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Closing the global pain divide: balancing access and excess

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Access to pain relief medication is one of the most heinous, hidden inequities in global health. The *Lancet* Commission on global access to palliative care and pain relief called on health systems and their leaders, including academics, to address the so-called 10–90 pain divide—ie, that the richest 10% of countries possess 90% of distributed morphine-equivalent opioids.¹ In an accompanying Article published in *The Lancet Public Health*, Chengsheng Ju and colleagues contribute evidence that supports the Commission’s findings: between 2015 and 2019, disparities in opioid analgesic distribution persisted, despite small increases in regional and global opioid distribution, reflecting the inadequate access to opioid analgesics in countries with a low consumption.²

In stark contrast to the global pain pandemic is the burgeoning opioid overdose epidemic in the USA and Canada. This public health priority is challenging the health system, is wreaking havoc on families and communities, and was responsible for over 70 000 deaths in the USA and over 6300 deaths in Canada in 2020 alone.³ However, the opioid epidemic in these two countries does not epitomise the relationship between opioid medicines and health either in other high-income countries (eg, Germany), or in low-income and middle-income countries (LMICs) where availability is very low. The poorest 50% of the world’s

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population has access to only 1% of the opioid medication (measured in morphine milligram equivalents) distributed annually.¹

Closing the global pain divide is an equity imperative that continues to be ignored, condemning people living in poverty—within and across countries—to avoidable pain. The path forward requires adopting a balanced approach that combines ready access to medically indicated, prescribed opioid analgesics, while reducing risks in response to both the overdose epidemic and the global pain pandemic, which disproportionately affects LMICs.^{4–6}

Research and science should be keen balancing forces to drive more equitable access to health and health care. Instead, they too often facilitate and exacerbate imbalances. The Commission on Health Research for Development coined what became known as the 10–90 gap over two decades ago to describe worldwide inequity in health research resource allocation: less than 10% of global resources were aimed at solving health problems in LMICs, where over 90% of preventable deaths occur.^{7,8}

The pain divide (also a 10–90 skew¹) exemplifies and perpetuates global health research gaps and is a key component of the imbalanced approach to opioid medicines. For at least three decades, research has been slanted toward the US opioid use disorder crisis. We (RSN and HAO) did a cursory, unpublished, librarian-assisted PubMed bibliometric analysis of the literature from Jan 1, 1990, to Dec 31, 2021, which generated 31 862 articles, 29 409 (92%) of which were related to opioid abuse and misuse, and 2453 (8%) to opioid access. We found that the “access abyss” in pain relief¹ is clearly fed by the 10–90 partiality of the literature, reflecting the imbalanced attention towards opioid abuse and misuse compared with the pain pandemic by the scientific community—itsself a reflection of maldistributed research funding⁹ and scholarly prioritisation.

The 10–90 pain divide will not be rectified without investing in research on the financing and safe, secure delivery of off-patent opioids with no or low profit margins.¹ Study design gaps are evident, rendering knowledge about opioid prescribing and use incomplete and insufficient. For instance, weak opioids such as tramadol are typically excluded from empirical analyses because they are unscheduled and data are scarce.^{2,10} Yet tramadol is sometimes the only opioid available in LMICs. Methadone, a strong opioid, is a viable cancer pain treatment per international recommendations, yet it is also discounted from global opioid studies because the medical indication (maintenance therapy for opioid addiction *vs* pain management requiring long-acting opioid therapy) is unclear within existing datasets.⁴

Additional research voids include the linkages between the overdose epidemic and the pain pandemic. Driven predominantly by opiophobia¹ and with no base in evidence, misguided application of lessons learned from the US overdose epidemic is propagating avoidable pain among seriously ill individuals and those at the end of their life both in the USA and globally.^{6,11} The US opioid crisis is mistakenly used as a reason to reduce access to pain medicine in LMICs.⁴ Rather than using the US opioid crisis as an excuse to restrict access to opioid analgesics in LMICs, implementation science could be applied to adapt lessons on

how the overdose and opioid use disorder disaster came to pass and preclude replication in LMICs.

A balanced approach in practice remains elusive until there is balance in the pursuit of knowledge. The global pain divide reflects not only the inadequacies of global and national health systems, but also of the science used to guide them. Investment is needed to develop the knowledge to effectively implement a balanced approach. It is not that less research is required on opioid misuse and abuse; rather, more research is required on the pain and suffering that plague individuals living in poverty. Re-balancing the creation of knowledge requires accountability for our collective failing to value lives,¹² and the alleviation of pain, in both poor and wealthy countries alike.

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References

1. Knaul FM, Farmer PE, Krakauer EL, et al. Alleviating the access abyss in palliative care and pain relief—an imperative of universal health coverage: the Lancet Commission report. *Lancet* 2018; 391: 1391–454. [PubMed: 29032993]
2. Ju C, Wei L, Man KKC, et al. Global, regional, and national trends in opioid analgesic consumption from 2015 to 2019: a longitudinal study. *Lancet Public Health* 2022; 7: e335–46.
3. Humphreys K, Shover CL, Andrews CM, et al. Responding to the opioid crisis in North America and beyond: recommendations of the Stanford–Lancet Commission. *Lancet* 2022; 399: 555–604. [PubMed: 35122753]
4. WHO. WHO guidelines for the pharmacological and radiotherapeutic management of cancer pain in adults and adolescents. Jan 1, 2019. <https://www.who.int/publications/i/item/9789241550390> (accessed Feb 27, 2022).
5. Pettus K, De Lima L, Maurer M, et al. Ensuring and restoring balance on access to controlled substances for medical and scientific purposes: joint statement from palliative care organizations. *J Pain Palliat Care Pharmacother* 2018; 32: 124–28. [PubMed: 30198811]
6. Rosa WE, Knaul FM, Pettus KI, Bruera E, Rajagopal MR. The US cancer pain crisis and the global pain divide: can two wrongs make it right? *J Clin Oncol* 2022; 40: 310–11. [PubMed: 34878827]
7. The Commission on Health Research for Development. Health research: essential link to equity in development. New York: Oxford University Press, 1990.
8. Vidyasagar D. Global notes: the 10/90 gap disparities in global health research. *J Perinatol* 2006; 26: 55–56. [PubMed: 16281051]
9. Pastrana T, Vallath N, Mastrojohn J, et al. Disparities in the contribution of low- and middle-income countries to palliative care research. *J Pain Symptom Manage* 2010; 39: 54–68. [PubMed: 19892510]
10. International Narcotics Control Board. Progress in ensuring adequate access to internationally controlled substances for medical and scientific purposes. 2018. https://www.incb.org/documents/Publications/AnnualReports/AR2018/Supplement/Supplement_E_ebook.pdf (accessed Feb 27, 2022).

11. Enzinger AC, Ghosh K, Keating NL, Cutler DM, Landrum MB, Wright AA. US trends in opioid access among patients with poor prognosis cancer near the end-of-life. *J Clin Oncol* 2021; 39: 2948–58. [PubMed: 34292766]
12. Farmer P, Saussy H. *Partner to the poor: a Paul Farmer reader*. Berkeley: University of California Press, 2010.

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