How opioids for the treatment of chronic pain cost communities and negatively impact health outcomes

Claire Suzanne Geldhof, BSN, RN, DNP/MPH candidate with the Colorado School of Public Health

Introduction to Chronic Pain and SB23-144

An estimated 50 million adults in the United States experience chronic pain (i.e., pain lasting ≥3 months), resulting in substantial health care costs and lost productivity (Rikard, et al., 2023).

John Hopkin's School of Medicine defines chronic pain as,

> *"a long-standing pain that persists beyond the usual recovery period or occurs along with a chronic health condition. Chronic pain may be "on" and "off" or continuous. It may affect people to the point that they can't work, eat properly, take part in physical activity, or enjoy life."*

How to treat chronic pain continues to be the subject of study and interest. The action outlined in SB23-144 contradicts much of what has been studied and known about treating chronic pain with opioids. The details of SB23-244 in its current form will have negative impacts and consequences on individual and community health, precipitating addictive pain management practices that have been demonstrated to be ineffective for treatment of chronic pain.

Opioids have been used in the treatment of pain for centuries, despite limited evidence and knowledge about their long-term benefits, but there is a growing body of clear evidence regarding their risks (AAPF, 2018).

- SB23-144 directs prescribing drug practices for chronic pain, providing supportive guidance on the use of opioids as appropriate treatment for chronic pain.

- SB23-144 currently expands a prescribing provider's discretion and autonomy to use opioids in a tailored care plan, specific to a patient with chronic pain.

Recommendations of how SB23-144 can be modified to reflect current peer-reviewed research on the harmful use of opioids in the treatment of chronic pain are included in this brief.

The Harmful History of Opioids and Limited Long-Term Evidence of Efficacy in Chronic Pain

Long-term opiate use for chronic nonmalignant pain is controversial, and current treatment practices endorse widely varying philosophies (Chabal, et al., 1997). To date, considerable attention has been paid to opioid-related harms, such as opioid use disorders and overdose, largely defined from the clinician or service providers' perspective (Larance, et al., 2019).

There is insufficient evidence to demonstrate long-term benefits of prescription opioid treatment for chronic pain, and long-term prescription opioid use was found to be associated with increased risk for overdose and opioid misuse, among other risks (Dowell, et al., 2022).

Opioids are not the right tool to effectively manage chronic pain with [illegible] several risk factors and other health complications.

Robert McGowan
2023-12-05 01:24:59

Genuine question: this is a strong statement - is it true 100% of the time? Are there some patients for whom opioids are the only thing that will work? If so, consider softer language here

How Chronic Pain and Opioids Disproportionately Impact Individuals and Communities:

Health disparities in morbidity, mortality, and other measures of well-being across the United States are increasing (Weindstein, et al., 2017). Chronic pain is overrepresented in specific populations, as are concerns with using opioids to treat chronic pain.

Pain can be conceptualized as a public health challenge due to prevalence, seriousness, disparities, vulnerable populations, the utility of population health strategies, and the importance of prevention at both the population and individual levels (IOM, 2011).

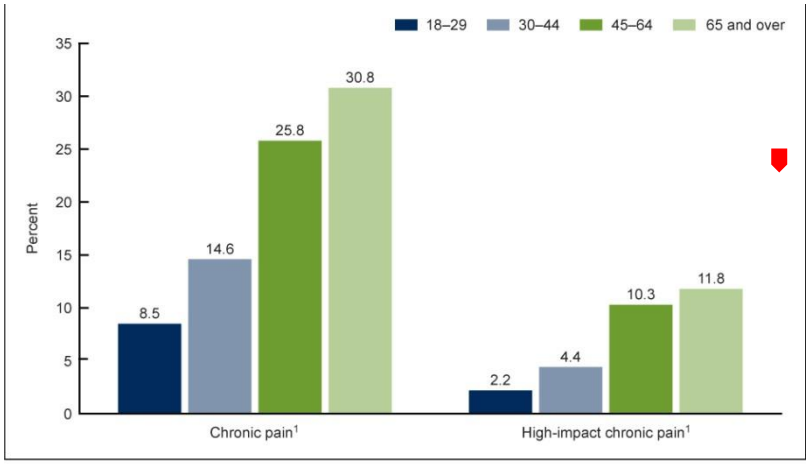
The percentage of adults who experience chronic pain in the past 3 months increased with age and was higher among those aged 45–64 (figure 1). Data from a study conducted by Pergolizzi, et al., (2008) illustrates how opioids are not an effective pain management tool in older adults with chronic pain, and that the incidence of adverse effects associated with opioid use in older adults is greater.

From a study published by Zelaya, et al., (2020) with the National Center for Health Statistics (NCHS), the research provided that the percentage of adults who had high-impact chronic pain in the past 3 months also increased as place of residence became more rural, from 6.1% in large central metropolitan areas to 10.9% in rural areas (figure 2).

Parallel to rural areas experiencing greater incidence of chronic pain, rural areas also experience higher rates of opioid abuse, and opioid poisonings at a [illegible] than threefold the increase in metropolitan counties, (Paulozzi, et al., 2003).

Figure 1

*Percentage of adults aged 18 and over with chronic pain and high-impact chronic pain in the past 3 months, by age group: United States, 2019, (*Zelaya, et al., 2020).



[1]Significant quadratic trend by age group ($p < 0.05$).
NOTES: Chronic pain is based on responses of "most days" or "every day" to the survey question, "In the past 3 months, how often did you have pain? Would you say never, some days, most days, or every day?" High-impact chronic pain is defined as adults who have chronic pain and who responded "most days" or "every day" to the survey question, "Over the past 3 months, how often did your pain limit your life or work activities? Would you say never, some days, most days, or every day?" Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. Access data table for Figure 2 at: https://www.cdc.gov/nchs/data/databriefs/db390-tables-508.pdf#2.
SOURCE: National Center for Health Statistics, National Health Interview Survey, 2019.

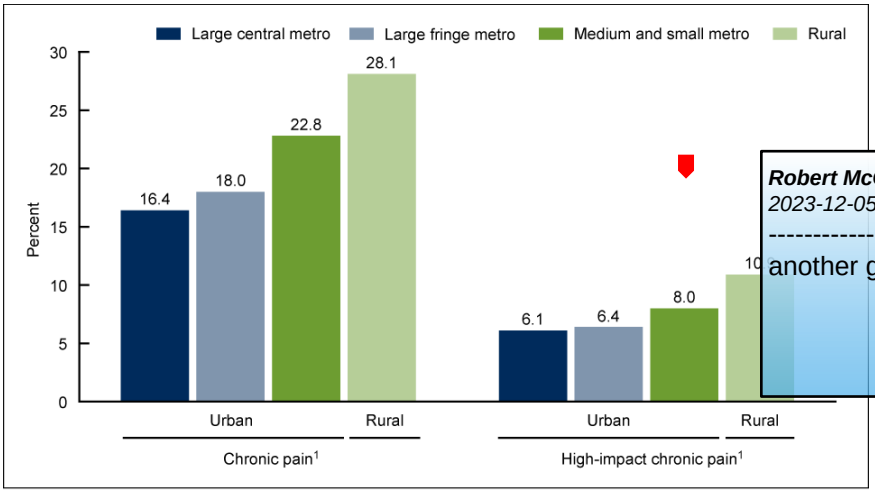
Robert McGowan
2023-12-05 01:26:18

Good summary of how big the problem is & some disparities

Robert McGowan
2023-12-05 01:24:07
---
nice relevant figure

Figure 2

*Percentage of adults aged 18 and over with chronic pain and high-impact chronic pain in the past 3 months, by urbanization level: United States, 2019 (*Zelaya, et al., 2020).



[1]Significant quadratic trend by urbanization level ($p < 0.05$).
NOTES: Chronic pain is based on responses of "most days" or "every day" to the survey question, "In the past 3 months, how often did you have pain? Would you say never, some days, most days, or every day?" High-impact chronic pain is defined as adults who have chronic pain and who responded "most days" or "every day" to the survey question, "Over the past 3 months, how often did your pain limit your life or work activities? Would you say never, some days, most days, or every day?" Counties were classified into urbanization levels based on the 2013 NCHS Urban-Rural Classification Scheme for Counties. Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. Access data table for Figure 4 at: https://www.cdc.gov/nchs/data/databriefs/db390-tables-508.pdf#4.
SOURCE: National Center for Health Statistics, National Health Interview Survey, 2019.

Robert McGowan
2023-12-05 01:26:39
---
another good relevant figure

The Price of Opioids and Their Adverse Effects

- Demonstrating how opioids are not a proper tool for chronic pain management, The U.S. economic cost of opioid use disorder is ($471 billion) and fatal opioid overdose ($550 billion), and during 2017 totaled $1,021 billion (Luo, 2021).
- At short-term follow-up, evidence showed no differences between opioids versus nonopioid medications in improvement in pain, function, mental health status, sleep, or depression (Chou, et al., 2020).

Proposed Solution

- Recent clinical guidelines have emphasized non-opioid treatments in lieu of prescription opioids for chronic non-cancer pain, exempting ca from these recommendations (Bandara, et al., 2022).

- The CDC (2022) relates extensive material on studies that demonstrate how chronic pain can be managed with or without prescription opioids, but many of the nonopioid options have been shown to work better with fewer side effects. Examples include:

    1. Over-the-counter medications like acetaminophen (Tylenol®), ibuprofen (Advil®, Motrin®), and naproxen (Aleve®)
    2. Physical therapy and exercise
    3. Cognitive behavioral therapy (CBT)
    4. Certain antidepressant and antiseizure medications

- In a study completed by Dusek, et al., (2018) examining alternatives to opioids for treatment of pain in the hospital setting, patients receiving alternative therapies, reported reduction of pain by an average of 2.05 points, and this pain reduction was associated with a cost savings of $898 per hospital admission.
- It is proposed that SB23-144 be rewritten to reflect the evidence showing that opioids are not acceptable options for treatment of chronic pain.

Robert McGowan
2023-12-05 01:29:01

This answers my question from the first annotation

Political Stakeholders and Positions

At its foundation, SB23-144 establishes ways to lower barriers for medical prescribers to treat and navigate patient pain experiences. The bill ensures that patients who are receiving opioids from a pharmacy are not refused from pharmacy dispensing because of the opioid prescription, or the dosage of opioid being prescribed.

SB23-144 prime sponsors include a democratic group with backgrounds in medicine and psychology. Senator (D.) Joann Ginal, Representative (D.) Javier Mabrey, and Representative (D.) Mary Young are the prime sponsors.

Components of SB23-144 lessen the rigid lines and boundaries that have limited prescribing providers from increasing the dosage of opioids. Sponsorship of this bill is endorsed by political groups that have experienced barriers to receiving effective pain management using opioids for individuals that may need their benefits (like cancer patients).

Prescribing providers are interested in the aspects of SB23-144 as they create more flexibility in prescribing practices of opioids, allowing for more provider discretion in the dosage used for patient care.

Pharmacies and health insurance companies are interested in SB23-144 as this will impact organizational policies around dispensing opioids and potentially increasing demand and cost of opioids in the health insurance plan.

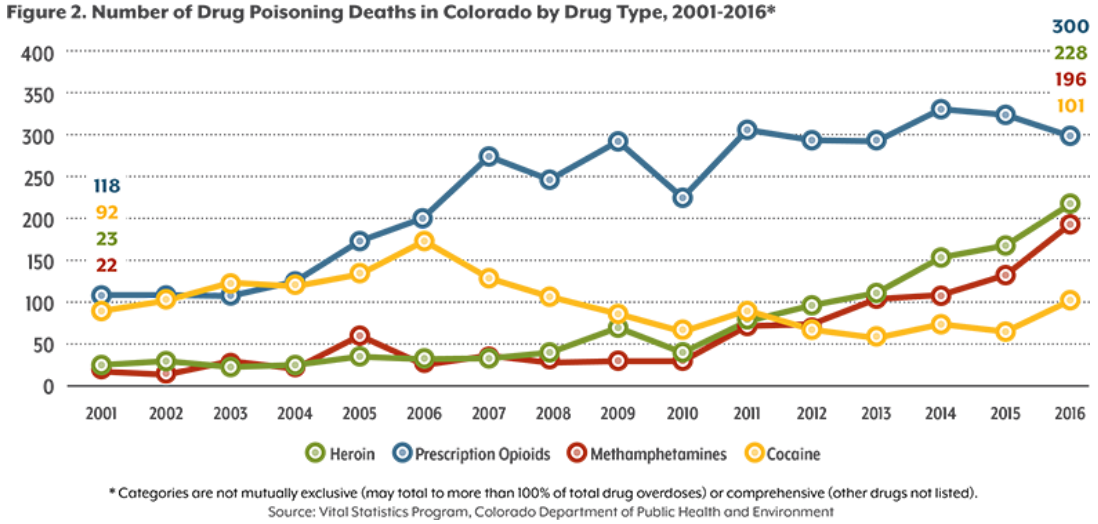
Patient advocacy groups, specifically aging/elder care groups, may have concern over the use of opioids prescribed to the populations with higher incidence of chronic pain, where people 65 and older experience higher rates of chronic pain (figure 1).

Public health groups are concerned with the outcome of SB23-144. The Colorado Institute of Public Health (2022) writes that, opioids — including prescription painkillers and heroin — are a major driver of Colorado's increase in drug overdose deaths (figure 3). The passage of SB23-144 creates more opportunities for increased prescription of opioids, specifically in the treatment of chronic pain.

Figure 3

Number of Drug Poisoning Deaths in Colorado by Drug Type, 2001-2016 (Colorado Health Institute, 2023).

Figure 2. Number of Drug Poisoning Deaths in Colorado by Drug Type, 2001-2016*



* Categories are not mutually exclusive (may total to more than 100% of total drug overdoses) or comprehensive (other drugs not listed).
Source: Vital Statistics Program, Colorado Department of Public Health and Environment

What to Keep & What to Omit from SB23-144 & Policy Recommendations

SB23-144 attempts to provide support and resolution to people experiencing pain, specifically opioids for chronic pain management. The practice of using opioids to treat chronic pain is unacceptable and has been demonstrated to do grea[illegible]good. The act of using opioids to treat chronic pain, included in SB23-144, [illegible] be omitted.

Robert McGowan
2023-12-05 01:33:05

Again, you should use softer language here, especially since you've already acknowledged that cancer patients are generally exempted. From the rubric: "Avoid hyperbolic language and phrasing that could be interpreted as partisan, biased, unrealistic, illogical, or overly dramatic"

- Opioids are a class of drugs that prove to be a poor candidate [illegible] improvement and reduction of chronic pain.

- SB23-144, can revise the language of the bill, omitting use of opioid prescribing practices that are specific for the treatment of chronic pain.

- The title of bill should be amended from, “Prescription Drugs For Chronic Pain.” The majority of the bill’s context that remains after omitting segments on chronic pain, should be renamed to reflect the intention of its act, which offers more flexibility to prescribers prescribing opioids.

- Where the act, *"prevents a health-care provider from being required to taper a patient's medication dosage solely to meet a predetermined dosage recommendation or threshold if the patient is stable, compliant with treatment, and not experiencing serious harm,"* increases the provision of individuals using opioids for extended periods, which could have long-term health consequences. This should be revisited in consultation with public health professionals to discuss how providers would measure stability, compliancy, and harm.

References

AAPF News: AFP Edition. (2018). *American Family Physician, 97*(9), 558.

Bandara, S., Bicket, M., & McGinty, E. (2022). Trends in opioid and non-opioid treatment for chronic non-cancer pain and cancer pain among privately insured adults in the United States, 2012–2019. PloS One, 17(8), E0272142.

Chabal, C. , Erjavec, M. K. , Jacobson, L. , Mariano, A. & Chaney, E. (1997). Prescription Opiate Abuse in Chronic Pain Patients: Clinical Criteria, Incidence, and Predictors. The Clinical Journal of Pain, 13 (2), 150-155.

Chou, R., Hartung, D., Turner, J., Blazina, I., Chan, B., Levander, X., McDonagh, M., Selph, S., Fu, R., Pappas, M., Opioid Treatments for Chronic Pain. Comparative Effectiveness Review No. 229. (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. 290-2015-00009-I.) AHRQ Publication No. 20-EHC011. Rockville, MD: Agency for Healthcare Research and Quality; April 2020.

Colorado Health Institute. (2023, March 10). Drug overdoses deaths in Colorado increase. Drug Overdoses Deaths in Colorado Increase | Colorado Health Institute. https://www.coloradohealthinstitute.org/research/death-drugs

Colorado Legislature. (2023). Prescription drugs for chronic pain. Prescription Drugs For Chronic Pain | Colorado General Assembly. https://leg.colorado.gov/bills/sb23-144

Dowell, D., Haegerich, T., & Chou, R. (2016). CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016. JAMA : The Journal of the American Medical Association, 315(15), 1624-1645.

Dowell, D., Ragan, K., Jones, C., Baldwin, G., & Chou, R. (2022). CDC Clinical Practice Guideline for Prescribing Opioids for Pain - United States, 2022. MMWR. Recommendations and Reports, 71(3), 1-95.

Dusek, J. A., Griffin, K. H., Finch, M. D., Rivard, R. L., & Watson, D. (2018). Cost Savings from Reducing Pain Through the Delivery of Integrative Medicine Program to Hospitalized Patients. Journal of alternative and complementary medicine (New York, N.Y.), 24(6), 557–563. https://doi.org/10.1089/acm.2017.0203

Institute of Medicine (US) Committee on Advancing Pain Research, Care, and Education. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washington (DC): National Academies Press (US); 2011. 2, Pain as a Public Health Challenge.

Johns Hopkins. (2021). Chronic pain. Johns Hopkins Medicine. https://www.hopkinsmedicine.org/health/conditions-and-diseases/chronic-pain

Larance, B., Campbell, G., Moore, T., Nielsen, S., Bruno, R., Lintzeris, N., . . . Degenhardt, L. (2019). Concerns and Help-Seeking Among Patients Using Opioids for Management of Chronic Noncancer Pain. Pain Medicine (Malden, Mass.), 20(4), 758-769.

Luo, F., Li, M., & Florence, C. (2021). State-Level Economic Costs of Opioid Use Disorder and Fatal Opioid Overdose - United States, 2017. MMWR. Morbidity and Mortality Weekly Report, 70(15), 541-546.

Medicine, I., Policy, B., & Committee on Advancing Pain Research, Care, Education. (2011). *Relieving Pain in America* (1st ed.). Washington, D.C: National Academies Press.

Paulozzi, L. J., & Xi, Y. (2008). Recent changes in drug poisoning mortality in the United States by urban-rural status and by drug type. Pharmacoepidemiology and drug safety, 17(10), 997–1005. https://doi.org/10.1002/pds.1626

Pergolizzi, J., Böger, R. H., Budd, K., Dahan, A., Erdine, S., Hans, G., Kress, H. G., Langford, R., Likar, R., Raffa, R. B., & Sacerdote, P. (2008). Opioids and the management of chronic severe pain in the elderly: consensus statement of an International Expert Panel with focus on the six clinically most often used World Health Organization Step III opioids (buprenorphine, fentanyl, hydromorphone, methadone, morphine, oxycodone). Pain practice : the official journal of World Institute of Pain, 8(4), 287–313. https://doi.org/10.1111/j.1533-2500.2008.00204.x

Rikard, SM., Strahan, AE., Schmit, KM., Guy, GP., Jr. Chronic Pain Among Adults — United States, 2019–2021. MMWR Morb Mortal Wkly Rep 2023;72:379–385.

Weinstein, J., Geller, A., Negussie, Y., Baciu, A., & National Academies of Sciences, Engineering, and Medicine. (2017). Communities in action: pathways to health equity (Chap 7: Partners in Promoting Health Equity In

Communities). *Washington, DC: The National Academies Available from: http://nap. edu/24624*.

Zelaya, C., Dahlhamer, J., Lucas, J., & Connor, E. (2020). Chronic Pain and High-impact Chronic Pain Among U.S. Adults, 2019. NCHS Data Brief, (390), 1-8.