<tr>
<td>Individuals</td>
<td>“Addicts”</td>
<td>Person-first language</td>
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<tr>
<td></td>
<td>“Abusers”</td>
<td>Examples:</td>
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<tr>
<td></td>
<td>“Users”</td>
<td>• People who use drugs</td>
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</tbody>
</table>
Deaths due to prescription and nonprescription opioids, 1999-2018 (per 100,000 people)

U.S. rate in 1999 = 2.9 deaths
FL rate in 1999 = 2.6 deaths

U.S. rate in 2018 = 14.3 deaths
FL rate in 2018 = 15.0 deaths

Source: CDC. Multiple Cause of Death 1999-2018 on CDC WONDER Online Database
Florida opioid overdose deaths

**Poll question:** The CDC data represent national death trends. Do you think Florida’s opioid overdoses follow the same patterns?

- **Yes**- I think heroin and synthetic opioids have increasingly caused FL overdose deaths in recent years
- **No**- I think FL overdose deaths are still mostly caused by prescription opioids
Opioid Overdose Deaths by Type of Opioid, Florida, 1999-2018

Source: CDC. Multiple Cause of Death 1999-2018 on CDC WONDER Online Database
Past-Year Treatment Utilization among Nonelderly Adults with Opioid Use Disorder, by Insurance Status, 2017

Total Number of Nonelderly Adults with Opioid Use Disorder: 1.98 Million

<table>
<thead>
<tr>
<th>Insurance Status</th>
<th>Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>34%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>44%</td>
</tr>
<tr>
<td>Private</td>
<td>24%*</td>
</tr>
<tr>
<td>Uninsured</td>
<td>32%</td>
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</table>

* Indicates a statistically significant difference from the Medicaid population at the p<0.05 level.

NOTE: Nonelderly adults are 18 to 64 years. Any treatment includes receiving drug and/or alcohol treatment at any of the following in the past year: inpatient hospital, residential rehabilitation, outpatient rehabilitation, mental health center, and private doctors’ office.

So, what can we do to improve the willingness and ability of people with opioid use disorders (and other addictions) to get treatment?

And for people who refuse treatment, what should we do?
One approach to improving people’s willingness to engage with treatment, and to help people who are not interested in stopping drug use is harm reduction.
Intro to Harm Reduction
What is harm reduction?

• No single definition
• A set of strategies aimed at reducing **negative social and physical consequences** associated with drug use
• Harm reduction is also a movement for **social justice** built on a belief in the rights of people who use drugs to be treated with humanity
• Also can refer to reducing harms associated with other behaviors
  • Example: seatbelts as a strategy to reduce deaths from auto accidents
What are harm reduction strategies?

• All strategies try to “meet people where they are at”
  • This means promoting safer use of drugs among people who are unable or unwilling to stop
  • And means supporting people seeking abstinence from drugs through helping them get effective treatment
What are harm reduction strategies?

- Harm reduction strategies are considered “evidence-based practices,” which means high quality scientific studies show they improve patient outcomes, such as:
  - Reduction in deaths
  - Less transmission of infectious disease

- Harm reduction strategies are recommended by the United Nations and the World Health Organization.
What is **not** included in harm reduction?

- Punitive policies for drug use are not harm reduction
  - Jail or prison
  - Loss of child custody
  - Loss of government benefits like Medicaid or food stamps

- Expectations that **all** people should want to achieve abstinence from drugs is not harm reduction

- Beliefs that people who use drugs have to “hit rock bottom” before they can be helped is not harm reduction
Principles of harm reduction

Eight key principles of harm reduction outlined by The Harm Reduction Coalition¹

1. Accept that drug use is part of our world and work to minimize its harmful effects rather than simply ignore or condemn them.

2. Understand that drug use encompasses a continuum of behaviors from severe use to total abstinence, and acknowledge that some ways of using drugs are clearly safer than others.
Principles of harm reduction

3. Establish **quality of life and well-being**—not necessarily cessation of all drug **use**—as the criteria for successful interventions and policies.

4. Call for the **non-judgmental, non-coercive provision of services and resources** to people who use drugs and the communities in which they live in order to assist them in reducing harm.

5. Ensure that people who use drugs routinely have a **real voice in the creation of programs and policies designed to serve them**.
Principles of harm reduction

6. Affirm people who use drugs as the primary agents of reducing the harms of their drug use, and empower users to share information and support each other.

7. Recognize that the realities of poverty, racism, social isolation, past trauma, sex-based discrimination and other social inequalities affect both people's vulnerability to and capacity for effectively dealing with drug-related harm.

8. Do not attempt to minimize or ignore the real and tragic harm and danger associated with licit and illicit drug use.
Initial reactions to harm reduction

Poll question: Right now, my feelings about harm reduction are…

- **Positive** - This seems like a good approach to addressing drug use
- **Neutral** - I can see some good and some bad things about harm reduction
- **Negative** - I don’t think harm reduction is the right approach to addressing drug use
Harm Reduction Interventions

Safe consumption sites, syringe distribution programs, & naloxone programs
Safe consumptions sites

• What are they?
  • Also called “safe injection sites/rooms”
  • Sites where people may inject, smoke, or inhale illicit drugs under the supervision of trained staff
  • Provide an immediate response to an overdose

• Additional benefits/functions
  • Reduce infectious disease transmission, discarded needles
  • Provide way for people to begin conversations with site staff about seeking treatment
The Cactus safe injection site in Montreal, Canada
Safe consumptions sites

• Are they legal?
  • Maybe! A group in Philadelphia that wanted to open a site won a court case against the federal government

• Are they effective?
  • Yes! Research from multiple countries show drug consumption sites do not increase illicit substance use, they simply change the location of use
  • Also shown to greatly reduce the likelihood of death and increase treatment referrals\textsuperscript{2,3}
Safe consumptions sites

Lessons from international contexts:

• Safe drug consumption site established in Sydney, Australia in 2001. In its first 18 months³:
  • 4,000 people who use drugs registered who then used the site for over 55,000 injections
  • 1,400 people were referred to treatment and social services
  • 409 overdoses were attended to by staff, none of which resulted in a death
  • Community members reported seeing fewer used needles on the ground
  • Community member support for the drug consumption site increased over time
Syringe distribution programs

• What are they?
  • Programs providing free unused needles and syringes to people who inject drugs to avoid infectious diseases such as HIV and Hepatitis C (HCV)
  • Some use an “exchange” model, requiring people to turn in used needles in order to receive unused needles
  • Other programs do not require exchange because research shows providing unlimited syringes/needles maximizes use of new needles⁴,⁵
Syringe distribution programs

• Additional benefits/functions
  • Programs also may offer:
    • Prescriptions for PrEP (a medication that prevents HIV infection)
    • Mental health services and referrals to treatment programs

• Are they legal?
  • Yes, in most places, but some local governments have limited programs and federal funding restrictions still exist
  • Over 2,000 syringe distribution programs exist across the U.S.
  • But federal funding is not allowed to be used for needles, syringes, or other equipment used solely for the purposes of illicit drug use
Utah Harm Reduction Coalition giving out supplies for safer drug use in Salt Lake City, UT
Syringe distribution programs

• Are they effective?
  • Reduce **new HIV and HCV infections**,\(^7,8\) and $391,223 saved in community healthcare and social services costs per new infection avoided\(^9\)
  • People who use syringe programs are 5 times more likely to **stop or reduce drug use** and **enter treatment** than people who do not use such programs\(^6,10\)
  • Reduce **accidental needle sticks** in communities\(^11\)
  • **Do not increase levels of arrests and crime**\(^12,13\)
Naloxone distribution

• What is it?
  • An overdose reversal drug
  • Approved by the U.S. FDA and promoted by the CDC and the surgeon general
  • Sometimes referred to as “Narcan,” which is brand name naloxone product
  • First made in 1961
How naloxone works: Phase 1, the overdose

During an overdose, too many opioids bond to the opioid receptors in the brain, which causes breathing to slow and eventually stop.
How naloxone works: Phase 2, naloxone

Naloxone has a stronger affinity to opioid receptors, so it kicks the opioids off the receptors for 30-90 mins, allowing a person to breathe again.

Opioid receptors on brain

Naloxone
Naloxone distribution

• Is it legal?
  • Yes!
    • In Florida, pharmacists can provide naloxone over the counter to all customers without a prescription

• Is it effective?
  • Yes!
    • No evidence from any published scientific study shows distributing naloxone leads to increased illicit opioid use\textsuperscript{14,15}
    • Increased knowledge about overdose risks, increased skills in responding to an overdose\textsuperscript{16,17}
    • Reduction in deaths\textsuperscript{14,18}
    • Small increase in people with SUDs enrolling in treatment\textsuperscript{19,20}
Acceptability of harm reduction interventions

Poll question: Which of the 3 harm reduction interventions do you consider acceptable services for a society* to provide to people who use drugs? (Select multiple if you wish)

- Safe consumption sites
- Syringe distribution programs
- Naloxone distribution programs

*Not yet asking if you personally want to work with these services!
Medications for Opioid Use Disorders (MOUD)

Methadone, buprenorphine, & naltrexone
Medications for opioid use disorders (MOUD)

• What are they?
  • FDA-approved medications used to treat opioid use disorder (OUD)
  • Sometimes called “medication-assisted treatment” (MAT) or “medications for addiction treatment”
  • Other medications also exist to treat alcohol use disorder (AUD)
  • Other substance use disorders do not currently have medication treatments
3 kinds of MOUD

- Methadone: Full agonist; generates effect
- Buprenorphine: Partial agonist; generates limited effect
- Naltrexone: Antagonist; blocks effect

Opioid receptors in the brain

Source: Pew Charitable Trusts21
Methadone

• Synthetic opioid agonist (i.e., in the family of opioid drugs)
• Long-acting (24-36 hrs), prevents withdrawal symptoms, and reduces cravings for people with OUDs
• Unlike short-acting illicit opioids, methadone does not produce euphoria when dosed properly by a physician
• Blocks the effects of other opioids like heroin
• Patients are encouraged to stay in methadone treatment as long as they feel helped by the medication\textsuperscript{21}
Buprenorphine

• Similar to methadone in how it works
• Methadone and buprenorphine are both “opioid agonist” treatments, sometimes called OAT
• Less regulated than methadone, lower burden on patients for access
• “Suboxone” is a popular brand name formulation of buprenorphine that combines naloxone to deter patients from injecting/snorting the medicine
• Patients are encouraged to stay on buprenorphine as long as it helps them21
Naltrexone

• Used for both OUDs and AUDs
  • Extended release injectable naltrexone (e.g., Vivitrol) is recommended for OUDs
• Not an opioid, instead this drug just blocks the effects of opioids as well as the euphoric effects of alcohol
• Recommended for people with AUD and OUD who want to reduce their chance of relapse, but not for people with high physical dependence on opioids\textsuperscript{21}
MOUD

- Are they effective?
  - Yes!
  - Methadone and Buprenorphine
    - The “gold-standard” of care for OUDs, especially when combined with counseling
    - More effective than counseling alone for retaining people with OUDs in treatment services and reducing illicit behaviors (drug use and criminal activities)\textsuperscript{22,23}
    - “Medication first” programs that provide low-threshold medication without requiring counseling also shown to increase access and retention\textsuperscript{24}
Effectiveness of methadone and buprenorphine

Relapses during treatment among MassHealth members who received treatment for opioid addiction between 2003 – 2010, n= 56,278 patients\textsuperscript{25}
• Are they effective?
  • Yes!
  • Naltrexone
    • New studies show it reduces cravings for opioids and illicit drug use, however, less effective than methadone and buprenorphine\textsuperscript{26-29}
    • Requires a 7-10 day opioid detoxification period before the drug can be started, and during this period patients are at heightened risk of relapse and overdose\textsuperscript{26}
    • Receiving counseling and naltrexone is still more effective than counseling alone for people with OUDs\textsuperscript{30}
Acceptability of medication treatment

Poll question: Which of the 3 medications do you consider acceptable treatments for a society to provide to people who use opioids? (Select multiple if you wish)

- Methadone
- Buprenorphine or Suboxone
- Naltrexone or Vivitrol
Utilizing medications and harm reduction in your work

Poll question: Which of the harm reduction interventions and medication treatments would you be willing to connect your clients/patients to? (Select multiple if you wish)

- Safe consumption sites
- Syringe distribution programs
- Naloxone distribution programs
- Methadone treatment
- Buprenorphine or Suboxone treatment
- Naltrexone or Vivitrol treatment
Barriers to Services
Barriers to harm reduction and treatment services

1. Cost
2. Lack of information
3. Stigma toward people with addiction conditions
4. Stigma toward medication and harm reduction interventions
Cost

- Although many harm reduction programs offer free services, medication and therapy treatment programs often charge for their services
  - Methadone cost: $13-15/day
  - Injectable naltrexone cost: $1,400/month
  - Buprenorphine cost: $350/month
- For uninsured or underinsured patients, such costs can be too high to access care
- Among insured patients, the cost of traveling to get services and taking time from work or family to do so can also be costly
Lack of information

• Public knowledge of services and treatment often comes from media that do not portray evidence-based interventions, or only show abstinence-based interventions\textsuperscript{31}

• This lack of information can fuel stigma toward effective harm reduction interventions and delay patient access to services\textsuperscript{32}
Stigma toward people with addiction conditions

- **Stigma:** When a person or group experiences prejudice or discrimination in society because of a particular characteristic.

- **Examples of stigma toward people with substance use disorders (SUDs) includes:**
  - Being denied care in emergency departments
  - Being called a “junkie”
  - Being denied a job due to past SUD diagnosis

- **Effects of stigma:**
  - Emotional distress\(^{33}\)
  - Housing discrimination, homelessness\(^{33}\)
  - **Avoiding treatment**\(^{34,35}\)
Stigma toward medication and harm reduction interventions

- Individuals may be **shamed for using harm reduction programs or medication treatment** by people who think the only legitimate steps toward recovery are through abstinent treatment programs\(^{36}\)
- This stigma at times comes from people who work in treatment\(^{36}\)
  - Urging patients to stop medication treatment
  - Denying counseling services to people who use MOUD or still use illicit drugs
- Stigma toward these services can result in
  - Delaying medication initiation\(^{37-38}\)
  - Hiding harm reduction and medication use from friends/family, employers\(^{39}\)
  - Stopping medication treatment prematurely\(^{40}\)
Treatment & Harm Reduction as Complementary Approaches
Common misperceptions of harm reduction and MOUD

“Harm reduction encourages drug use”

“Harm reduction underestimates what people who use drugs are capable of achieving”

“MOUD, especially methadone or buprenorphine, are the same as heroin use”

“MOUD should only be used for a short time”

“Methadone makes people so drowsy that they look high”
Common misperceptions of harm reduction and MOUD

• Many of the myths about harm reduction and MOUD make people think these approaches to addiction cannot work with other treatment models

• Harm reduction and MOUD can and should be components of care that work along with other forms of treatment!
Traditional Treatment Programs and the Substance Use Spectrum:

No use/abstinence

Experimental/social/recreational use and bingeing

Substance use disorder (SUD): mild, moderate, or severe

The goal of traditional inpatient and outpatient treatment for SUDs
Traditional Treatment Programs and the Substance Use Spectrum:

- No use/abstinence
- Experimental/social/recreational use and bingeing
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The goal of traditional inpatient and outpatient treatment for SUDs

VS.

Harm Reduction Programs and the Substance Use Spectrum:

- No use/abstinence
- Experimental/social/recreational use and bingeing
- Substance use disorder (SUD): mild, moderate, or severe

The many goals of harm reduction strategies for SUDs
Integrating harm reduction, MOUD and other treatment?

Poll question: Do you think harm reduction, MOUD programs, and abstinent treatment could be integrated in ways where each kind of service complements the other?

- **Yes** - I see how these services can work together to help people with SUDs
- **Maybe** - I see opportunities for integration/collaboration, but not sure if it can ultimately work out
- **No** - I think these services fundamentally conflict in their approaches to SUD care
Harm reduction, MOUD, & other treatment

In many regions there is tension between harm reduction, MOUD, and non-medication treatment programs.

How can harm reduction, MOUD programs, and other treatment programs work together better?
Thank you!

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References


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