

The Pendulum: The Need to Develop a Safe, Effective, and Equitable Management Strategy for Opioids in Cancer Patients

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Abstract: The opioid epidemic has caused major morbidity and mortality to Americans. Although there are multiple sources of this staggering issue, one inciting factor has been the use of opioids to manage pain. Although recent efforts have changed care pathways for patients with chronic pain, the first-line management of cancer pain remains opioids. Despite this, there is very little evidence and no guidelines/regulations to assist in the management of these patients. Although the literature suggests a number of current barriers to identifying and managing the challenges (such as the preferred management of patients with opioid use disorder (OUD), the optimal approach to tapering, or approaches to disparities), there are no concrete strategies for providers to manage these circumstances. Investing in further research utilizing the national opioid settlement funding, exploring the equity gaps using community based participatory research and community health worker models, and increasing provider education pathways are all potential approaches to improving this issue. These solutions could help identify and address some of the gaps that affect cancer patients taking opioids for pain.

Keywords: opioids, cancer pain, disparities, education

Background

The current opioid epidemic has caused a resurgent focus on the management of chronic pain. The number of overdose related deaths has reached abysmal new heights in the United States, greater than 106,000 in 2022.¹ Publications such as a 2016 summary in NEJM have noted that a percentage of deaths were presumed related to Opioid Use Disorder (OUD) resulting from pain management with opioids which prompted a vast change to the approach to chronic pain management with limitations in prescribing opioids long-term.² CDC guidelines, as well as state regulations (for example, Virginia)³ exclude cancer patients from their recommendations. Although this allows for individualized treatment planning, it has also led to a lack of standardized approaches to opioid prescribing for cancer patients. It is still recommended that patients with cancer pain are managed with opioids according to the most recent ASCO guidelines.⁴ These guidelines do note that there is a paucity of data to guide management of patients with OUD or non-medical opioid use and cancer pain requiring opioids. Furthermore, it has been well noted that there are disparities in pain management due to a variety of factors, and these findings have even been noted in patients who are nearing end of life.⁵ A further exploration of the underlying challenges in the management of pain in cancer patients will help define strategies that may improve treatment pathways.

Current Issues

Balance is necessary on this topic, as it is also known that there are a number of current barriers that affect the ability of cancer patients to access opioids at times, which may cause inadequate pain treatment.⁶

Opioid use disorder that arises in the context of treating cancer pain is unfortunately not well described. A systematic review of chronic pain management studies from 2022 concluded that, although heterogeneity of the studies meant the result of approximately 8% for the prevalence of OUD was inconclusive, the rate of prevalence of the risk of use disorder

was 23.5%.⁷ In addition to the unknown rates of OUD in cancer patients, little is known on how to manage this circumstance even when diagnosed. Given the lack of evidence to guide therapeutic options, a consensus-based publication for patients with advanced cancer as well as suspicion of opioid misuse or OUD, was developed using a qualitative survey of 120 palliative or addiction medicine specialists. For patients with untreated OUD there was more consensus on an approach using buprenorphine/naloxone whereas there was less certainty on treatment planning for patients with suspected misuse but undiagnosed OUD.⁸

Tapering is an expected outcome according to guidelines for patients whose source of pain resolves. If cancer is likely to be cured or treated successfully long-term, the patient should have expectations for an eventual tapering. During the course of the opioid epidemic, tapering became so fraught as patients were abruptly taken off opioids that the FDA released multiple warnings regarding the risks of harm.⁹ The CDC has developed materials to guide clinicians on how to manage the tapering process.¹⁰ Many reviews on tapering, even with a focus on palliative or cancer patients, note extrapolation from chronic non-cancer pain.¹¹ Despite the lack of evidence, there are considerations that are likely appropriate in cancer patients on opioids. Expectations will be paramount in regards to the indications for tapering as well as when a discussion about tapering should be held. Additionally, although development of high-risk behavior is an indication for tapering in chronic pain it may not be a possible strategy for patients with active cancer. It should also be highlighted that tapering is also known to be a medicolegally fraught activity with high associated risks. One recent publication noted the elevated risk of withdrawal/overdose after tapering,¹² as well as a potentially higher risk for harm in tapering over long-term opioid therapy without aberrant behavior in the first year.¹³

In addition to these factors, cancer is becoming a more treatable disease. Over the past decade, multiple trials have demonstrated the advancing benefits of more tolerable treatments for cancer with decreased mortality being noted in common cancers such as colon, lung and ovarian cancer.¹⁴ Patients are also living longer with incurable cancers, including those with very short survival periods previously, such as lung cancer.¹⁵ Noting the transformation of cancer into a more chronic and survivable illness, it is incumbent that we also reconsider how we approach management of these patients with opioids. Patients who may have a prognosis of years instead of months should potentially be managed with a different perspective on risk of opioid therapy. It bears highlighting that although it has been noted that pain is a common occurrence in cancer survivors,¹⁶ evidence remains unclear on how to optimally manage this circumstance.

Finally, as noted briefly in the introduction, there are ongoing disparities in cancer pain management that are, at this time, not well described. It has been noted in multiple studies that there appear to be racial differences in assessing pain, in one study even noting that early medical professionals agreed that there were actually physiologic differences between African American and Caucasian patients.¹⁷ In addition to race, socioeconomic barriers also appear to play a role in cancer pain assessment and management, with one study noting characteristics such as age and education status increased the barriers that survivors noted in a survey regarding pain management.¹⁸ Similarly, female patients with early stage breast cancer had higher odds of reporting pain if they lived in high poverty areas versus low.¹⁹ Finally, although as mentioned earlier African American patients were more likely to receive lower doses of pain medications at end of life, another study analyzing opioid prescribing trends found that Medicaid patients were more likely to receive prescriptions than patients with other insurance types.²⁰

Discussion/Recommendations

Given the challenges noted previously, the management of cancer pain with opioids is a crucial area for partnership between risk management and clinical teams. Since there are scant guidelines for how to manage these circumstances, collaboration to define institutional approaches to maximize safety while adequately addressing pain are essential. Flexible strategies should be developed to allow providers to respond to circumstances unique to cancer patients (such as missing appointments due to cancer treatment effects) alongside close monitoring to prevent harm. Exploring these complicated topics before there are patient issues allows providers to be prepared with optimal pathways to manage elevated opioid risk prescribing. This is especially true for tapering as summarized previously where setting expectations in advance and planning for supportive follow-up will be mandatory for good outcomes.

Institutions will need support to research the best approaches to this issue in the limited populations who are utilizing opioids for pain. In addition to grants, the national opioid settlement funding may, over time, be a way to explore the link

between opioid pain management and risk with billions of dollars that will eventually be available.²¹ This funding could also be used to focus on the multiple socioeconomic and health equity barriers that affect pain management. Although we are starting to see a significant collection of articles describing what the gaps are, there is much less known about how to manage these circumstances in clinical practice. Community based participatory research is a method of engaging communities in developing research and quality work to improve the outcomes for specific patient populations. These approaches have been used in many areas of medicine from mental health²² to stroke²³ to diabetes,²⁴ as partnering with communities with known disparities who are struggling with significant health conditions can potentially improve the benefits realized. Another approach that has been utilized when there are significant gaps in care is community health workers. This model can significantly improve quality of life²⁵ as well as symptom reporting, leading to less hospitalization.²⁶ Both of these models should be employed to improve our ability to effectively assess and manage pain in patients across a spectrum of backgrounds.

Finally, the educational process for opioid prescribing needs to be approached differently. Based on the change in recommendations, data show less providers are prescribing opioids in their practices.²⁷ This, over time, will translate to less exposure of medical trainees (medical students, residents and fellows) to clinical experiences with opioid management. Interventions to improve provider practices surrounding opioids that include education have led to successful outcomes.²⁸ There are also topics that have been excluded or de-emphasized in traditional education that are absolutely critical to responsible opioid prescribing, such as physical dependence and withdrawal. As discussed previously, one of the more significant barriers to tapering is withdrawal; when it occurs, it is a terrifying repeat outcome for the involved patient. Since withdrawal is such a feared outcome of opioid use, dedicated education for providers should occur and this education should be provided routinely to patients.²⁹ Finally, improving patient education surrounding opioid use is critical. One study that measured providing basic information in a pamphlet regarding opioid safety found improved concrete outcomes such as proper opioid storage and disposal.³⁰

Conclusions

The opioid epidemic has ruined countless lives in the United States and was at least partially fueled by widespread pain management with opioids. Although standards have changed for chronic pain, those for patients with cancer have not and much is left to be discovered about optimal management. Given there is more funding available to research optimal ways to manage pain with opioids while mitigating risk of developing opioid use disorder, the time is now to better understand the gaps and ethical frameworks that will allow for better care of these patients and diminish the risk of harm to our patients and communities. A broad approach to this issue will help us put the pendulum on opioid pain management in cancer pain where it belongs: in the middle, where benefits and risks are optimally balanced to allow the best outcomes for our patients.

Disclosure

The authors report no conflicts of interest in this work.

References

1. Ahmad FB, Cisewski JA, Rossen LM, Sutton P. Provisional drug overdose death counts. National Center for Health Statistics; 2023. Available from: <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>. Accessed April 12, 2024.
2. Volkow N, McClellan T, Longo DL. Opioid abuse in chronic pain--misconceptions and mitigation strategies. *NEJM*. 2016;374(13):1253–1263. doi:10.1056/NEJMr1507771
3. 18VAC85-21. Regulations Governing Prescribing of Opioids and Buprenorphine. Virginia Administrative Code. Available from: <https://law.lis.virginia.gov/admincodefull/title18/agency85/chapter21/>. Accessed April 12, 2024.
4. Paice JA, Bohlke K, Barton D, et al. Use of opioids for adults with pain from cancer or cancer treatment: ASCO guideline. *J Clin Oncol off J Am Soc Clin Oncol*. 2023;41(4):914–930. doi:10.1200/JCO.22.02198
5. Enzinger AC, Ghosh K, Keating NL, et al. Racial and ethnic disparities in opioid access and urine drug screening among older patients with poor-prognosis cancer near the end of life. *J Clin Oncol off J Am Soc Clin Oncol*. 2023;41(14):2511–2522. doi:10.1200/JCO.22.01413
6. Arthur J, Bruera E. Managing cancer pain in patients with opioid use disorder or nonmedical opioid use. *JAMA Oncol*. 2022;8(8):1104–1105. doi:10.1001/jamaoncol.2022.2150
7. Preux C, Bertin M, Tarot A, et al. Prevalence of opioid use disorder among patients with cancer-related pain: a systematic review. *J Clin Med*. 2022;11(6):1594. doi:10.3390/jcm11061594

8. Fitzgerald Jones K, Khodyakov D, Arnold R, et al. Consensus-based guidance on opioid management in individuals with advanced cancer-related pain and opioid misuse or use disorder. *JAMA Oncol.* **2022**;8(8):1107–1114. doi:10.1001/jamaoncol.2022.2191
9. Center for Drug Evaluation and Research. FDA identifies harm reported from sudden discontinuation of opioid pain medicines and requires label changes to guide prescribers on gradual, individualized tapering (FDA Drug Safety Communication); **2019**. Available from: <https://www.fda.gov/drugs/drug-safety-and-availability/fda-identifies-harm-reported-sudden-discontinuation-opioid-pain-medicines-and-requires-label-changes>. Accessed April 12, 2024.
10. Centers for Disease Control and Prevention. Pocket Guide: Tapering Opioids for Chronic Pain. Centers for Disease Control and Prevention. U.S: Department of Health and Human Services; **2017**.
11. Davis MP, Digwood G, Mehta Z, McPherson ML. Tapering opioids: a comprehensive qualitative review. *Ann Palliat Med.* **2020**;9(2):586–610. doi:10.21037/apm.2019.12.10
12. Fenton JJ, Magnan E, Tseregounis IE, Xing G, Agnoli AL, Tancredi DJ. Long-term risk of overdose or mental health crisis after opioid dose tapering. *JAMA Network Open.* **2022**;5(6):e2216726–e2216726. doi:10.1001/jamanetworkopen.2022.16726
13. Larochelle MR, Lodi S, Yan S, Clothier BA, Goldsmith ES, Bohnert ASB. Comparative effectiveness of opioid tapering or abrupt discontinuation vs no dosage change for opioid overdose or suicide for patients receiving stable long-term opioid therapy. *JAMA Network Open.* **2022**;5(8):e2226523–e2226523. doi:10.1001/jamanetworkopen.2022.26523
14. Arnold M, Rutherford MJ, Bardot A, et al. Progress in cancer survival, mortality, and incidence in seven high-income countries 1995–2014 (ICBP SURVMARK-2): a population-based study. *Lancet Oncol.* **2019**;20(11):1493–1505. doi:10.1016/S1470-2045(19)30456-5
15. Bar J, Urban D, Amit U, et al. Long-term survival of patients with metastatic non-small-cell lung cancer over five decades. *J Oncol.* **2021**;2021:7836264. doi:10.1155/2021/7836264
16. Shapiro CL. Cancer Survivorship. *N Engl J Med.* **2018**;379(25):2438–2450. doi:10.1056/NEJMra1712502
17. Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proc Natl Acad Sci U S A.* **2016**;113(16):4296–4301. doi:10.1073/pnas.1516047113
18. Stein KD, Alcaraz KI, Kamson C, Fallon EA, Smith TG. Sociodemographic inequalities in barriers to cancer pain management: a report from the American Cancer Society's Study of Cancer Survivors-II (SCS-II). *Psycho-oncology.* **2016**;25(10):1212–1221. doi:10.1002/pon.4218
19. Choi HY, Graetz I, Shaban-Nejad A, et al. Social disparities of pain and pain intensity among women diagnosed with early stage breast cancer. *Front Oncol.* **2022**;12:759272. doi:10.3389/fonc.2022.759272
20. Williams E. A Look at Changes in Opioid Prescribing Patterns in Medicaid from 2016 to 2019 | KFF. KFF; **2023**. Available from: <https://www.kff.org/medicaid/issue-brief/a-look-at-changes-in-opioid-prescribing-patterns-in-medicaid-from-2016-to-2019/>. Accessed April 12, 2024.
21. National Academy for State Health Policy. State approaches for distribution of national opioid settlement funding. NASHP; **2023**. Available from: <https://nashp.org/state-approaches-for-distribution-of-national-opioid-settlement-funding/>. Accessed April 12, 2024.
22. Collins SE, Clifasefi SL, Stanton J; The Leap Advisory Board null. Community-based participatory research (CBPR): towards equitable involvement of community in psychology research. *Am Psychol.* **2018**;73(7):884–898. doi:10.1037/amp0000167
23. Springer MV, Skolarus LE. Community-based participatory research. *Stroke.* **2019**;50(3):e48–50. doi:10.1161/STROKEAHA.118.024241
24. Tremblay MC, Martin DH, McComber AM, McGregor A, Macaulay AC. Understanding community-based participatory research through a social movement framework: a case study of the Kahnawake Schools Diabetes Prevention Project. *BMC Public Health.* **2018**;18(1):487. doi:10.1186/s12889-018-5412-y
25. Patel MI, Kapphahn K, Wood E, et al. Effect of a community health worker-led intervention among low-income and minoritized patients with cancer: a randomized clinical trial. *J Clin Oncol.* **2023**;2:00309.
26. Patel MI, Kapphahn K, Dewland M, et al. Effect of a community health worker intervention on acute care use, advance care planning, and patient-reported outcomes among adults with advanced stages of cancer: a randomized clinical trial. *JAMA Oncol.* **2022**;8(8):1139–1148. doi:10.1001/jamaoncol.2022.1997
27. Goldstick JE, Guy GP, Losby JL, Baldwin G, Myers M, Bohnert ASB. Changes in initial opioid prescribing practices after the 2016 release of the CDC guideline for prescribing opioids for chronic pain. *JAMA Network Open.* **2021**;4(7):e2116860–e2116860. doi:10.1001/jamanetworkopen.2021.16860
28. Meisenberg BR, Grover J, Campbell C, Korpon D. Assessment of opioid prescribing practices before and after implementation of a health system intervention to reduce opioid overprescribing. *JAMA Network Open.* **2018**;1(5):e182908–e182908. doi:10.1001/jamanetworkopen.2018.2908
29. Pergolizzi JV, Raffa RB, Rosenblatt MH. Opioid withdrawal symptoms, a consequence of chronic opioid use and opioid use disorder: current understanding and approaches to management. *J Clin Pharm Ther.* **2020**;45(5):892–903. doi:10.1111/jcpt.13114
30. de la Cruz M, Reddy A, Balankari V, et al. The impact of an educational program on patient practices for safe use, storage, and disposal of opioids at a comprehensive cancer center. *oncologist.* **2017**;22(1):115–121. doi:10.1634/theoncologist.2016-0266

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