Having a doctor who shares the same race may ease patient's angst

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Previous research has suggested that when a patient has a doctor who shares their demographics in terms of gender, race, or language, it can influence peripheral health outcomes. Credit: University of Miami

When doctors are the same race as their patients, it can sometimes forge a sense of comfort that helps to reduce anxiety and pain, particularly for Black patients, new research from the University of Miami suggests.

In a study recently published in the academic journal *Pain Medicine*, and led by Steven R. Anderson, recent psychology Ph.D. graduate, and Elizabeth Losin, assistant professor of psychology, groups of non-Hispanic white, Hispanic, and Black patients participated in a simulated doctor's appointment. Patients were given a mildly painful series of heat stimulations on their arm by a medical trainee playing the role of a doctor to simulate a painful medical procedure. Participants indicated how intense their pain was throughout the procedure and researchers also measured the patients' physiological responses to the painful experience using sensors on the patients' hands.

Some of the patients were paired with a doctor who identified as the same race and ethnicity as they did, which is called "racial/ethnic concordance," while others were not. After the experience, researchers compared the pain levels of the group paired with same race/ethnicity doctors with those paired with a doctor of a different race/ethnicity. The most intriguing results came from the Black patients who were paired with Black doctors.

"Black patients paired with Black doctors reported experiencing less pain across several types of measures than Black patients paired with Hispanic or non-Hispanic white doctors," said Losin, who leads the Social and Cultural Neuroscience lab.

Additionally, Losin said that data from the sensors showed the Black patients' physical responses to pain were also lower when they were paired with a doctor of their own race.

"This provides some evidence that Black patients were showing a benefit of having a doctor of their own race at multiple levels—showing pain relief in both their communication and their physiology," Losin said.

The idea to investigate the role of racial concordance in the doctor-patient relationship came from previous research that shows that there are major disparities between racial and ethnic groups in terms of the level of pain experienced from medical conditions and procedures, according to the researchers.

Typically, Black and Hispanic populations report more pain from medical conditions and in pain research studies, compared to non-Hispanic white populations. Also, previous research has suggested that when a patient has a doctor who shares their demographics in terms of gender, race, or language, it can influence peripheral health outcomes like the patient's satisfaction and their adherence to medication. That led Losin's team to investigate whether racial/ethnic concordance between doctor and patient would go deeper to
affect the patient's pain level as well.

"There are fewer studies about doctor-patient concordance and its effect on direct health outcomes like pain," Losin said.

To understand why Black patients experienced reduced pain and pain-related bodily responses with a doctor of the same race, the researchers delved into some of the introductory surveys given to the patient participants, Anderson noted, and found a big clue.

"The factor that really differentiated the Black patients from the other groups was that Black patients were much more likely to say they had experienced racial or ethnic discrimination or were currently concerned about it," he said.

What's more, the Black patients who reported experiencing and worrying more about discrimination showed the greatest reductions in their bodily responses to pain when they had doctors of their own race, Anderson said.

"Together these findings suggest that perhaps one reason why Black patients may have had a reduced physiological response to pain when they had Black doctors was because they were less anxious about the possibility of being discriminated against," Losin said. "We know that anxiety is closely tied to pain."

Although non-Hispanic white and Hispanic patients were included in the study as well, whether or not they had a doctor of their own race didn't seem to make a difference for their pain. This was what the study authors expected for the white patients but found surprising for Hispanic patients, who also have been found to report more pain than non-Hispanic whites in previous research studies.

One possible reason Hispanic patients didn't show the same pain reduction benefit of having an own-race doctor as Black patients did, is that on average the Hispanic patients didn't actually perceive the Hispanic doctors to be more similar to them in terms of their race or ethnicity than the Black or non-Hispanic white doctors. This is likely due to the high cultural and national heterogeneity among Hispanic/Latino Americans and suggests more research is needed into what factors related to the doctor-patient relationship may help decrease pain for Hispanic patients.

Losin and Anderson said their study highlights a potential benefit of having more Black physicians in the medical profession: It could mean a reduction in pain disparities.

As of 2019, only around 5 percent of physicians identified as African American and Hispanic respectively, which means that most Black patients will rarely get to experience the benefits of seeing a physician that looks like them and understands their life experiences.

"Physician diversity initiatives are often seen as beneficial for improving patient comfort and satisfaction, but with our study we have evidence that there may be direct health consequences to not having a diverse work force as well," Anderson said. "Our study speaks to the importance of physician diversity in improving health outcomes."


Provided by University of Miami