Opioids—The New Plague

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Gwyn Staddon, age 16, found dead in a Starbuck’s restroom.

Parents in East Liverpool, Ohio, passed out from opioid overdose in running vehicle with child in the back seat.
Opioid Crisis—How Did We Get Here?

- 1990’s introduced new healthcare accreditation standards:
  - Pain control became the “fifth” vital sign in evaluating patients
  - Physicians encouraged to control all pain out of fear of negative evaluations

- Misinformation/misperceptions of the addictiveness of intermediate and long acting opioids

- Pharmaceutical companies’ marketing campaigns

- Inappropriate prescribing practices:
  - Use for other than moderate-to-severe, intractable, or end-of-life pain
  - Duration of treatment:
    - Risk of addiction increases after more than three days of use
  - Treating with the wrong type of medication:
    - Different types of pain respond better to non-opioid medications

- Patient misuse:
  - Hoarding
  - Taking more than prescribed in amount or frequency
  - Taking differently than prescribed, e.g., snorting or injecting
Pain Is the Problem

- The most common reason to seek medical care in United States
- Average 4.6 hours per week of productive time lost due to pain
- Chronic pain is greater than diabetes, heart disease, or cancer combined

Pain may be controlled at local, spinal, or brain levels by various medications including local anesthetic, opioid, and anti-inflammatory drugs.
What Are Opioids?

• **Opioids:**
  - Chemically-related substances that interact with specific receptors in the nerve cells of the body and brain
  - Relieve pain
  - Produce euphoria, and later tolerance, to opioids

<table>
<thead>
<tr>
<th>Common Prescription Opioids</th>
<th>Illicit Opioids</th>
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<tbody>
<tr>
<td>Hydrocodone (Vicodin), Oxycodone (Percocet)</td>
<td>Heroin</td>
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<tr>
<td>Morphine</td>
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<td>Codeine</td>
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<td>Fentanyl</td>
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Prescription opioid analgesics are the most commonly abused opioids in the United States.
The Opioid Epidemic

• 2016 Centers for Disease Control (CDC) and Prevention statistics:
  – 63,600 drug overdose deaths:
    • 66 percent involved opioids
  – An average of 115 Americans die every day due to opioid overdose
Who’s at Risk

• Risk factors:
  – Genetic predisposition?
  – Poverty
  – Unemployment
  – Family or personal history of substance abuse
  – Young age
  – Risk-taking or thrill-seeking behavior
  – History of severe depression or anxiety
  – History of criminal activity
  – Female gender:
    • Women, due to issues of chronic pain, treated for longer periods and with higher doses
Addiction: Substance Use Disorder

- Addiction:
  - Substance Use Disorder
  - Complex, lifelong condition:
    - Physical and psychological dependence
  - No cure, but can be managed
  - 2.4 million Americans struggle with opioid substance use disorder
Prevention of Acute Overdose Deaths

• Naloxone (Narcan):
  – Reverses effects of opioids
  – Available over-the-counter in all states with NASA facilities
  – Blocks the receptors where opioids attach
Initiatives to Combat the Crisis

• Health and Human Services’ (HHS) five priorities:
  – Improve access to treatment and recovery
  – Promote use of overdose-reversing drugs
  – Strengthen understanding of the epidemic through improved public health surveillance
  – Provide support to cutting-edge research on pain and addiction
  – Advance better practices for pain management

• Food and Drug Administration’s action plan:
  – Improve medication labeling and warnings
  – Expand access to development of abuse-deterrent formulations
  – Improve access to medication-assisted treatment

• Prescription drug monitoring programs:
  – State-run electronic databases to track controlled prescription drugs

• Mental Health Parity and Addiction Equity Act (2008):
  – Requires same level of benefits for mental and/or substance use treatment and services as provided for medical/surgical care
Federal Workers Compensation Opioid Initiative

- Department of Labor Office of Workers’ Compensation Program:
  - Additional efforts to monitor and manage claimants’ opioid medication usage
  - Urge claimants and their treating physicians to be mindful of safety concerns relating to opioid medications and to consider alternative drugs
  - Limit prescriptions of opioids
  - Encourage physicians to prescribe the shortest duration appropriate
  - Tailored treatment plans
  - Aggressive fraud detection and prevention
What Does NASA Do?

- In accordance with NPR 3792.1D, NASA supports a drug-free workplace

- Conducts the following drug testing:
  - Pre-employment
  - Random
  - Reasonable suspicion
  - Accident or unsafe practice
  - Follow-up
  - Voluntary

- Drugs included in screening:
  - Marijuana
  - Cocaine
  - Amphetamines
  - Opiates
  - Phencyclidine

- Contractors must comply with Drug-Free Workplace Act

- Drug testing is conducted in accordance with company policies and procedures
Opioids, Safety, and Supervisors

- Opioids were recently added to occupational drug screens
- Recent regulations require the Medical Review Officer to alert the supervisor to possible unsafe testing results
- Even in the case of legal opioid use, safety concerns may exist for certain occupations, e.g., heavy machinery
- Supervisors will need to consider the nature of the employee’s duties and possibly confer with the Center physician or the prescribing physician to assess the safety of opioid use while on duty
How NASA Supports Employees

• Provides Employee Assistance Program support at all locations:
  – Assists with referral and treatment of employees with substance abuse disorders
  – Assists employees with family members suffering from substance abuse disorders
  – Educates supervisors

• Complies with “Safe Harbor” voluntary referral policy:
  – Employees self-identifying substance misuse/abuse for purposes of entering drug treatment program
  – Must occur prior to being identified by other means
  – Does not exempt individual from other non-disciplinary consequences
NASA Drug Free Workplace

https://www.nssc.nasa.gov/drugtesting
References

• NASA Resources:
  – NPR 3792.1D, NASA's Plan for a Drug Free Workplace
  – NASA Drug Free Workplace Program Employee & Supervisor Guide—October 2018 (Large PDF)
  – NSSC Drug Free Workplace Information
  – Trends, Challenges, and Impacts of Addiction-A Personal and Professional Perspective (Office of the Chief Health and Medical Officer-/Office of Human Capital Management-sponsored webinar)

• Other Resources:
  – Executive Order 12564—Drug-free Federal Workplace
  – CDC: Opioid Overdose
  – Mayo Clinic: How Opioid Addiction Occurs
  – HHS: Opioid Help, Resources, and Information