NIH HEAL Workshop

Intersection between Pain and Substance Use

December 2, 2024

Chronic Pain and Substance Use in Older Adults

Lisa R. LaRowe, PhD

Mongan Institute Center for Aging and Serious Illness

Massachusetts General Hospital Division of Palliative Care & Geriatric Medicine

Harvard Medical School

CASI CENTER FOR AGING AND SERIOUS ILLNESS

Improving Outcomes in Aging & Serious Illness

HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

Disclosures

I am supported by the National Institute on Aging grant number K23AG088376. I have also received funding from the U.S. Deprescribing Network (R33AG086944 and R24AG064025).

Outline

1. Our aging population
2. Opioid Use
3. Nonopioid Substance Use
4. Conclusions

Outline

1. Our aging population
2. Opioid Use
3. Nonopioid Substance Use
4. Conclusions

Our Population is Aging

By 2030 one in five individuals in the U.S. will be 65 or older

By 2034 older adults will outnumber children for the first time in U.S. history

(Vespa et al., 2018)

Our population is aging

Special Considerations for Older Adults:

- High prevalence of chronic pain
- Multimorbidity
- Polypharmacy
- Age-related changes in pharmacokinetics and pharmacodynamics
- Limited access to treatments
- Ageism

Outline

1. Our aging population
2. Opioid Use
3. Nonopioid Substance Use
4. Conclusions

Opioid Use in Older Adults

- Nearly **one-quarter** of Medicare Part D beneficiaries received an opioid prescription in 2021 (U.S. Department of Health and Human Services, 2022)
- 22% of older adults use prescription opioids for chronic pain (Ritchie et al., manuscript in preparation)

Opioid Use in Older Adults

Concerns about Opioid Use for Chronic Pain Management in Older Adults

- Limited evidence supporting the long-term efficacy of opioids for chronic pain in older adults (O'Brien & Wand, 2020)
- Age-related changes increase risks for adverse effects (Mangoni & Jackson, 2004; Neelamegam et al., 2021; Yoshikawa et al., 2020)
- The prevalence of opioid use disorder has increased more than 3-fold in older adults from 2013 to 2018 (Shoff et al., 2021)

Key Gap #1: We lack research on effects of opioid regulations and opioid deprescribing in older adults

- Opioid regulations may have had unintended consequences for older adults (Ritchie et al., 2020)

"I am a little concerned…about this whole opioid crisis is making doctors afraid to do anything for their patients."

"Even if I were to go off the drug, I would be in unbearable pain … I talk to my doctor about it every month, 'Is there anything else I could be on that I could get off narcotics?' And she says, 'Not really.'"

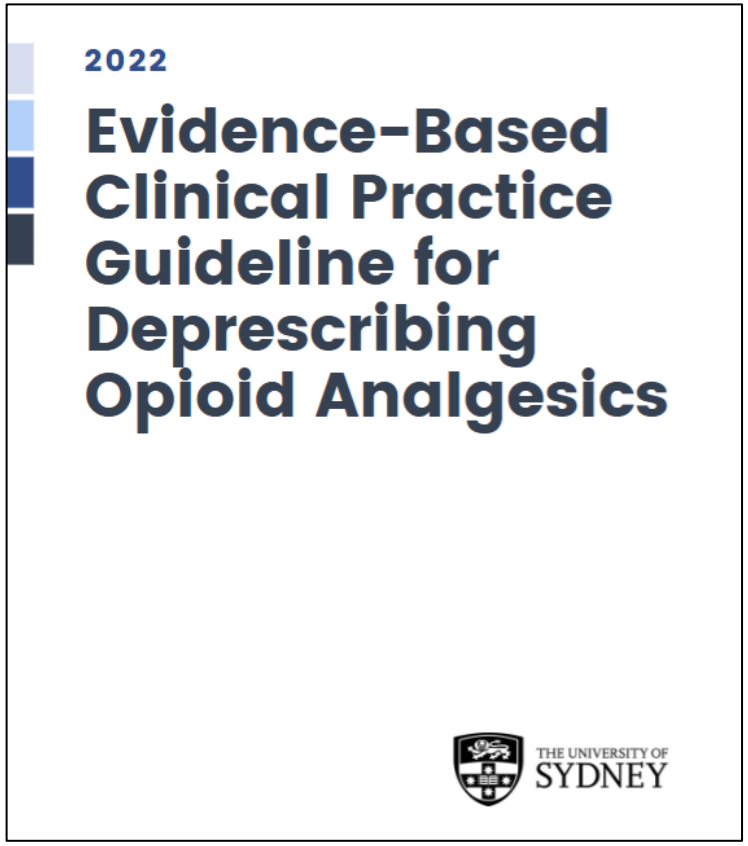
"For instance, if I'm in a lot of pain, I can't send somebody to the drugstore to refill my oxycodone; I have to go there. It doesn't matter if it's hard to walk."

- Research on **iatrogenic consequences** of opioid regulations is needed.

Key Gap #1: We lack research on effects of opioid regulations and opioid deprescribing in older adults

- **Deprescribing**: the planned and supervised process of dose reduction or stopping of medication that might be causing harm or no longer be of benefit
  - No specific guidelines for older adults

- <u>Research is needed to inform the development of clinical practice guidelines for opioid deprescribing in older adults</u>



Key Gap #1: We lack research on effects of opioid regulations and opioid deprescribing in older adults

- One potential consequence of opioid deprescribing =

  non-prescribed opioid or nonopioid substance use

- Pain can be a strong motivator of opioid and nonopioid substance use
  (Ditre & Brandon, 2008; Ditre et al., 2019; Ditre et al., 2023; Fales et al., 2019)

"With the **pain level** being what it is, I'm forced to use [cannabis]"

"If **the pain is so bad**, I say, 'Well, I wanna knock myself out,' and I'll drink a glass of wine."

"…you're in **so much pain**, you can't even walk across the room. At that point, you would try anything that you can that might work."

(LaRowe et al., data presented at the 2024 meeting of the Gerontological Society of America)

- <u>Research is needed to develop opioid deprescribing interventions that maximize health benefits while minimizing risk for harm</u>.

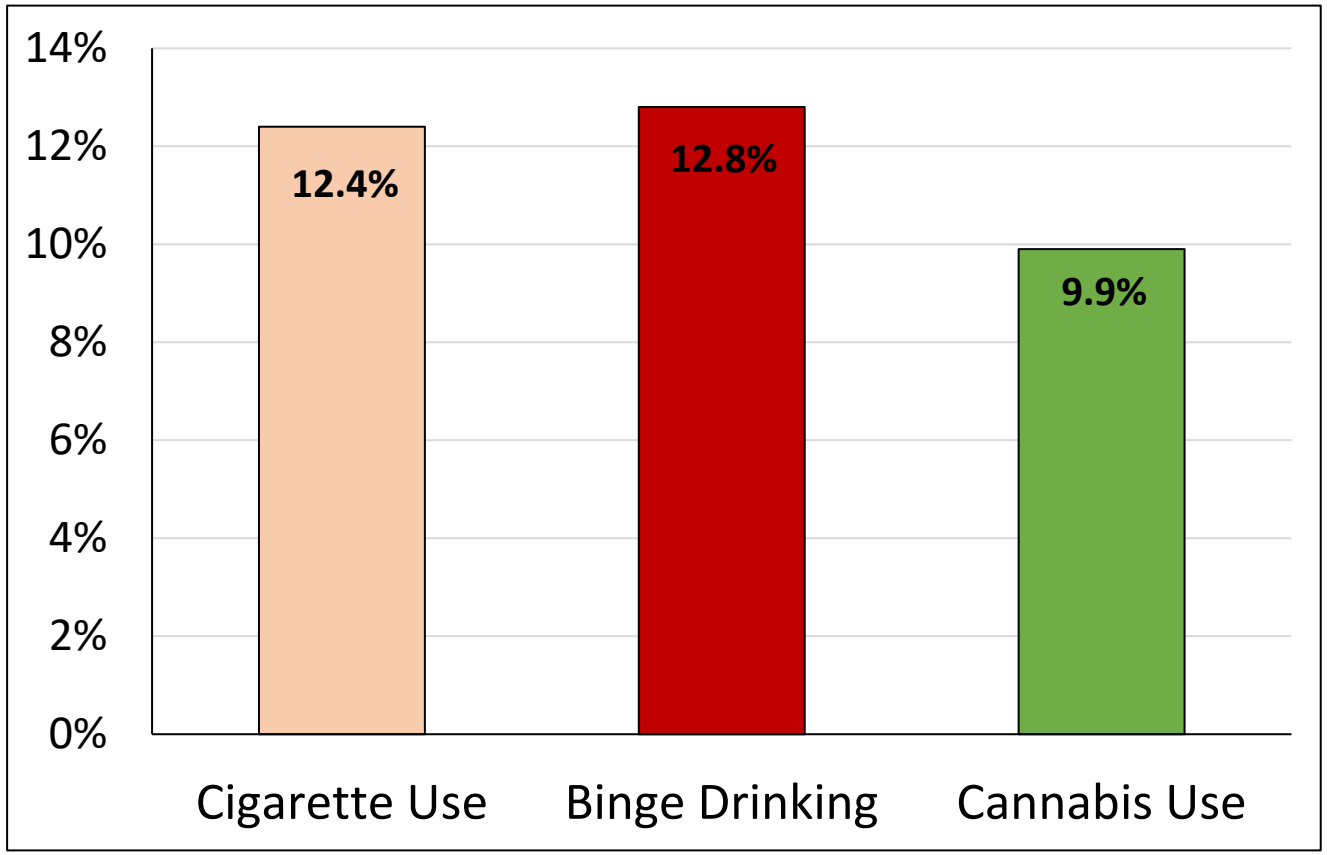
Outline

1. Our aging population
2. Opioid Use
3. Nonopioid Substance Use
4. Conclusions

Nonopioid Substance Use in Older Adults

Prevalence of Nonopioid Substance Use in Older Adults

Results from the 2021 and 2022 National Surveys on Drug Use and Health



(SAMSHA, 2024)

Nonopioid Substance Use in Older Adults

Co-occurring chronic pain and nonopioid substance use

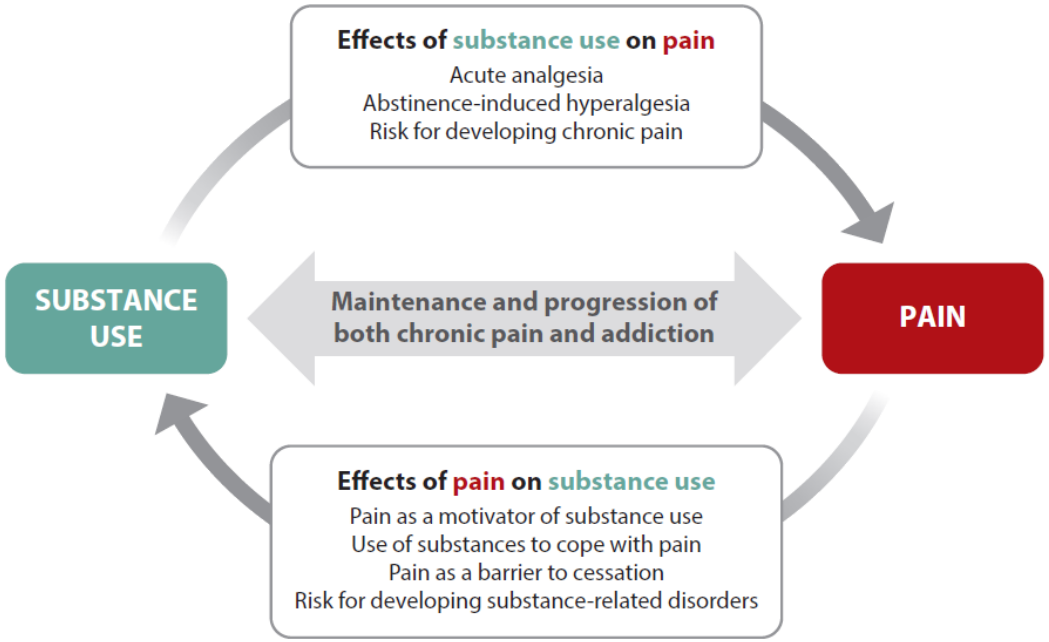
- In older adults with pain, initial evidence of high prevalence of:
  - Cigarette smoking (Jakobsson & Larsson, 2014; LaRowe et al., manuscript in preparation)
  - Alcohol use and hazardous drinking (LaRowe et al., 2024)
  - Cannabis use (Kaufmann et al., 2022; Ritchie et al., manuscript in preparation)

Key Gap #2: We lack research on the impact and treatment of nonopioid substance use in older adults with chronic pain

- **Older adults are underrepresented in most research on pain and nonopioid substance use**
  - Exclusion of adults aged ≥65
  - Exclusion based on comorbidities and/or medications
  - Poor reporting of prevalence of older participants
- Research focused specifically on older adult populations is needed.

Key Gap #2: We lack research on the impact and treatment of nonopioid substance use in older adults with chronic pain

- Very limited work in older adults has examined the impact of:
  - Distinct patterns of substance use on pain-related outcomes
  - Pain on substance-related outcomes
- <u>We need longitudinal research focused on bidirectional relationships between pain and substance use in older adults</u>
- <u>We also need research on the impact of co-occurring pain and substance use in older adults.</u>



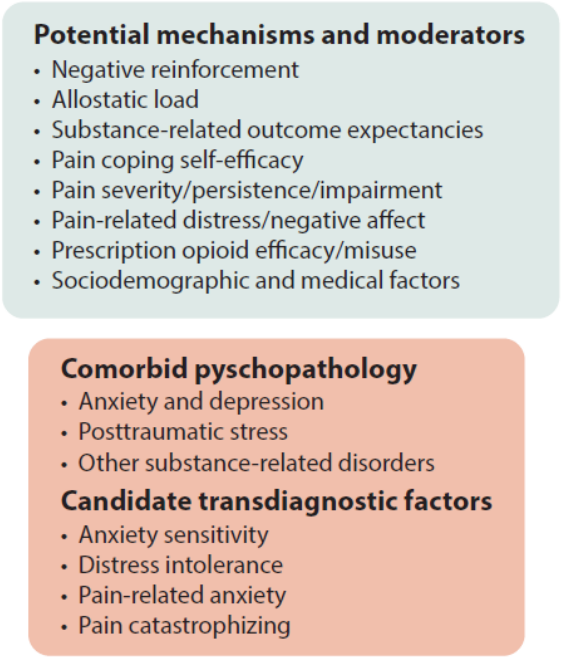
IMPACT

On function, geriatric syndromes, quality of life

Key Gap #2: We lack research on the impact and treatment of nonopioid substance use in older adults with chronic pain

- We lack information about specific mechanisms underlying relationships between pain and substance use in older adults.
- We lack treatments for nonopioid substance use in adults aged ≥65 with chronic pain.
  - Scoping review identified **no** interventions to reduce alcohol use in older adults with pain (LaRowe et al., manuscript in preparation)

- <u>We need research to identify mechanisms and develop interventions to treat pain and substance use in older adults</u>.



Outline

1. Our aging population
2. Opioid Use
3. Nonopioid Substance Use
4. Conclusions

Conclusions

Key Gap #1: We lack research on effects of opioid regulations and opioid deprescribing in older adults

Future Research Directions:

- Iatrogenic consequences of opioid regulations
- Development of clinical practice guidelines for opioid deprescribing
- Development of tailored opioid deprescribing interventions

Key Gap #2: We lack research on the impact and treatment of nonopioid substance use in older adults with chronic pain

Future Research Directions:

- Pain-substance research focused on older adults
- Impact of co-occurring pain and substance use
- Identification of mechanisms underlying pain-substance comorbidity
- Development of substance use interventions for older adults with chronic pain

Thank You

llarowe@mgh.harvard.edu