

Solving the Global Crisis in Access to Pain Relief: Lessons From Country Actions

Afsan Bhadelia, PhD, Liliana De Lima, MHA, Héctor Arreola-Ornelas, MSc, Xiaoxiao Jiang Kwete, MD, Natalia M. Rodriguez, PhD, and Felicia Marie Knaul, PhD

Annually, more than 61 million people worldwide experience about 6 billion days of serious health-related suffering that could be alleviated with access to palliative care and pain relief. However, palliative care is limited or nonexistent in most parts of the world. The access abyss is so stark that 50% of the world's poorest populations live in countries that receive only 1% of the opioid analgesics distributed worldwide. By contrast, the richest 10% of the world's population live in countries that receive nearly 90% of the opioid pain relief medications.

The Lancet Commission on Global Access to Palliative Care and Pain Relief developed a framework to measure the global burden of serious health-related suffering and generated the evidence base to address this burden.

We present the inequities in access to pain relief and highlight key points from country responses, drawing from and building on recommendations of the Lancet Commission report "Alleviating the Access Abyss in Palliative Care and Pain Relief—An Imperative of Universal Health Coverage" to close the access abyss in relief of pain and other types of serious health-related suffering. (*Am J Public Health*. 2019;109:58–60. doi:10.2105/AJPH.2018.304769)



See also Carr et al., p. 17; and also the *AJPH* Pain Management section, pp. 30–72.

The poor, worldwide, have little or no access to palliative care or pain relief. Approximately 298 metric tons of morphine-equivalent opioids are distributed in the world each year. However, only 0.1 metric tons—0.03%—are distributed to low-income countries.¹ More than 61 million people worldwide experience serious health-related suffering annually throughout the life course that could be alleviated if they had access to palliative care. More than 80% of these individuals reside in low- and middle-income countries where palliative care is limited or nonexistent.¹

This global pain crisis counts among the most serious health and equity imperatives facing the world. Yet the barriers to accessing pain relief medications—one of the most basic palliative care interventions—are surmountable. These barriers include "opiophobia" (i.e., prejudice and misinformation on medical use of opioids) among prescribers, social and cultural perceptions of opioids, the neglect of end-of-life care, and a lack of priority-setting tools to incorporate suffering into

measurement of health outcomes investment decisions. The Lancet Commission on Global Access to Palliative Care and Pain Relief, in its report,¹ quantified the global burden of serious health-related suffering associated with 20 life-limiting and life-threatening health conditions and identified effective and affordable strategies to address this burden, particularly through the design and estimated cost of an essential package of palliative care health services.¹ Its findings call on governments and global institutions to act collectively to address this grotesque injustice that leaves millions in pain when appropriate interventions exist.¹

We briefly present global inequities surrounding access to pain relief and highlight

key points from country responses, drawing from and building on recommendations from the Lancet Commission report.¹

THE GLOBAL PAIN RELIEF ACCESS ABYSS

Pain is one of the most common symptoms and accounts for 20% of total days with serious health-related suffering worldwide.¹ Yet pain relief medicines, especially opioid analgesics, are severely lacking. An estimated 3.6 billion people—50% of the global population that reside in the poorest countries—receive less than 1% of the distributed opioids measured in morphine equivalent.¹

Access to distributed opioids measured in morphine equivalent compared with palliative care need shows this impressive inequity across countries. In Nigeria, less than 1 milligram of distributed opioids is available per patient in need of palliative care per year, enough to meet only 0.2% of need. By contrast, Mexico meets 36% of palliative care need, and Canada has 3090% available for distribution per patient in need of palliative care.¹ Inequities within countries are also severe yet impossible to measure with existing data.

An essential package including off-patent medicines, particularly immediate-release oral and injectable morphine, and costing slightly more than \$3 per capita could alleviate much of the avoidable suffering in low- and middle-income countries.¹

ABOUT THE AUTHORS

Afsan Bhadelia, Xiaoxiao Jiang Kwete, Natalia M. Rodriguez, and Felicia Marie Knaul are with the Institute for Advanced Study of the Americas, University of Miami, Miami, FL. Liliana De Lima is with the International Association for Hospice and Palliative Care, Houston, TX. Héctor Arreola-Ornelas is with Fundación Mexicana para la Salud, A.C., Mexico City, Mexico.

Correspondence should be sent to Afsan Bhadelia, PhD, 1633 Tremont St, Boston, MA 02120 (e-mail: afsan_bhadelia@harvard.edu). Reprints can be ordered at <http://www.ajph.org> by clicking the "Reprints" link.

This article was accepted September 9, 2018.

doi: 10.2105/AJPH.2018.304769

A BALANCED APPROACH: COUNTRY ACTIONS

A balanced approach is necessary in designing and implementing health systems strategies to promote an understanding of medical need for and appropriate use of opioids as well as risks of nonmedical use.² Two crises are under way—an opioid crisis in a few countries, including the United States, Canada, and Australia, and a global pain crisis with millions of people who have untreated pain.

Examples of a balanced approach exist in different parts of the world. In Western Europe, which often serves as a benchmark, rational and balanced regulations on prescribing opioids have averted either crisis within this context.^{3,4} Despite high opioid consumption reports to the International Narcotics Control Board, both in Germany and in the United Kingdom, limited or no nonmedical use is reported.⁵ This may be partially a result of adequate training of health care professionals, safety protocols for responsible handling of opioids across health care settings, monitoring of unlawful practices, and rapid response of regulatory measures without undermining the medical need for opioids.

Argentina, an upper-middle-income country, is improving access to pain relief and offers a point of comparison at least for the Latin American region. Largely as a result of efforts by concerned clinicians and civil society to improve access to pain relief medications, beginning with oral morphine in the 1990s and a current government project that will provide methadone for no cost to patients in palliative care, Argentina is the only country in the region that has a sufficient supply of opioid analgesics to meet palliative care need. Recent data from the Lancet Commission report indicate sufficient supplies to meet approximately 115% of palliative care need for pain relief; however, this remains insufficient to meet projections of overall need for analgesics, including those needed for trauma and surgical procedures.¹ No evidence has shown diversion of prescription opioid analgesics for nonmedical use, and this could be partially because of the application of community-based approaches to mitigate illicit use.⁶

Other low- and middle-income countries provide important insights. In Uganda, the creation of a hospice and strategies to import

powder and locally reconstitute it into liquid oral morphine, along with training nurses to legally and safely prescribe morphine, have improved the accessibility of pain relief medicines.⁷ Kerala, India, introduced a state-level policy in 2008 on palliative care using a community-based model that serves as a benchmark for other states in India. Data plus efforts to expand access indicate no evidence of nonmedical use, and updated research could help reiterate this point.⁸ In Costa Rica, an integrated, national palliative care program is a core component of universal health coverage efforts.

Important lessons can be learned from the complex opioid epidemic in the United States.⁹ To avoid this crisis in other settings, the Lancet Commission report signals the need to monitor the supply and marketing of opioids, restrict direct marketing of opioid medications to health care providers by pharmaceutical companies, and implement basic mandatory training for all health care personnel for safe management and evidence-based prescribing and use of opioid analgesics.¹

REVIEW

The global burden of serious health-related suffering and the inequity of access to palliative care and pain relief are global health priorities that can no longer be neglected. Systemic solutions are available to establish palliative care as a core component of universal health coverage through a balanced approach, avoiding the unnecessary opioid crisis experienced in few countries such as the United States. Such crises are not necessarily the trajectory for countries expanding access to opioids for pain relief. Various countries in Western Europe and emerging examples in low- and middle-income countries provide access to opioids for pain relief without the issue of excess, as discussed in this article. These examples indicate a need to establish knowledge exchange platforms for wider sharing of country responses and lessons.

PUBLIC HEALTH IMPLICATIONS

Compromising the human right to access medications for pain relief is harmful to

individuals and societies, with enormous, population-wide physical and psychological consequences. Access to adequate, effective pain relief is protected under Article 7 of the International Covenant on Civil and Political Rights, which prohibits torture, inhuman or degrading treatment, or punishment.¹⁰

As populations age and chronic and noncommunicable diseases increase,¹¹ the need for palliative care and pain relief medications will increase. Global health institutions and countries should develop balanced policies¹² based on lessons learned from national experiences that have safely and effectively expanded access to pain relief medications to mitigate and avoid exacerbating the already enormous global pain crisis.

As next steps, the Lancet Commission has received requests from policymakers in low- and middle-income countries for country-level data on serious health-related suffering to inform policy reform and from the International Narcotics Control Board to use the serious health-related suffering framework to improve measurement of the need for opioid analgesics. Furthermore, the World Health Organization has committed to incorporating palliative care and pain relief into the universal health coverage agenda. **AJPH**

CONTRIBUTORS

A. Bhadelia wrote the first draft of the article. L. De Lima and F. M. Knaul supervised development of the article. All authors reviewed and edited the article.

ACKNOWLEDGMENTS

This article was financially supported by the Mayday Fund.

We thank all authors of the report of the Lancet Commission on Global Access to Palliative Care and Pain Relief for their contributions to the report on which this article builds. Furthermore, we thank Christina M. Spellman for her continued support of the work of the Lancet Commission and input on earlier versions of this article, and Julia Olson for research assistance.

CONFLICTS OF INTEREST

The authors note all conflicts of interest included in the Lancet Commission report and additional ones thereafter. A. Bhadelia and X. Jiang Kwete report unrestricted gifts through Harvard T. H. Chan School of Public Health and University of Miami from Pfizer and through Harvard T. H. Chan School of Public Health from Celgene and grants from Susan G. Komen for the Cure. X. Jiang Kwete also reports grants from the Gates Foundation. H. Arreola-Ornelas reports grants from Grunenthal, GDS, Pfizer Roche, Novartis, Merck/EMD Serono, Asociación Mexicana de Industrias de Investigación Farmacéutica, Chinoin, NADRO, and American Cancer Society. F. M. Knaul reports grants from Pfizer, Mayday Fund, American Cancer Society, Roche, CRDF Global, JM Foundation, Grunenthal, Novartis, GlaxoSmithKline,

Sanofi, Chinoï, NADRO, and GDS; grants, personal fees, and nonfinancial support from Roche and Merck/EMD Serono; and grants and nonfinancial support from Asociacion Mexicana de Industrias de Farmaceutica outside the submitted work. All other authors declare no conflicts of interest.

HUMAN PARTICIPANT PROTECTION

Institutional review board approval was not needed for this article because it did not involve human participants.

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(10128):1391–1454.
2. Anderson ED, Davis CS. Breaking the cycle of preventable suffering: fulfilling the principle of balance. *Temple Int Comp Law J*. 2010;24:329–335.
3. Fischer B, Keates A, Bühringer G, Reimer J, Rehm J. Non-medical use of prescription opioids and prescription opioid-related harms: why so markedly higher in North America compared to the rest of the world? *Addiction*. 2014;109(2):177–181.
4. Cherny NI, Baselga J, de Conno F, Radbruch L. Formulary availability and regulatory barriers to accessibility of opioids for cancer pain in Europe: a report from the ESMO/EAPC Opioid Policy Initiative. *Ann Oncol*. 2010;21(3):615–626.
5. Häuser W, Petzke F, Radbruch L, Tölle TR. The opioid epidemic and the long-term opioid therapy for chronic noncancer pain revisited: a transatlantic perspective. *Pain Manag*. 2016;6(3):249–263.
6. Harris S. The social practice of harm reduction in Argentina: a “Latin” kind of intervention. *Hum Organ*. 2016;75(1):1–9.
7. Jagwe J, Merriman A. Uganda: delivering analgesia in rural Africa: opioid availability and nurse prescribing. *J Pain Symptom Manage*. 2007;33(5):547–551.
8. Rajagopal MR, Joranson DE, Gilson AM. Medical use, misuse, and diversion of opioids in India. *Lancet*. 2001;358(9276):139–143.
9. Centers for Disease Control and Prevention. Vital signs: overdoses of prescription opioid pain relievers—United States, 1999–2008. *MMWR Morb Mortal Wkly Rep*. 2011;60(43):1487–1492.
10. United Nations Human Rights Council. *Report of the Special Rapporteur on Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, Manfred Nowak*. New York, NY: United Nations; 2009. A/HRC/10/44.
11. World Health Organization. *Global Status Report on Noncommunicable Diseases*. Geneva, Switzerland: World Health Organization; 2014.
12. International Narcotics Control Board, World Health Organization, and United Nations. *Guide on Estimating Requirements for Substances Under International Control*. Vienna, Austria: United Nations; 2012. Available at: https://www.incb.org/documents/Narcotic-Drugs/Guidelines/estimating_requirements/NAR_Guide_on_Estimating_EN_Ebook.pdf. Accessed November 2, 2018.