Diversity in the Orthopedic Workforce

What are the diversity issues facing the Orthopedic workforce?

Racial and ethnic healthcare disparities have been a topic of increasing focus as we learn more about the negative impact this problem has on providing quality care to patients. The Centers for Disease Control and Prevention (CDC) identifies health disparities as, "preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations (1). A lack of minority physicians contributes significantly to this issue since these physicians are more likely to work within and serve communities that lack access to care (2). It has been shown that a diverse physician workforce improves patient care and access (2). Furthermore, patients are more likely to be satisfied with communication and treatment when managed by a physician sharing their cultural beliefs and values (3).

Much of the lack of diversity in the physician workforce can be attributed to historical factors that systematically treated minorities differently and made the path to becoming a physician much harder in comparison to their white counterparts (4). This dates to the period of segregation where the opportunity for minorities to pursue a degree in medicine were severely limited or nonexistent. There has been a recent effort to increase overall physician diversity; however, the improvement of diversity in orthopedic surgery has been exceptionally sluggish (5).

Orthopedic surgery is among the least diverse medical specialties as demonstrated by the 2016 American Academy of Orthopedic Surgeon's survey. The census revealed that 86% of practicing orthopedic surgeons were non-Hispanic white, 2% were Hispanic or Latino, and 2% were African American (6). There has only been a marginal increase in the percentage of minority medical students applying to orthopedic residencies (10). Evidence has shown that the reason for this difference has less to do with qualifications but is more attributable to a lower number of minority students choosing to pursue a career in orthopedics (7,8). Minority students tend to view orthopedic surgery as less inclusive, which could thus impact application rates (9). This lack of an orthopedic workforce that reflects the diversity of the American population undoubtedly affects patient care adversely.

Specific to hip and knee arthroplasty, abundant literature has demonstrated that minority patients undergo joint replacement surgery at a significantly lower rate in comparison to white patients. There are multiple reasons for this disparity including decreased patient access to care, lower expectations for surgery to help address pain and loss of function, and lack of familiarity with the surgical procedure. Fortunately, patient willingness to seek medical care increases with more knowledge along with trust in their physician and the healthcare system (10). This underscores the need for a workforce that better reflects the overall population in the United States. A more representative workforce would be more willing to work within minority communities, thus more likely leading to improved communication and trust. The care would therefore become more patient-centered, meaning that it will be responsive to the preferences and values of the community.

How do we fix this problem?

Increasing the number of minority hip and knee arthroplasty surgeons will be one of the most effective tools to combat these inequities. This will lead to more surgeons within minority communities, improved access, enhanced outreach, and more effective communication. There are currently efforts to improve racial diversity in the orthopedic profession. **The J. Robert Gladden Orthopedic Society**, founded in 1998, aims to increase workforce diversity and eliminate disparities in musculoskeletal care via mentorship, advocacy, and clinical research. **The Nth Dimension**, founded in 2006, aims to address the lack of underrepresented minorities and females in orthopedics through a pipeline program. Both undergraduate and medical students are provided with early exposure to orthopedics through workshops, research, and mentoring. The Nth dimension has been shown to increase the likelihood of students applying to orthopedics.

Although the problems in hip and knee arthroplasty are well established and have garnered interest over the past decade, there has not been a focused effort to find solutions. As the number of hip and knee replacement procedures performed in the United States are expected to rise substantially over the next decade, the importance of diversifying the orthopedic workforce will grow. In response, the American Academy of Hip and Knee Surgeons (AAHKS) has created a Diversity Advisory Board (DAB). The mission of DAB is to 1) increase diversity and inclusion among the membership and leadership of AAHKS and 2) build mentorship programs for minority students, residents, fellows, and attending surgeons.

A census is currently being conducted to evaluate the current composition of the arthroplasty workforce. With this data, AAHKS will be able to create initiatives and programs to better address these issues.

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This article has been written by Obi Adigweme, MD, in collaboration with the AAHKS Patient and Public Relations Committee and peer reviewed by the AAHKS Evidence Based Medicine Committee. Links to these pages or content used from the articles must be given proper citation to the American Association of Hip and Knee Surgeons.