

Disparities in Back Pain

1. Health Disparity and Health Equity

Health disparity is defined as “a particular type of health difference that is closely linked with economic, social, or environmental disadvantage” [40]. Health equity is consequently “the absence of unfair and avoidable or remediable differences in health among population groups defined socially, economically, demographically or geographically” [38]. Disparities in health outcomes have been documented both within and between countries [14; 25] and are stronger determinants of health outcomes than the quality and availability of medical care [5].

2. Disparities in back pain have been documented worldwide.

A recent systematic review of social determinants of health in low back pain across 17 countries showed important associations between gender, race, ethnicity, education, occupation and socioeconomic status and important facets of low back pain (e.g., prevalence, intensity and level of disability) [14]. Difference in health because of where you live or your race or gender, have important societal and economic costs.

3. Race and ethnicity are not synonymous.

Race is defined as “physical differences that groups and cultures consider socially significant” while *Ethnicity* refers to the “shared cultural characteristics such as language, ancestry, practices, and beliefs” [1]. Race and ethnicity when used interchangeably fail to capture the distinction that an individual may be of one race but can be multi-ethnic through language, culture, and religion. In the presence of inequitable race relations in a society, it becomes very difficult to disentangle ethnicity from race in a meaningful way; in such cases the terms race/ethnicity are used jointly [17].

4. Racial and ethnic disparities lead to under-treatment of back pain.

Racial and ethnic disparities in health care [36] persist even after adjusting for differences in access-related factors, needs, preferences, and appropriateness of the intervention. Specific to back pain, racial and ethnic disparities in opioid prescribing have been documented extensively in emergency departments and outpatient settings [16; 23; 26; 27]. Despite racial/ethnic minorities reporting severe back pain and disability levels, health care providers were more likely to associate less severe pain to them, less likely to refer them for imaging [4] and more likely to recommend non-opioid therapy [23].

5. Racial and ethnic disparities are undermining measurement and understanding of pain experiences in various populations.

Without culturally adapted pain-related constructs, measurement, and interpretation frameworks, racial and ethnic disparities in back pain will persist. For example, application of measures not adapted for use in Indigenous communities in Australia has prevented fully capturing their pain experience [28] and consequently impacted on their pain assessment and treatment. This is important considering that in some communities for example, such as Canadian Mi’kmaq community, there is no word for ‘pain’, only expressions for ‘hurt’ [19]. In this context the use of numeric or faces pain scales as descriptors for pain were perceived as lacking meaning. Efforts have been made to create

culturally adapted scales. For example, a systematic review of cross-cultural adaptation of a functional disability index for back pain, the Oswestry Disability Index, found 27 different adaptation of the questionnaire [43]. Such efforts are a step in the right direction but much more needs to be done in this domain.

6. Women are more likely than men to experience low back pain.

Differences in socially constructed masculinity- and femininity-related ways of being and acting (gender) [7] and those characteristics that are biologically determined (sex) have been associated with various facets of back pain experience [42]. Prevalence of low back pain is higher in women compared to men (ratio around 1.27), and this difference is greater when women reach the postmenopausal stage [9; 41]. Multiple sex-related (e.g., hormonal, differences in the endogenous opioid system) [9; 21] and gender-related (e.g., traits, role expectations, attitudes, stereotypes, norms, status/power asymmetries, ideologies) factors at the intra-individual, situational, positional and ideological levels have been proposed to explain these differences [2], however a complete understanding of back pain in minority groups (including LGBTQI), is poorly documented [21].

7. Sex and gender difference in health care access and treatments for low back pain exist.

Women seek health care for low back pain more often and in greater amounts than men [8; 15]. This might reflect generally higher levels of health seeking behaviors among women. But this might also be in part explained by their higher levels of reported pain intensity and severity, leading to more frequent health care encounters or prescription of analgesics for example [21]. A theory-guided qualitative review of gender bias in chronic pain suggest that beyond gender norms about pain and pain-related coping, gender bias is present in the treatment of chronic pain that cannot simply be explained by different medical needs [35].

8. Socioeconomic positions are associated with poor back pain prognosis.

A recent European study showed that socioeconomic inequalities in the prevalence of back pain might be less pronounced compared to other pain conditions (e.g., hand/arm pain); however, there was great regional heterogeneity [39]. Beyond simply pain prevalence, socioeconomic position, for example education level, has been shown to be associated with recurrence of low back pain and disability, more so than it is associated with new back pain onset [6]. The reasons for these inequities are multifactorial and include variability in behavioral and environmental risk factors, occupational status, and barriers to accessing and utilizing health care resources [6]. There is also evidence suggesting that childhood socioeconomic position is a risk factor for back pain in adulthood [18; 29]. The magnitude of these inequities is on the rise and this seems to be particularly true for men [12] and persist into older adulthood [13].

9. Patient socioeconomic position influences pain assessment and treatment.

Unlike race/ethnic or sex/gender characteristics, the role of classism, or categorization of individuals based on their social class, has been less studied in the context of back pain assessment and treatment [11; 34]. Recent studies of classism in chronic pain more broadly suggest that individuals with low socioeconomic position are assessed by health care providers as experiencing lower pain intensity,

being less credible, and as their pain being more strongly influenced by psychological factors compared to individuals with higher socioeconomic status [3].

10. There is reason to hope for a better future.

Different global initiatives have been developed that focus on achieving health equity and minimizing health disparities, for e.g. the US-based Healthy People 2020 initiative [33], the culturally appropriate education program “My Back on Track, My Future” [22] project for Indigenous Australian communities. In addition, Pain Revolution (Australia) [31], Pain BC (Canada) [30], and Flippin’ Pain (UK) [10] campaigns are also examples of recent efforts to adopt a more equitable approach to pain literacy and consumer empowerment. While not specific to back pain, these types of initiatives help gather knowledge and inform policies. Such endeavours can be easily adopted for other minority groups to overcome health disparities and achieve health equity in back pain.

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AUTHORS

M. Gabrielle Pagé*, PhD, Assistant professor and research scholar, Department of Anesthesiology and Pain Medicine, Faculty of Medicine, & Department of Psychology, Faculty of Arts and Science, University of Montreal, Montreal, QC, Canada; gabrielle.page@umontreal.ca

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Manasi Murthy Mittinty, MD (Medicine), PhD, Co-chair of the Sex, Gender and Race Special Interest Group of the International Association for the Study of Pain; Lecturer, Pain Management Research Institute, University of Sydney, Australia

Kobina Gyakye deGraft-Johnson, MBChB, FGCS (Anaesthesia), PGDip Interdisc Pain Mgt, Consultant Anaesthetist and Pain Specialist, Korle Bu Teaching Hospital, Accra, Ghana

ACKNOWLEDGMENTS

MG Pagé is a Junior 1 research scholar from the Fonds de recherche du Québec en santé.

REVIEWERS

Lorimer Moseley AO
Chair in Physiotherapy
UniSA Allied Health & Human Performance
University of South Australia
Australia

Sónia F. Bernardes
Associate Professor with Habilitation
Department of Social and Organizational Psychology
ISCTE-IUL
Lisbon, Portugal