ANNALS OF SURGERY

Title: The State of Diversity in American Surgery: A Call to Action
Running Head: Diversity in American Surgery (30/40 characters)
Article Type: Surgical Perspective

Authors: Danielle I. Ellis, MD, MTS[1] and Jasmine A. Khubchandani, MD[1, 2]

1. Department of Surgery, Massachusetts General Hospital, Boston MA
2. Center for Surgery and Public Health, Brigham and Women's Hospital, Boston, MA

Corresponding Author:
Jasmine A. Khubchandani, MD
55 Fruit Street GRB-425
Boston, MA 02114
(508) 373 8097
jkhubchandani@partners.org

Reprints will not be available from the authors. The authors have no funding to disclose.

In the recent release of Doximity's program rankings, the Massachusetts General Hospital (MGH) Department of Surgery was ranked number one among surgical training programs nationally. MGH leadership celebrated the success both internally and on social media. However, a photograph accompanying a congratulatory tweet which featured the program's young surgeons in training generated an impassioned negative response. Many on Twitter took note of the group's apparent whiteness and commented on the problematic absence of people of color in the photograph. Comments included "seems about White" and "#MGHSurgerySoWhite" (a nod at the social movement for greater gender and racial diversity in film which erupted following the 2015 Oscars). The picture even became a part of a viral video – viewed over 300,000 times – by a popular medical parody account with comments regarding bias in medicine and photos of glaringly white groups of medical trainees, as well as Beauty and the Beast's "Tale as Old as Time" playing ever so ironically in the backdrop.

The outcry on social media against the lack of diversity in one surgery program's photo is in many ways refreshing, timely, and necessary. However, it is too myopic: to reduce this issue to one institution or to advocate for diversity without also advocating for a culture in which surgeons from diverse backgrounds feel a sense of belonging is to miss the mark.

The crisis of underrepresentation (and its inextricably linked consequence, a culture not uniformly characterized by equity and inclusion) is much bigger than any one institution, department, or diversity committee. And this crisis demands the attention of the surgical community. While representation matters, nurturing a community that embraces and uplifts surgical residents of color is the true challenge. An already difficult journey, the obstacles to reaching and completing surgical training are often exacerbated by the resident's identity.

As two women of color who are surgical residents at the MGH, the reality of underrepresentation is all too proximal. It is well-established that Black, Native American, and

ANNALS OF SURGERY

Latinx residents are Underrepresented In Medicine (UIM) compared to the general population. While Black and Latinx individuals comprise 13.4% and 18.5% of the U.S. population,[1] only 5.6% and 7.1% of the surgeons in training are Black and Latinx, respectively.[2] Among surgical residents nationally, 13.1% are UIM and 29.4% are Black, Indigenous, and People of Color (BIPOC).[2] At the MGH, our general surgery residency is 12.5% UIM and 32.8% BIPOC. Although the photograph circulated and ridiculed is not completely representative of the community of residents at our institution, the response the photograph generated sheds light on a real dilemma.

Non-White self-identification remains an independent predictor of lower likelihood of being selected for surgical residency interviews.[3] Further, the barriers to successfully becoming a surgeon persist even after students graduate from medical school and enter post-graduate training. Black, Latinx, and Native American residents report daily experiences of racial bias at work, which they are reluctant to report to leadership.[4] They also are painfully aware of their institutions' dependence on residents of color to promote diversity and race related issues.[4] Nationally, 70% of Black, 46% of Asian, and 25% of Latinx surgical residents reported experiencing discrimination, compared to 13% of White respondents.[5] Another study found that Black and Asian residents were less likely to feel that they fit into their training programs and were less comfortable asking for help.[6]

In light of this data, achieving equity may seem like a daunting task, but American surgery is no stranger to movements advocating for equity. While as recently as 2001, women made up only 14% of surgical residents nationwide, they now account for 40% of surgical trainees.[7] Within the MGH surgery department, 57% of our residents are women. Behind advancements in gender representation has been a persistent, critical mass advocating for equity, and current events have continued to demonstrate that such a force can be incredibly powerful and tangibly effective.

For example, a recently published article by a group of vascular surgeons outlining "professional" resident behavior concluded that images on these residents' personal social media accounts in which they wore bikinis, held glasses of alcohol, or expressed social or political views were unprofessional.[8] Surgeons and other medical professionals, particularly female physicians, posted on social media platforms by the thousands denouncing the evident sexism still pulsating through medicine. Their expressed outrage at the article, known collectively as the #MedBikini movement, was so powerful that it both resulted in the paper's retraction and gained enough purchase to draw attention from outside of the medical community.

Only days later, an article making equally alarming and abhorrent but racialized assertions came to public attention.[9] It included claims such as "failures [of efforts to increase the number of blacks and Hispanics within the physician workforce] have largely been attributable to the limited qualified applicant pool" and called for admissions committees to abandon any diversity directives. Though this article, like that which spawned #MedBikini, was circulated within the medical community, #MedRacism did not garner nearly the same following or sense of indignation as its gendered counterpart.

The space for advocacy on behalf of racial equity does not exist in the same way as it does for gender equity. For many well-intentioned onlookers of both movements, the most comfortable response to issues of diversity is silence.

As women of color in surgery, we are the intersection of these movements. We are often mistaken for a patient's nurse (a historically majority-female profession), an experience that likely

ANNALS OF SURGERY

resonates with many White female physicians as well. We shake it off, assert our roles in our introduction, don our white coats and ID badges that read "DOCTOR" in large bold letters, and attempt to stave off the imposter syndrome that inevitably creeps in. However, unlike our White counterparts, we are also confused for the environmental services staff, for the food service staff, and because of our relatively few numbers,[10] for one another. Sometimes the bias is more subtle, coming from other surgical trainees or those more senior to us; for example, our clinical decisions may be questioned more often. In both overt and more innocuous forms, these experiences span medical disciplines and institutions.

As the Black Lives Matter (BLM) movement entered the mainstream public discourse over the last several months, many institutions released statements of support. Out of a healthy skepticism regarding the genuineness of these statements, the Pull Up for Change campaign gained traction. The campaign called for companies 1) to publicly release the percentage of Black employees at corporate and executive levels and 2) develop anti-racism efforts to demonstrate authentic commitment to diversity. In American surgery, we advocate for a similar movement; the presence of UIM and BIPOC trainees, even if on par with national numbers in a program is no longer enough. Representation and an inclusive environment must become a priority, and we must hold institutions accountable for joining the pursuit.

We challenge institutions responsible for training future surgeons to the following actionable steps. First, in addition to listing resident photos and biographies on their websites, residency programs should specifically note the percentage of their trainees that are women, UIM, or BIPOC. Secondly, though we wholeheartedly agree with active and purposeful recruitment of BIPOC trainees, institutions should develop and publicize strategies to shift from simply recruiting to also empowering residents of color. This means departments should **forsake the common instinct to rely on faculty members and trainees of color to respond to and resolve race-related challenges** – not only does this distract from their work as surgeons, but this is incredibly burdensome and uncompensated labor. Instead outside consultants and experts in race relations should be engaged both for department-wide anti-racism workshops (with required annual booster sessions for incoming first-year residents as well as new faculty or staff) and ad hoc issues that arise. Surgical residencies should **intentionally create multi-generational mentorship programs for BIPOC individuals** that ensure mentorship across levels of training, from internship to full professorship. Finally, we encourage institutions to **develop a bias response protocol** – a data collection system designed to anonymously track the experiences of members within the department of surgery. The responses should be regularly analyzed and utilized as a basis for intervention.

As we have seen before with respect to women in surgery, change can come in the presence of a critical mass pushing for it. Captive and quarantined amidst a pandemic, the general public as well as academia have become more aware of the current state of American race relations. It was in this climate that Twitter users sounded the alarm of underrepresentation in surgery, and we must now respond with sincere reflection and genuine action. For us, every day that we walk into the hospital is a day to advocate for change; now more than ever, it is time for the surgical community to join us and pull up for change, too.

Word Count: 1459/1500

ANNALS OF SURGERY

References

1. United States Census Bureau. QuickFacts United States. https://www.census.gov/quickfacts/fact/table/US/PST045219#qf-headnote-b.
2. Education AC for GM. Data Resource Book Academic Year 2018-2019. 2019.
3. Jarman BT, Kallies KJ, Joshi ART, et al. Underrepresented Minorities are Underrepresented Among General Surgery Applicants Selected to Interview. *J Surg Educ*. 2019:1-9. doi:10.1016/j.jsurg.2019.05.018
4. Aba Osseo-Asare A, Balasuriya L, Huot SJ, Keene D, Berg D, Nunez-Smith M. Minority Resident Physicians' Views on the Role of Race/Ethnicity in Their Training Experiences in the Workplace. *AMA Netw Open*. 2018.
5. Yuce T, Turner P, Glass C, et al. National Evaluation ofRacial/Ethnic Discrimination in US Surgical Residency Programs. *JAMA Surg*. 2020;155(6).
6. Wong RL, Sullivan MC, Yeo HL, Roman SA, Bell RH, Sosa JA. Race and surgical residency: Results from a national survey of 4339 US general surgery residents. *Ann Surg*. 2013;257(4):782-787. doi:10.1097/SLA.0b013e318269d2d0
7. Abdel Aziz H, Ducoin C, Welsh DJ, et al. 2018 ACS Governors Survey : Gender inequality and harassment remain a challenge in surgery. 2018:1-16.
8. Journal of Vascular Surgery. RETRACTION: Prevalence of unprofessional social media content among young vascular surgeons. *J Vasc Surg*. 2020. doi:10.1016/j.jvs.2019.10.069
9. Journal of American Heart Association. Retraction to: Diversity, Inclusion, and Equity: Evolution of Race and Ethnicity Considerations for the Accepted Article Cardiology Workforce in the United States of America From 1969 to 2019. *J Am Hear Assoc*. 2020. doi:10.1161/JAHA.119.014602
10. Young SG, Hugenberg K, Bernstein MJ, Sacco DF. Perception and Motivation in Face Recognition: A Critical Review of Theories of the Cross-Race Effect. *Personal Soc Psychol Rev*. 2012;16(2):116-142. doi:10.1177/1088868311418987