Research has consistently documented inequities in the quality of care experienced by Black patients, with negative downstream effects on patient outcomes. Chronic pain is an area where substantial racial and ethnic differences in the management and treatment of Black individuals’ pain have been well-documented. While previous research posits that the patient-physician relationship is a primary mechanism for these disparities, little empirical research has examined this association. The study by Licciardone et al1 aims to fill this gap in the evidence-base by evaluating whether the quality of the patient-physician relationship serves as a mediator between patient race and pain and physical function outcomes among adults with chronic low back pain. This cross-sectional study included 1177 Black and White adults recruited from the University of North Texas Health Center’s Pain Registry for Epidemiological, Clinical, and Interventional Studies and Innovation from 2016 to 2021. The quality of the patient-physician relationship was assessed using 3 self-report measures, which were completed by the study participants at registry enrollment: participant’s perception of physician communication was assessed with the Communication Behavior Questionnaire; perceived physician empathy was measured with the Consultation and Relational Empathy scale; and perceived satisfaction with medical care was assessed with the Patient Satisfaction Questionnaire. All were linearly transformed to create a score ranging from 0 to 100 to facilitate direct comparison of the measures. Intensity of chronic low back pain was measured as the average pain level over the 7 days prior to registry enrollment using a 0 (no pain) to 10 (worst pain) scale. The Roland-Morris Disability Questionnaire was also administered at registry enrollment to assess the perceived adverse impact of low back pain on physical function.

Overall, the authors found comparable ratings in Black and White participants’ perceptions of the patient-physician relationship across all three measures, with only one significant difference in ratings of effective and open physician communication (mean for Black participants vs White participants, 72.1 vs 67.9; \( P = .03 \)). However, this was not considered a clinically significant finding (Cohen d, 0.16; 95% CI, 0.01-0.30). Alternatively, the authors found significant racial differences in the pain-related outcomes, including higher pain intensity and greater back-related disability among Black participants compared with White participants (intensity mean: 7.1 vs 5.8; \( P < .001 \); disability mean: 15.8 vs 14.1; \( P < .001 \)). The quality of the patient-physician relationship did not explain the association between participant race and the pain outcomes in the mediation analysis.

This study has several strengths. First, more than 18.4% of participants self-identified as Black, which is important for diversity in clinical research. Second, the authors made use of a patient registry, which can be a valuable resource for research. Third, the mediation analysis helps to advance the scholarship of health disparities in pain, which is of public health significance. These strengths must be taken into context of notable limitations, which may explain why none of the association between participants’ race was attributable to measures of the patient-physician relationship, and the pain outcomes.

Participation was limited to individuals who could access the digital registry and had a regular source of care, which offers a narrow view of how these findings relate to vulnerable patients who are most likely to experience disparities in pain. Important limitations in the measures of patient-physician relationship may also explain the null findings. First, the Communication Behavior Questionnaire was designed to assess the attributes of the relationship that are considered important to individuals when talking with his or her physician rather than the perceived quality of their physician’s communication. Thus, a positive interpretation of the study results are that Black
and White adults place equal importance on patient-physician relationships that are characterized as emotionally supportive, include shared decision-making, and value the whole person. Second, all 3 measures are nonspecific and do not provide a frame of reference for a specific physician or clinic visit for responding to the items, creating large opportunities for recall and response bias. Recording of actual communication during clinic visits would be a more appropriate method to accurately characterize the quality of patient-physician relationship when discussing chronic pain. This is particularly important for patients who identify as racial and ethnic minorities and are more likely to use nonverbal behaviors (eg, grimacing) to communicate pain. Fourth, while a strength of this study was the collection of data on contextual factors, including participant sociodemographic, psychological, and clinical characteristics, they were not analyzed to understand how they shaped perceptions of the relationship among the Black and White participants. Perceptions of the relationship are often shaped by characteristics of both the patient and the physician (eg, race, gender, cognitive load), qualities of their relationship (eg, length), and the broader context where the interaction occurs (eg, in-person vs telehealth; safety-net clinic vs private practice).

We agree with the authors’ conclusions that multilevel models are essential for developing a comprehensive understanding of the factors influencing racial differences in pain outcomes. The authors suggest that system-level factors, such as poor access to high-quality care, may be a potential mechanism for future study. We contend that key factors related to the patient-physician relationship, including bias and discrimination in pain treatment, also warrant further study as potential explanations for the observed racial disparities in pain outcomes. Several studies have reported associations between Black patients’ experiences of perceived bias and discrimination with worse pain outcomes. Physician implicit bias has been associated with false beliefs that Black patients have greater pain tolerance, thicker skin, and feel less pain than White patients. Physicians who endorsed these false beliefs were also less likely to prescribe appropriate pain treatments for Black patients as compared with White patients. Failure to address the biases held by physicians will only perpetuate the inequities in the management and treatment of chronic pain in Black patients. To address these biases, medical school curricula should go beyond dispelling myths about biological differences in pain to also provide students with opportunities for deliberative reflection to develop structural humility, that is, an ongoing commitment to recognizing and addressing the influence of social vulnerabilities on health, in partnership with their patients. In research, the use of race as the independent variable without reference to the social and political context (eg, cultural, environment, structural racism) should also be carefully scrutinized, especially with respect to race-specific treatment for pain. The self-reported race variable may explain far less given that there are differential opportunities (eg, access to goods and resources), especially for disadvantaged groups such as Black Americans. At a minimum, place of residence should be included for understanding these underlying mechanisms in future research.

A focus on improving health equity through research and clinical care can be achieved by implementing policies that foster a culture of inclusivity, examining the role of social determinants of health on outcomes, prioritizing diversity in medical school admissions and research faculty hiring, and implementing antiracism strategies that actively engage individuals in recognizing and addressing their biases in research and medicine. The recent movement by national organizations (eg, National Committee for Quality Assurance, Association of American Medical Colleges) and hospital ranking systems (eg, US World and News Report) to place health equity at the forefront of health care may also provide the needed impetus for health systems and medical schools to reform practices and policies to focus on providing high-quality, equitable care to all patients.
REFERENCES


