Building Community Coalitions to Address the Opioid Crisis
Understanding the Overdose Epidemic, Addiction, and Treatment

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Case Presentation
Harms related to opioid use

• Overdose
• Infection
• Criminal activity and criminal justice involvement
• Family crisis
• Homelessness
Opioids

Progressive CNS Depression

Dose

Action

Death
Coma
Nod
Euphoria
Relax
Pain
Overdose Deaths

• 58,000 Died in the Vietnam War
• 51,000 Died of AIDS in 1995
• >62,000 Died of overdose in 2016
• Drug Overdose is leading cause of death for Americans under age 50
• Life Expectancy Decreases 2\textsuperscript{nd} year in a row
3 Waves of the Rise in Opioid Overdose Deaths

Wave 1: Rise in Prescription Opioid Overdose Deaths
Wave 2: Rise in Heroin Overdose Deaths
Wave 3: Rise in Synthetic Opioid Overdose Deaths

Drugs Involved in U.S. Overdose Deaths, 2000 to 2016

Synthetic Opioids other than Methadone, 20,145
Heroin, 15,446
Natural and semi-synthetic opioids, 14,427
Cocaine, 10,619
Methamphetamine, 7,663
Methadone, 3,314
Drug-related Deaths

The total number of deaths from drug poisoning, including both illicit and prescription drugs. (Read more)
Impact of opioid epidemic on people experiencing homelessness

- Overdose deaths often top cause of mortality among homeless
- Many barriers to access to treatment
- Outcomes of treatment limited by unmet needs for housing and other basics
- Despair and hopelessness in community
- US Interagency Council on Homelessness: Strategies to Address the Intersection of the Opioid Crisis and Homelessness

Harms and Harm Reduction

• Harms related to method of use
  • Injection related infection – skin and soft tissue, endocarditis, other
  • Sharing related infections – HIV, HCV

• Harms related to characteristics of substance
  • Overdose
  • Toxicity from cut

• Most opioid use harms are related to criminalization and prohibition
  • Quality control of drug supply is poor – users unable to predict what they are getting
  • Use is hurried and surreptitious
  • Users are isolated from positive aspects of community and immersed in destructive aspects
Case 2
Substance Use Disorder
Addictive Disease
Addiction
Substance Use Disorder
Addictive Disease
Addiction
• DSM 5
• Bio-psycho-social-spiritual phenomenon
• Resilience and recovery
TABLE 4.4 DSM-5 Criteria for Substance Use Disorder

A mild substance use disorder is diagnosed if 3 of the following criteria are met. People meeting 4 or 5 criteria are classified as having moderate substance use disorder, and severe substance use disorder is diagnosed in cases where 6 or more of the criteria are met.

1. Taking the substance in larger amounts or for longer than you meant to
2. Wanting to cut down or stop using the substance but not managing to
3. Spending a lot of time getting, using, or recovering from use of the substance
4. Cravings and urges to use the substance
5. Not managing to do what you should at work, home, or school because of substance use
6. Continuing to use, even when it causes problems in relationships
7. Giving up important social, occupational, or recreational activities because of substance use
8. Using the substance again and again, even when it puts you in danger
9. Continuing to use, even when you know you have a physical or psychological problem that could have been caused or made worse by the substance
10. Needing more of the substance to get the effect that you want (tolerance)
11. Development of withdrawal symptoms, which can be relieved by taking more of the substance

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impaired control</td>
<td>• Opioids used in larger amounts or for longer than intended</td>
</tr>
<tr>
<td></td>
<td>• Unsuccessful efforts or desire to cut back or control opioid use</td>
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<tr>
<td></td>
<td>• Excessive amount of time spent obtaining, using, or recovering from opioids</td>
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<td></td>
<td>• Craving to use opioids</td>
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<tr>
<td>Social impairment</td>
<td>• Failure to fulfill major role obligations at work, school, or home as a result of recurrent opioid use</td>
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<tr>
<td></td>
<td>• Persistent or recurrent social or interpersonal problems that are exacerbated by opioids or continued use of opioids despite these problems</td>
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<tr>
<td></td>
<td>• Reduced or given up important social, occupational, or recreational activities because of opioid use</td>
</tr>
<tr>
<td>Risky use</td>
<td>• Opioid use in physically hazardous situations</td>
</tr>
<tr>
<td></td>
<td>• Continued opioid use despite knowledge of persistent physical or psychological problem that is likely caused by opioid use</td>
</tr>
<tr>
<td>Pharmacological properties</td>
<td>• Tolerance as demonstrated by increased amounts of opioids needed to achieve desired effect; diminished effect with continued use of the same amount</td>
</tr>
<tr>
<td></td>
<td>• Withdrawal as demonstrated by symptoms of opioid withdrawal syndrome; opioids taken to relieve or avoid withdrawal</td>
</tr>
</tbody>
</table>
Neurobiology 1
Neurobiology 2

preoccupation with obtaining persistent physical/psychological problems

preoccupation anticipation

addiction

tolerance withdrawal

compromised social, occupational or recreational activities

binge intoxication

persistent desire larger amounts taken than expected

withdrawal negative affect
Neurocircuitry/Neurochemistry of the “Dark Side” of Addiction Overlap with Neurocircuitry of PTSD

↑ Corticotropin-releasing factor
↑ Norepinephrine
↑ Dynorphin
↑ Vasopressin
↑ Orexin (hypocretin)
↑ Substance P
↓ Neuropeptide Y
↓ Nociceptin (orphanin FQ)
↓ Endocannabinoids

Symptom co-morbidity in PTSD and addiction
Hyperarousal
Negative affect
Dysphoria
Hyperarousal
Irritability
Sleep Disturbances
Attentional biases
Self-destructive/reckless behavior
HPA dysregulation

From: George O, Koob GF. Proc Natl Acad Sci USA, 2013, 110:4165-4166

NIH National Institute on Alcohol Abuse and Alcoholism

“High”

Normal Mood

Abstinence Begins

phoria
Neurobiology 4

- Abnormal Physiology related to constant cycle of intoxication / withdrawal
  - Endocrine effects
  - Immune system effects
  - Pain
Bio-Psycho-Social-Spiritual

• Biological factors
  • Genetics 50%+ attributable cause of alcohol use disorder and probably other addictions
  • Biological impact of ACE’s
  • Effects of chronic pain
  • Physical and neurological damage related to substance use
    • Brain systems most needed for recovery may be most severely damaged
    • Damage often permanent but resilience and brain plasticity allow for work arounds and recovery
Bio-Psycho-Social-Spiritual

• Psycho-social factors
  • Importance of set and setting
  • Very high prevalence of co-occurring mental health disorders
• People experiencing homelessness are not “isolated”
  • Community is essential but may not be healthy or helpful
Bio-Psycho-Social-Spiritual

• Psycho-social factors
  • Racism and other forms of discrimination and violence
  • Lack of opportunity and disadvantage
Bio-Psycho-Social-Spiritual

• Spiritual factors - Aspects of life that transcend the everyday mundane
  • Loss of meaning in life
  • Dehumanization
  • Loss of connection
  • Shame
  • Need for forgiveness for harms done to others and self
Resilience and Recovery

• Most people with substance use disorders who get better do so without medical intervention

• A dead addict can’t recovery!
  • Harm reduction, harm reduction, harm reduction, ...

• Most people with SUD do not get treatment
  • More severe disorder less likely to resolve without intervention
  • Opioid use disorder – unlikely to maintain remission without medications for addiction treatment

• Most effective treatment will address bio-psycho-social-spiritual aspects
  • Needs to address trauma
  • Needs to address homelessness
Case 3

NARCANIA VS DEATH

THE HEROINE WHO FIGHTS HEROIN OVERDOSES (AND OTHER OPIATE QOS. LIKE FROM PILLS)

DEATH APPROACHES HIS NEXT VICTIM, LIL' SALLY SLAMSALOT WHO IS OVERDOsing ON OPIATES (HEROIN + PILLS)
BUT WAIT! BEFORE DEATH CAN TAKE SALLY AWAY, NARCANIA COMES TO SAVE THE DAY WITH HER AMAZING OPIATE BLOCKING POWERS!
Yes this is a real thing! Narcan, or Naloxone, is an opiate blocking drug that revives people who are experiencing an opiate-related overdose.

Narcania gives Sally Narcan, bringing her back to life! Hooray!

I'm outtie, but I'll be back.

Thanks Narcania! I don't know if there's anything worth living for, but at least now I'll get the chance to find out!
Harm Reduction for opioid users

- Syringe access
- Naloxone
- Testing drugs for contaminants
- Drug users unions and other advocacy
- Safe Consumption Facilities (safe injection facility)
- Embracing a harm reduction philosophy
  - Trauma informed care
  - Harm reduction practices
- Treatment
  - Medications for Addiction Treatment (MAT)
- Abstinence
SYRINGE ACCESS: IT’S COMMON SENSE

Sharing needles can get you more than high... it can get you HIV and Hep C.

Use clean needles. Get them at the health department.
Test Your Dope!
Drug Users Unions and other advocacy

- Success of peer naloxone
- Restoration of meaning and connection
- Volunteering at syringe access
- Drug users can be “solid citizens”
Comment

Safe injection facilities save lives

Chris Beyrer

Review

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

Chloé Potier, Vincent Lanrévote, Françoise Dubois-Arber, Olivier Cottencin
Harm Reduction Philosophy

• Treat people as human beings with dignity and respect
• Meet people where they are
• Harm reduction psycho-therapy
• Harm reduction Addiction Medicine
• Harm Reduction changed my life
Case 4

https://www.youtube.com/watch?v=KUmZp8pR1uc

They tried to make me go to rehab but I said "No, no, no".
DEATH BY ADDICTION

Prince was a strict vegan, didn’t drink and frowned on recreational drugs, but his healthy lifestyle didn’t exclude prescription medication

By JANE VORSTER & SHANAAZ PRINCE
What is treatment?

• What Are Possible Goals Of Treatment?
Does Treatment Work?

- Treatment Resistant – Treatment Failure
  - Who or what is resistant?
  - Who or what has failed?

- Use Motivational Interviewing
  - Agree on treatment goals
  - Reassess regularly
  - Don’t keep doing the same thing that didn’t work before

- Avoid “blaming the victim”

- Ineffective, Outmoded, Non-evidence Based Treatment is still vast preponderance

- Evidence Based Best Practices work as well (or poorly) as most other medical interventions
Goals of Treatment

• Markers of Success
  • Retention in Treatment
  • Improved health and functioning
  • Decreased destructive behavior (toward self and others)
    • Tricky area due to moral judgment
  • Decreased criminal justice involvement

• Usual Goals
  • Abstinence
  • Reduction in use
  • Reduction in risky use
Opioid Use Disorder Treatment

• MAT
  • Medication for addiction treatment=medication assisted treatment
  • Buprenorphine
  • Methadone
  • Naltrexone
• Everything Else
Barriers to Treatment for Individuals Experiencing Homelessness

• **Patient-related barriers**
  - No insurance
  - No ID
  - No phone
  - Difficulty making appointments
  - Can’t / won’t leave stuff / pets
  - Can’t / won’t leave partner
  - Lack of trust for doctors
  - Warrants or other criminal justice complications
  - Chaotic drug use
  - Acute medical issues
  - Frequent lost or stolen medication

• **Prescriber-related barriers**
  - Judgment and stigma
  - Won’t provide same-day prescription
  - Discharge patients with ongoing drug use
  - Discharge patients who aren’t abstinent
  - Discharge patients who miss appointments
  - Concern for diversion of medication
  - Perception of patients as “difficult”, “time-consuming”, “manipulative”

• **System-related barriers**
  - Not enough providers/prescribers
  - Lack of same-day access to care
  - No support to help patients navigate fragmented system of care
What about NA, AA, other 12 step and fellowship groups?

• Yes lifesaving – Not treatment
• Spiritual fellowships
• Community Supports
• 12 step facilitation is a form of treatment
• Not for everyone and rejection of AA is not “treatment resistance”
Evidence For MAT

• Extremely high likelihood of return to opioid use in long term heroin users (90%+ no matter what other treatment used) if not on MAT
• Even for shorter term prescription opioid only patients rates of return to opioid use very high if not on MAT
• Not substituting 1 addiction for another: Normalization of physiological functions well documented
  • Advantage of long acting vs short acting
• Best evidence for indefinite treatment for most patients
  • Short term detox lower safety
• Safety
Naltrexone

- Available as daily oral or monthly injectable
- Efficacy is still being debated and demonstrated
- Not well studied in people experiencing homelessness and other severe opioid use disorder patients
- Few adverse effects
  - Injection site reactions
  - Problems if need for opioid analgesic
  - High risk of overdose when on for a while and then off
    - Decreased tolerance
Methadone

- Only available in highly regulated Narcotic Treatment Programs
- High treatment retention and very strong evidence base of successful outcomes
- Usually daily observed dosing
  - Take homes limited to stable patients
  - Homelessness is usually an automatic sign of non-stability and contraindication to take homes
- Adverse effects
  - Oversedation and overdose especially 1st week of treatment
  - Constipation
  - Hypogonadism
  - Prolonged QT with risk of sudden cardiac arrest
  - Dangerous when used with alcohol and other sedatives
    - But probably less dangerous than for heroin and other opioids mixed with sedatives
  - “liquid handcuffs”
  - Many myths and urban legends
- “Blocking” effect dependent on idea of inducing very high tolerance and therefore not getting effect of regular dose of opioid
Buprenorphine

• Now available sublingual, buccal, implantable (6 month), injectable (1-4 weeks)
• Available from MDs, NPs, PAs with training and waiver
• Stimulates opioid receptors
  • Minimal euphoric effect
  • Ceiling effect on sedation
  • Pts report feeling “normal”
• Very high affinity to mu receptors
  • Blocks effects of other opioids
  • Decreases risk of opioid overdose if using other opioid
• Adverse Effects
  • Constipation
  • May make pain management more complicated if opioid analgesic needed
    • May not!
  • Risk of sedation and overdose when used with sedatives
    • Less than with street drugs or methadone
MAT and bio-psycho-social-spiritual approach

- Hard to show additional benefits of counseling
  - Need to treatment withdrawal and craving and cycle of intoxication/withdrawal almost always needs to come first
  - Maybe counseling was not matched to needs

- Useful add-ons to MAT
  - Naloxone training and dispensing
  - Housing
  - HCV and HIV treatment
  - Co-occurring disorder treatment
  - Opportunities for meaningful activities
  - Comprehensive pain management
MAT and bio-psycho-social-spiritual approach

• Harm reduction psycho-therapy and other psycho-dynamic therapy
• Cognitive behavioral therapy
• Meaningful work or volunteerism
• Other community involvement
• Pros and cons of “working in the recovery field”
MAT and bio-psycho-social-spiritual approach

• Destigmatize drug users and treatments
• Mindfulness, meditation, yoga, other practices
• Prayer and other faith practices
• 12th step work
  • “Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.”
Case 5

time for a dr zevin email:
what a beautiful day on 5th..... i tell people all the time to go there when they're ready to get clean...go to TWC and ask for dr zevin..