The Opioid Epidemic: Understanding Trends in Drug Misuse among Older Adults

Mary W. Carter, PhD
Towson University

ABA Senior Lawyers Division Spring Meeting 2017
An Overview for Today’s Presentation

• History of Opioid Epidemic
• Current Trends of Opioid Misuse: All Ages
• Current Trends of Opioid Misuse: Older Adults
• Current Trends: Emergency Department and Hospital Use

During my talk, 78 adults aged 18+ will die from an opioid overdose

Every 23 minutes, an older adult is admitted to an emergency department with related drug misuse complications

In Maryland, nearly 7% of all Emergency Department Visits related to Opioids occurs among adults aged 65 years or older.
Unprecedented growth → 240+ million prescriptions were dispensed for opioids in 2014 → more than one Rx for every adult aged 18+

- Each day, roughly 650,000+ opioid prescriptions are written
- Every 24 hours, 78 people die from an overdose
- Staggering annual costs →
  - $20 billion dollars in ED and hospital care
  - $55 billion in related health and social costs

In 2014, 28,647 or 61% of all drug-related deaths involved opioids.

A little history... How many Opioid Related epidemics have there been in the US?

- **Early 1800s**: Opium begins showing up in cough syrups and other preparations, widely available.
- **Mid-1800s to Early 1900s**: Increasing use and marketing of heroin and opium derived products
  - Addiction increases, 1 in 3 addicts → woman
  - 1909 International meeting on Opium at the request of Pres. Teddy Roosevelt, followed by a 1911 international commission
  - 1914 US sales prohibited without prescription
- **Following WWII, epidemic**: Late 1940s to mid-1950s
- **Following Vietnam War, epidemic**: Early 1970s to early 1980s
- “…the early stages of heroin epidemics are often hidden from society, and the epidemics are already full-blown by the time health and other agencies become aware….”

Old habits die hard:

“**For the past 40 years we have been trying the mainly punitive approach**; we have increased penalties, we have hounded the drug addict, and we have brought out the idea that any person who takes drugs is a most dangerous criminal and a menace to society. We have perpetuated the myth that addiction to opiates is the great cause of crimes of violence and of sex crimes. .... **Our whole dealing with the problem of drug addiction for the past 40 years has been a sorry mess.**”

~Dr. Bowman (1958)
A little more history... the beginning of this epidemic: 1990s

• Long acting Opioids developed in 1990s

• New Concern: Unmanaged Pain, began to be referred to as the Fifth Vital Sign
  • In response, call for increased use of opioids for pain

• Pharma companies minimized addictive properties, stressing efficacy and safety over adverse outcomes

• Pain Mills
We are now in the midst of the largest Human-Caused Epidemic Ever.

Sources: [https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6101a3.htm](https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6101a3.htm); [https://www.cdc.gov/nchs/products/databriefs/db190.htm](https://www.cdc.gov/nchs/products/databriefs/db190.htm)
US Consumption of opioids has outpaced the rest of the world.

The US consumes nearly 100 percent of the world total for hydrocodone (e.g., Vicodin) [Source: Volkow (2014). America’s Addiction to Opioids: Heroin and Prescription Drug Abuse. NIA/NIDA.]
Annual Sales in Dollars: $50 Million to $30 Billion in 18 years


That’s a 59,900% increase in 18 years.
Up-Close: Mingo County, WV

- One pharmacy in a little town (Kermit, WV) with less than 400 people
- Located in Mingo County, population 33,000 people
- Received more than 9 million hydrocodone pills over two years.
- Received a Pulitzer Prize for Investigative Reporting.
Maryland: Key Data Source Does not Track Older Adults

Figure 6. Total Number of Opioid* and Non-Opioid-Related Deaths Occurring in Maryland, 2007-2015.

Figure 9. Number of Heroin-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2007-2015.

Office of Epidemiology and Planning, Baltimore City Health Department.
Despite lots of information, we still know very little about opioid addiction among older adults

• Obstacles
  • Few studies provide age-stratified results. Either:
    • Studies do not include older adults,
    • Studies lump older adults together with other age groups (50+)
  • Because of earlier concerns of undertreating pain, research tended to downplay the risk of addiction in older adults (e.g., Guerriero, F. (2017). World Journal of Clinical Cases, 5(3), 73–81.).
  • Early recommendations suggested that older adults were less at risk of addiction (e.g., American Geriatric Society (2009). Pharmacological Management of Persistent Pain in Older Persons. [Note: these recommendations are no longer in use]}

“National prescription tracking data show that more than 40% of opioid Rx are written by [generalists] and most commonly for diseases of the musculoskeletal system” Source: Okie (2010). NEJM, 363(21)

One study found that 15% of hospital discharges resulted in a new prescription, with nearly 45% taking opioids 60 days later. Source: Jena & Goldman (2016). AMA Intern Med. 2016;176(7):990-997
High Risk Opioid Use and Misuse

- Early research focused on misuse of valid prescriptions only
  - “non-compliance”
  - Unintentional and intentional misuse

- High-Risk Misuse Strategies
  - Obtained Rx from multiple doctors
  - Stole prescriptions/pills
  - Some other way (e.g., friends, street)

Older Adults, Pain, and Opioids

FAILURE TO RECOGNIZE BY HEALTH CARE PROVIDERS

• Misdiagnosis symptoms of misuse:
  • dementia, depression, falls, insomnia
• Withdrawal symptoms mimic common complaints
  • Gastrointestinal complaints, confusion
• Misinformation about addiction and older adults
• Older adults more apt to hide signs
• Misuse may be unintentional

OLDER ADULTS ARE VULNERABLE

• Chronic Pain is common
  • 50% community-dwelling older adults
  • 75 to 95% of nursing home residents
• Multiple comorbidities and diagnoses
• Multiple doctors and care provided across multiple settings
• Multiple medications
  • 80% take one Rx daily
  • 20% take five or more Rx daily
• Higher rates of drug complications, e.g., infections
• Dosage → changing target as adults age
Opioid Crisis: Growing Awareness of Drug Misuse among Older Adults

Steep Increase in Hospital Use Related to Opioid Misuse

Aging Baby Boomers and Drug Misuse: Implications for Elder Drug Misuse


Hospital and ED Use and Costs Related to Drug Misuse among Older Adults

• Roughly 5% of all ED Visits by Older Adults involve drug misuse (both intentional and unintentional)
  • 60% women
  • 47% aged 75 years or older
  • 21% rurally located
  • From both high (21%) and low (27%) income groups
  • 5% involved alcohol (much lower than other age groups)
• Nearly 21% of all drug misuse cases were identified through principal diagnosis
• Nearly 60% of those with a principal diagnosis of drug misuse were hospitalized
• Average Hospital Costs + ED Costs per visit = $25,275 dollars.
• Annual Hospital + ED costs per year = $898.1 million dollars

Maryland: Signs that Older Adults are Misusing Opioid Prescriptions

Climbing ED Rates for Opioid-Related Visits

Increase ED Use among Older Adults Climbing Faster than Younger Age Groups

Challenges in Opioid Use among Older Adults

• Untreated chronic pain has consequences
  • Increased disability and reduced mobility
  • Falls
  • Depression, social isolation, and anxiety
  • Poor Sleep

• Chronic Pain may stem from multiple underlying conditions

• Many non-opioid drugs are contraindicated; fail to manage pain, but side affects with opioids are high (80%)
  • Exhaust other options first
  • Patient history (Prior addiction? Antipsychotic Use?)
  • Low dosaging and frequent contact needed

• Like most things in life, the middle of the road approach is warranted.

Additional approaches:
• Massage
• Physical therapy
• Meditation
• Psychotherapy
• Yoga/Tai Chi
• Topical

What do you mean, try something else?! I mean, did you see her list of prescriptions?!