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Editor's Spotlight/Take 5

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Editor's Spotlight/Take 5: Racial Disparities are Present in the Timing of Radiographic Assessment and Surgical Treatment of Hip Fractures

Seth S. Leopold MD

The issue of racial disparities in health care is a sensitive one. I believe that most physicians would like to think that there are good explanations—something other than racism, institutional or individual—for the generally poorer care that nonwhite patients receive compared to those who are white. Unfortunately, the evidence is not on the side of those who feel that way.

Increasingly sophisticated analyses are doing a better job of controlling for confounding variables, leaving us with fewer non-sinister explanations for the serious healthcare disparities that so many studies have identified. I've written before that we need to read research on this topic with great care. From a biological standpoint, the very topic of race is controversial, and there may be less to it than was previously believed [5]; as such, ascribing biological complications to differences in race should be done thoughtfully and modestly [3]. But as a social construct—one that may nudge a healthcare provider or healthcare system to deliver care differently based on the color of a patient's skin—race remains a viable, vital element to consider [4, 7].

In this month's *Clinical Orthopaedics and Related Research®*, Dr. Uma Srikumaran's group from Johns Hopkins University in Baltimore, MD, USA found that it took black patients with hip fractures who presented to the emergency departments of five area hospitals substantially longer to receive radiographic evaluation and to have surgery than white patients [1]. The study controlled for most of the parameters other than race that might plausibly have influenced the findings (age, BMI, Charlson Comorbidity Index [CCI], and American Society of Anesthesiologists [ASA] class), leaving those of us who want to see the best in one another and in the system we're all a part of squirming in our seats.

It would have been nice if the authors could have drilled deeper into the role that insurance status had here (they controlled for it, but only in a limited way), or to see whether these findings apply also to other racial and ethnic minorities (or other orthopaedic diagnoses), but even with more than 1500 patients, statistical power precluded doing so. Those concerns are quibbles in the face of a fairly overwhelming finding, and don't diminish the wallop this study packs.

It should go without saying but feels important to say nonetheless: There is no justification for the color of a patient's skin to have any role in the care (s)he receives when his or her hip is broken. And in the face of Dr. Srikumaran's findings, any hospital or healthcare system that isn't starting to look at whether it is delivering care differently to patients of different races is not doing enough to address a

A note from the Editor-In-Chief: In "Editor's Spotlight," *one of our editors provides brief commentary on a paper we believe is especially important and worthy of general interest. Following the explanation of our choice, we present* "Take 5," *in which the editor goes behind the discovery with a one-on-one interview with an author of the article featured in* "Editor's Spotlight." *We welcome reader feedback on all of our columns and articles; please send your comments to eic@clinorthop.org.*

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problem that seems rather obviously to be present.

This study is relevant—essential, really—to all of us, whether or not we treat patients with hip fractures. Please read it. And then join me to go behind the discovery of this very disturbing study with its senior author, Uma Srikumaran MD, MBA, MPH, in the *Take 5* interview that follows.

Uma Srikumaran MD, MBA, MPH

Take 5 Interview with Uma Srikumaran MD, MBA, MPH, senior author of "Racial Disparities are Present in the Timing of Radiographic Assessment and Surgical Treatment of Hip Fractures"

Seth S. Leopold MD: *Congratulations on publishing a study that I cannot describe as anything other than deeply disturbing. I am hoping you can offer some non-sinister explanations for your main findings, but I fear you may not be able to. Can you do so, and if you can, how can we tease them apart from the more-concerning explanations that seem so likely here?*

Uma Srikumaran MD, MBA, MPH: We controlled for as many potential cofounding variables as we could, including age, sex, BMI, CCI, ASA, and insurance type, and we still found that black patients waited much longer for radiographic evaluation and surgical repair of hip fractures. Use of radiographic timing is informative as it should not be as prone to other complicating factors such as comorbidities that can confound time to surgery and clinical complications or functional return. One factor that we were not able to control for is the staffing levels at the time of presentation to the hospital. This might have affected the timing of care, but there is no evidence to believe that black patients are more prone to seeking care during days or times when hospitals are not optimally staffed. It is possible certain patient groups or their families may be more vocal as it relates to the timing of their care. As much as we would like to think that these disparities are due to some other factor than race, I am afraid our results paint a different picture. Regardless of the possibility of multifactorial causes for racial disparities, we feel knowledge that they do indeed exist warrants efforts at a systems level to help address them. This might be a more fruitful exercise than trying to understand the causes behind them.

Dr. Leopold: *About half the white people in the United States believe that substantial racial equality has been achieved* [6]. *How does your study inform this conversation?*

Dr. Srikumaran: While most would agree progress has been made in various areas, racial disparities continue to exist in health care across geographic areas. The results of our study are not widely generalizable as we are looking at one system with limited geographic scope. I would expect if every hospital conducted a similar analysis, and the results would vary greatly across our country. We hope our findings will motivate such analyses so we can inform and educate our workforce and justify expending resources to mitigate these inequalities. I would view racial equality as an ideal we must continuously strive towards.

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And while this is unlikely to occur in all aspects of life or within a single generation, as surgeons and healthcare workers we can look within our own spheres of influence to make the small changes that can grow into substantial and widespread change.

Dr. Leopold: *Your analysis did not seem to consider whether the lack of insurance, or underinsurance (such as Medicaid), was associated with delays in care. To what degree might the lack of insurance have made a difference, and how should readers factor that into their understanding of your important work?*

Dr. Srikumaran: Only 2% (n = 31) of the patients in our study lacked insurance or were underinsured. Of these patients, 12 were white and four were black. Due to the small number of black patients who were uninsured or underinsured, we are doubtful that insurance type explains the disparity in timing of care experienced between white and black patients.

Dr. Leopold: *Without getting overly philosophical, there is good evidence to suggest that all people have an underlying preference for self over other* [2]*, and so eliminating unconscious biases may be unrealistic at the individual level. If that is true, the solutions need to come at the systems level. What do you perceive are the most-promising systems-level solutions to the problems you've uncovered?*

Dr. Srikumaran: One potential solution is to implement a multidisciplinary, standard-care pathway for patients with hip fractures. These pathways have had great success in improving outcomes for this patient population in European countries. We believe that these standardized care pathways, composed of nurses, social workers, emergency room providers, orthopaedic surgeons, and geriatric care teams, can streamline care and improve the efficiency of triage and management of patients. We have already begun to implement triage nurse initiated protocols to identify patients with hip fractures and link them to order sets for appropriate and timely radiographic evaluation.

These protocols and order sets can be built into the emergency medical record and associated clinical decision-support systems. In this manner, implicit biases, to the extent they exist, may be mitigated, and we hope this will ultimately reduce racial disparities in hip fracture care. Another important aspect is the continuous evaluation of our progress. We are working to establish a hip fracture registry so we can continue to identify and address barriers to optimal care in real time. Additionally, educating physicians (emergency department, medicine, surgeons) as well as patients and their families about the importance of timing in the care of patients with hip fractures may help all parties advocate for timely care.

Increasing the racial diversity of the healthcare workforce can allow for more race-concordant physician-patient relationships that could alleviate patient-level discrimination and lead to overall improved patient satisfaction. Residency programs should aim to recruit more medical students from underrepresented backgrounds. This can be achieved through a more holistic review of residency applicants and by inclusion of faculty members from diverse backgrounds on the admissions committees. Similarly, schools can establish outreach programs and fund rotations to help students from disadvantaged groups gain exposure to the field.

Dr. Leopold: *What stands in the way of those changes happening, and what are the short-term, half-measure solutions that healthcare systems need to stay away from?*

Dr. Srikumaran: Refusal to consider the possibility, or investigate the possibility, that racial inequality exists in one's own system may be the greatest barrier. We should not fear what we might find. After investigating whether this is an issue at a particular site, the main hurdle, as is often the case, is acquiring and committing the necessary resources to address the problem. Isolated educational events are unlikely to result in lasting change. Assigning responsibility to a single individual such as a "diversity officer" is also not enough. This should be considered a shared responsibility of all us and requires buy in from the top and the front lines. Physicians and other healthcare personnel from various specialties will need to collaborate to develop and implement the standardized hip fracture pathways. There may be some challenges initially in hospital personnel adapting to these new protocols. Leaders in the healthcare system must ensure continuous engagement of personnel to ensure that these pathways are implemented successfully long-term. Eventually, the change becomes the standard and all patients, regardless of race, can benefit.

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