Looking for the roots of racial bias in delivery of health care

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Johns Hopkins study suggests medical students may "learn" to treat nonwhite patients differently than white patients

New Johns Hopkins research shows that medical students — just like the general American population — may have unconscious if not overt preferences for white people, but this innate bias does not appear to translate into different or lesser health care of other races.

The research findings, published in the Sept. 7 issue of the *Journal of the American Medical Association*, questions whether something could be happening during medical training that turns benign unconscious preferences of students into ideas and behaviors that may lead to different types care for patients of different races.

Being a member of a minority race and being poor are consistent predictors of worse health outcomes in the United States, the investigators say, and substantial amounts of research suggest that racial bias — conscious or not — is an important factor in clinical decisions that create racial disparities in health care.

"Our results raise the question: Are we doing something in medical education and training that makes doctors act on their unconscious preferences, even though as medical students they may not have done so?" says study leader Adil H. Haider, M.D., M.P.H., an assistant professor of surgery at the Johns Hopkins University School of Medicine. "This may sound like a cliché, but I really do believe that most

people who become doctors choose to do so out of a noble calling and they really want to help people. But it may be that training and experience are unwittingly reinforcing negative stereotypes pushing us to unconsciously treat some patients differently. If this is the case, it makes a good argument for interventions to ensure that doctors are aware of how even subtle biases may affect their decision-making and their assessments of patients."

Previous studies using a validated "association test," for example, have shown that roughly 70 percent of the general population, as well as doctors specifically, have an implicit preference for white people. One study showed that a group of doctors who were unconsciously partial to white people were less likely to treat black heart patients with needed clot-busting drugs and more likely to give them to similar white patients.

Other past studies have shown that among trauma patients, race and insurance status are independently associated with higher mortality. Minorities are less likely to undergo bypass surgery and are less likely to receive kidney dialysis or transplants, and more likely to undergo less-desirable procedures, such as lower limb amputations for diabetes. Several studies have shown that physicians prescribe fewer analgesics for African-Americans in emergency rooms despite similar estimates of pain.

In the new study, Haider and his team invited first-year Johns Hopkins medical students to participate in a confidential, Web-based survey. They were not informed of the survey content ahead of time and were asked not to share it with their peers afterward.

First, the students were given four clinical scenarios in which they were randomly presented with either a black or white patient and asked questions about how they would treat each. Next the students were presented with four more patients, this time randomly altering the

patients' social class, by incorporating occupations into the clinical vignettes.

To determine whether student assessment's were associated with their unconscious attitudes, they were then given the Implicit Association Test (IAT) which is a widely used and validated tool that tests reaction times to uncover unconscious biases and preferences. For example, in the Black/White Race IAT, a photo of a white or black individual is presented along with words that have good and bad connotations. The test measures how quickly the participant associates good or bad words with people from each race. If a participant is quicker at associating the good words with a particular race, then that person is thought to have an unconscious preference towards that race. Haider and his team also used a new tool they developed, based on the IAT, to measure preferences for different social classes.

The research team found that of the 202 first-year medical students who participated, the IAT determined that 69 percent had an unconscious bias toward whites and 14 percent innately favored blacks. They also determined that 86 percent of the students had subconsciously favored upper class people, while just three percent showed a preference for those of a lower class.

To their surprise, and considering results of previous studies of practicing physicians, the researchers say they found that the unconscious preferences of students did not affect how they assessed or treated patients of various races and incomes depicted in the scenarios.

"For the most part, the students' answers had nothing to do with the patients' race or social class, regardless of their unconscious biases," Haider says.

Haider says it is possible that the biases of younger people don't affect

their work because they may have been exposed to educational curricula focused on cultural competency, something that may translate into improved awareness and management of unconscious preferences.

Understanding — and confronting — the role that racial and social bias may play in the relationship between doctors and their patients is an important step toward fixing the racial disparities that plague the health care system, Haider says.

"We know there are disparities — they are well documented — but we need to confront them and understand why," says Haider, who is also co-director of the Johns Hopkins Center for Surgery Trials and Outcomes Research. "Even though it's a sensitive topic, we can't move forward until we acknowledge the problem. We need to have an honest discussion about these things instead of just trying to ignore them or pretend they're not there."

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