



Global Inequities in Pain Treatment: How Future Research Can Address This Better

Inequities in pain treatment occur globally^[6]. Pain Inequities exist between high-income countries and low- and middle-income countries, as well as within countries based on factors such as race, sex, gender, ethnicity, socioeconomic status, and age^[5,20,25,32]. Inequities in pain treatment are more salient in lower income countries due to the disproportionate access to and use of established pain treatments and inadequate pain education^[7,11]. These barriers to pain care become more complex with consideration of how socioeconomic factors and sociocultural context impact the pain experience^[2,18,30,32,35,36] and contribute to individual differences in pain among populations that are highly affected by the burden of pain.

To date, most clinical, basic science and preclinical pain research has also studied pain and pain treatments in male humans and animals until relatively recently^[24,28], yet we now know there are significant sex and gender differences in pain^[14]. This has all led to challenges in translating research into practice, particularly in underrepresented and historically excluded populations^[15], as well as challenges translating research conducted largely in high-income countries into practice in low- and middle-income countries^[17,34].

Examples of Inequities Include:

- Sex and/or gender differences in the experience and treatment of pain and differences in response to treatment, such as to medications, where women are disadvantaged^[5]
- Disparities in pain perception, experience, assessment, and treatment based on patients' race, ethnicity, and/or age^[1,2,21]

- Undertreatment of pain of racialized and minoritized people is more common than in Non-Hispanic White people^[1,29]
- Inequities in access, attendance, and outcomes at tertiary chronic pain services^[22,31]
- Lack of access to essential analgesics, particularly opioids, in low- and middle-income countries that account for 85% of the world's population^[8]. This includes for patients with cancer pain or non-oncological terminal illnesses, end-of-life care, and post cesarean analgesia ^[19,23,25]
- The excess of available opioids in some higher income countries has negatively influenced opioid access in middle and low-income countries, especially where opioids are not broadly available^[23]
- The burden of the disease is higher, and the probability of effective treatment is lower, in middle and low-income countries (up to 34% in the general population, and 62% in women)^[14]

What Contributes to Pain Inequities?

- Discrimination and racism influence access and quality of pain care, as well as outcomes ^[26]
- False beliefs among medical trainees, such as false beliefs among medical trainees that Black people have thicker skin with fewer nerve endings, and feel less pain, which echo narratives used throughout US history as justification for painful abuse during and after slavery^[13]
- Lack of culturally appropriate pain care that respects the diverse needs of patients^[9]

- Stigma. Patients are often stigmatized (by health professionals, the general public, or family members) when there is a lack of objective findings or their pain persists despite treatment ^[33]
- Governmental policies (or lack thereof) and healthcare systems influences on the availability of and accessibility to pain treatments^[10]
- Insufficient pain education and training for medical and allied health professions, which is even greater in LMIC countries^[7]. This contributes to poor pain service delivery at all levels
- As a result of insufficient training and limited resources and funding in low- and middle-income countries, there is less research being done. For example, in the [Clinicaltrials.gov database](#), of the 22,461 registered “complete” “pain” studies, only 39 were registered in Colombia, 73 in Mexico, and 619 in Brazil

What to do Next to Increase Equity in Pain Research and Care

Things to Consider Moving Forward

To address the global problem of pain inequities, and increase equity in pain care, we must reflect on how power, racist beliefs, and oppression towards members of a minoritized or racialized groups have contributed to inequities in the experience and treatment of pain around the world. Future research should consider or examine how caste systems, classism, colorism, racism, ageism, sexism, stigma, and discrimination and/or biases based on race, ethnicity, color, age, sex, gender, sexual identity, religion, income, geographic region, and disability status contribute to inequities in pain research and treatment. It is also important to examine and overcome biases and inequities that exist regarding research conducted in low- and middle-income countries^[12].

Actions we can take:

- Recognize that inequities exist. When ethnic and racial differences in pain treatment are identified, they should be addressed to achieve health equity
- Make pain research more inclusive by conducting studies that include underserved, diverse populations to help generalize study findings^[9]

- Partner with people living with pain in pain research, education, and treatment. Include patient partners from populations that have been historically, socially, or economically excluded, such as minoritized and racialized communities ^[4,16] (See Partnering with People with Lived Experience in Pain Research Global Year fact sheet)
- Develop culturally appropriate/sensitive pain assessments and treatments in partnership with patients and practitioners to contribute to the successful translation and implementation of the latest evidence-based practices ^[9,15,37]
- Develop or use existing technology where appropriate and feasible to improve access to pain treatment, especially in remote areas. Include community leaders, health experts, and technology experts in the development and implementation^[9]
- Collaborate with local communities to identify and prioritize research, education, treatments, and support that meet their needs^[9]
- Use anti-racism, intersectional, and equity-oriented frameworks for pain research^[3]
- Build research capacity in low- and middle-income countries
- Promote and support global collaboration between research groups from high-income, low-income and middle-income countries
- Promote and support the exchange of short academic visits of professors between high- and low-income countries
- Facilitate clinical rotations of medical students from low- and middle-income countries to academic centers in high-income countries
- Facilitate contact and collaboration between patient groups in high-income countries and similar groups in low and middle-income countries, such as through IASP's [Global Alliance of Partners for Pain Advocacy \(GAPPA\)](#)
- Acknowledge and study the impacts of colonization and colonial medicine that are still present in the beliefs, attitudes, policies, and practices of medicine and research today
- Finally, it is of high priority that high-income countries support low- and middle-income countries in achieving these steps, including access to resources, education, and funding

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