Trends within Drug Abuse and Healthcare – COVID and Beyond

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Competing Interests

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RADARS® System is supported by subscriptions from pharmaceutical manufacturers, government and nongovernment agencies for surveillance, research, and reporting services. No subscriber participated in the conception, analysis, drafting, or review of this presentation.
What Caused the US Opioid Crisis - HHS

• In the late 1990s, pharmaceutical companies reassured the medical community that patients would not become addicted to opioid pain relievers and health care providers began to prescribe them at greater rates.

• Increased prescription of opioid medications led to widespread misuse of both prescription and non-prescription opioids before it came clear that these medications could indeed be highly addictive.

• 2017 HHS declared a public health emergency and announced a five point strategy to combat the opioid crisis

What Really Happened?

• Health care systems and regulation
  • Fifth vital sign, patient “satisfaction,” etc.
• Careless doctors
  • We knew better, but let convenience win out.
  • Criminal behavior
• Opioid marketing
  • Aggressive, irresponsible
• Increased supply of illicit opioids
• Lack of treatment for OUD
  • Good, but after the fact, insufficient to meet demand
• Increased demand?
10 Years ago...

Prescription drug abuse is the Nation's fastest-growing drug problem, and the Centers for Disease Control and Prevention has classified prescription drug abuse as an epidemic. ... nearly one-third of people aged 12 and over who used drugs for the first time in 2009 began by using a prescription drug non medically.
Real World Evidence and Triangulation

RADARS® System

- Acute Health Effects
- Substance Use Treatment
- Drug Diversion
- Population Survey
- Street Price
- Web Discussion
- Mortality

Opioid Prescribing Decreased Until COVID

Source: IQVIA™ US-Based Longitudinal Prescription Data
RADARS Drug Diversion Program, 2006 - 2020

Diversion of Prescription Drugs

Invest. Opened Per 100,000 population

Combined: oxycodone, hydrocodone, hydromorphone, fentanyl, morphine, tramadol
RADARS Drug Diversion Program, 2006 - 2019

Invest. Opened Per 100,000 population

oxycodone, hydrocodone, hydromorphone, fentanyl, morphine, tramadol
Total Drug-Involved Deaths in the US

Figure 1. National Drug-Involved Overdose Deaths*
Number Among All Ages, by Gender, 1999-2019
HOW CAN WE HAVE DECREASING PRESCRIPTION DRUG ABUSE, BUT INCREASING DEATHS?
Most Deaths are Due to Fentanyl and Heroin (Often Adulterated with Fentanyl or Analogs)

Fentanyl is the reason that deaths are increasing while Rx opioids are decreasing
Drug Exposure
Nicotine - Alcohol – Cannabis – Etc.

Polysubstance Abuse

Risk Factors
- Family Dysfunction
- Emotional Abuse
- Isolation

Risk Factors
- Physical Abuse
- Trauma
- Genetics

Opioid
- Heroin/Fentanyl
- Designer opioids
- Rx analgesics
- Loperamide

Sedative/Hypnotics
- Alprazolam
- Diazepam
- Designer drugs
- Z-Drugs

Antipsychotic
- Quetiapine
- Olanzapine

GABAergic
- Pregabalin
- Gabapentin

Stimulant
- Cocaine
- Amphetamine
- Methylphenidate
- Designer drugs

Hallucinogen
- Ketamine
- LSD
- Psilocybin

NPS/Synthetic
- Mephedrone
- Cathinones
- Synth Cann’oids

Risk Factors
- Physical Abuse
- Trauma
- Genetics

- Family Dysfunction
- Emotional Abuse
- Isolation
Drug Exposure
Nicotine - Alcohol – Cannabis – Etc.

Risk Factors
Family Dysfunction
Emotional Abuse
Isolation

Risk Factors
Physical Abuse
Trauma
Genetics

Polysubstance Abuse

Drugs are not my problem.
Reality is my problem.
Drugs are my solution.

Russell Brand
It’s Not the Drug
Deaths of Despair

White non-Hispanic midlife mortality from “deaths of despair” in the U.S. by education
Ages 50-54, deaths by drugs, alcohol, and suicide

Strategy Implications

• Supply reduction: “The War on Drugs”
  • Better law enforcement can reduce the amount of drug available
  • No drug = no abuse
  • But efforts have failed for over 50 years

• Demand reduction
  • If people don’t want to abuse drugs (e.g. no market for sale), then there will be no supply.
  • Community Coalitions
  • Substance abuse treatment facilities

• Harm reduction
  • Measures to reduce the harm produced by drug abuse (e.g. needle exchange programs, take-home naloxone, etc.)
Project Lazarus

- Provider Education
- Naloxone
- Community Education
- Pain Patient Support
- Public Awareness
- Pain Management
- Hospital ED Policies
- Data & Evaluation
- Addiction Treatment
- Harm Reduction
- Diversion control
- Legislation

https://www.projectlazarus.org/
Covid and Beyond
Endorse. Per 100,000 population

oxycodone, hydrocodone, hydromorphone, morphine, tramadol
Treatment Center Programs, 2008 - 2020

Endorse. Per 100,000 population

Oxycodone, hydrocodone, hydromorphone, morphine, tramadol
## Changes in Treatment Center Operations

<table>
<thead>
<tr>
<th>Operation Change</th>
<th>March 1, 2020 through May 31, 2020</th>
<th>June 1, 2020 through September 31, 2020</th>
<th>October 1, 2020 through December 31, 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspended patients from entering treatment</td>
<td>15.3%</td>
<td>3.1%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Temporarily Closed and Reopened</td>
<td>6.9%</td>
<td>3.1%</td>
<td>5.1%</td>
</tr>
<tr>
<td>No closure/suspensions</td>
<td><strong>76.4%</strong></td>
<td><strong>93.8%</strong></td>
<td><strong>83.1%</strong></td>
</tr>
</tbody>
</table>
Open Ended Text Response Examples

- “A decrease in the number of patients seeking MAT services”
- “Moved to... two week or monthly take homes.”
- “Telehealth counseling; car dosing”
- “Staffing shortages have led to decreases in counseling services...”
- “Due to court and legal offices not meeting regularly, demand for treatment has decreased.”
- “Some clients who are positive for Covid or experience symptoms have been dosed in their cars.”
- Several noted increased use of telemedicine for treatment and counseling
What Comes Next?

Figure 1. National Drug-Involved Overdose Deaths*
Number Among All Ages, by Gender, 1999-2019
Stimulants - Increasing Mortality over Time

Mortality related to medical stimulants is rising rapidly alongside illicit substances like cocaine and methamphetamine.

Black J, et al. Association of Medical Stimulants With Mortality in the US From 2010 to 2017
Interaction of Licit and Illicit Pharmaceuticals
3 Million Adults Have Used Kratom, NMURx, 2018-2019

Estimated prevalence of lifetime Kratom use is 1.3% = 3,353,624 adults

Nonmedical Use of Loperamide (Immodium) in UK and US, NMURx, 2017

Why?

- Tx Med Condit
- Get High
- Come Down
- Withdraw
- Other

UK
US

Increasing Diversion of Nonscheduled Psychoactive Prescription Medications

Kurtz SP, et al. Pharmacoepidemiol Drug Safety, 2019
Summary

• Opioid deaths are still rising
  • Deaths mainly due to synthetic opioid analog

• It’s Not Just The Drug
  • Most patients misuse more than one drug
  • Most deaths involve more than one drug
  • Treatment needs to address the underlying causes of opioid use

• Abuse of other drugs is skyrocketing

• Societal mirror?
Questions?

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