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Views and Perspective

Equity of African American Men in Headache in the United States: A Perspective From African American Headache Medicine Specialists (Part 2)

Larry Charleston, IV, MD, MSc, FAHS; Roderick C. Spears, MD, FAHS, FAAN

In part 1 of this opinion piece, we described inherent and potential challenges of the equity of African American (AA) men in headache medicine including headache disparities, mistrust, understudied/lack of representation in research, cultural differences, implicit/explicit bias, and the diversity tax. We shared personal experiences related to headache medicine likely faced due to the color of our skin. In part 2, we offer possible solutions to achieve equity for AA men in headache including: (1) addressing head and facial pain disparities and mistrust in AA men; (2) professionalism and inclusion; (3) organizational/departmental leadership buy-in for racial diversity; (4) implicit/explicit and other bias training; (5) diversity panels with open discussion; (6) addressing diversity tax; (7) senior mentorship; (8) increased opportunities for noteworthy and important roles; (9) forming and building alliances and partnerships; (10) diversity leadership training programs; (11) headache awareness, education, and literacy with a focus to underrepresented in medicine trainees and institutions; and (12) focused and supported the recruitment of AA men into headache medicine.

Key words: health care disparities, African American men, headache medicine, migraine, underrepresented populations, implicit bias

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INTRODUCTION

In part 1 of this opinion piece, we described inherent and potential challenges of the equity of African American (AA) men in headache medicine including headache disparities, mistrust, understudied/lack of representation in research, cultural differences, implicit/explicit bias, and the diversity tax. We shared personal experiences related to headache medicine likely faced due to the color of our skin. In part 2, we offer possible solutions to achieve equity for AA men in headache including: (1) addressing head and facial pain disparities and mistrust in AA men; (2) professionalism and inclusion; (3) organizational/departmental leadership buy-in for racial diversity; (4) implicit/explicit and other bias training; (5) diversity panels with open discussion; (6) addressing diversity tax; (7) senior mentorship; (8) increased opportunities for noteworthy and important roles; (9) forming and building alliances and partnerships; (10) diversity leadership training programs; (11) headache awareness, education, and literacy with a focus to underrepresented in medicine (UIM) trainees and

From the Department of Neurology, University of Michigan, Ann Arbor, MI, USA (L. Charleston); Department of Neurology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA (R.C. Spears).

Address all correspondence to L. Charleston IV, Headache Medicine, Department of Neurology, University of Michigan, 1914 Taubman Center, 1500 E. Medical Center Dr., SPC 5316, Ann Arbor, MI 48109-5316, USA, email: larrycha@med.umich.edu

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institutions; and (12) focused and supported the recruitment of AA men into headache medicine.

Possible Solutions.—Unfortunately, racial systemic challenges have been long-standing in the United States. Solutions will require iterative actions that span in perpetuity. Here, we offer a few recommendations and actions that may help to mitigate disparities experienced by AA men in headache medicine (Table 1). To be clear, we do not believe this to be a quick or one-time fix. Task forces and committees may provide great "think tanks" for great ideas. At the same time, it is vital that power and resources must be given to execute proposed actions.

ADDRESSING HEADACHE DISPARITIES AND MISTRUST IN AA MEN

It is suggested that racial/ethnic disparities in pain may be due to a variety of factors.[1] The Institute of Medicine (IOM), now the National Academy of Medicine, identified targeting health disparities in pain as a major research priority. The National Pain Strategy (NPS), developed by the guidance of the IOM, suggests disparities in pain care may be due to conscious and unconscious biases and negative attitudes, beliefs, perceptions, misconceptions about higher-risk populations (eg, due to race, ethnic, sex, and gender biases), insufficient knowledge: behavioral and biological issues that affect pain, management approaches, data to understand pain and its treatment in higher risk and vulnerable populations, and pain itself. To eliminate disparities and promote equity in pain assessment and treatment, the NPS recommends efforts aimed at increasing understanding of the impact of bias and supporting effective strategies to overcome it; increasing access to high-quality pain care for vulnerable population groups; and improving communication among patients and health professionals.[2] However, there remains a paucity of

Table 1.—Proposed Solutions to Address Equity for AA Men in Headache Medicine

Societal/department leadership buy-in for racial diversity • Value placed on diversity, equity, and inclusion from leadership • Increase societal/departmental diversity and sensitivity to cultural issues • More racial diversity in leadership • Resources should be allocated to implement diversity measures.	Professionalism and inclusion • Mutual respect for colleagues of diverse background • Diversity and inclusion certificate programs or curricula development • More racial diversity on study sections, scientific committees, and other critical decision-making platforms
Avoid diversity tax • Active participation from non-AA especially White allies (both women and men)	Implicit/explicit bias training and other interventions such as • Counterstereotyping and cognitive retraining • Intentional strategies to overcome biases • Evaluative conditioning
Diversity panels/forums/luncheons with open discussion	Diversity leadership training programs
Senior mentorship • One needs not to match race or gender to provide senior mentorship	Increased leadership/speaking/moderating opportunities in national headache organizations
Form and build alliances and partnerships with organizations with an emphasis on serving underrepresented groups in medicine • Engaging in dialog and assessing needs with organizational leaders and utilize resources to help meet needs • Establishing liaisons with organizations • Coordinating or co-facilitating organizational programs • Establish or extend established outreach programs such as the AHS's Resident Education Assessment and Care for Headache "REACH" program to include Historically Black Colleges and Universities • Look for opportunities for collaboration (eg, advocacy) • Create or Establish Commonplace blogs that inform and help other providers avoid bias for headache providers in conjunction and collaboration with other organizations	Address head and facial pain disparities and mistrust • Community engagement • Funding for research that seeks to better understand and remedy headache disparities in AA • Community-based focus groups, engagement, and participatory research • Embrace and utilize mixed methods research • Diverse inclusion in Headache-related studies/research • Cultural awareness and improved cross-cultural communication
Strategic, focused, and supported the recruitment of African American men into headache medicine	Headache awareness, education, literacy with a focus to UIM trainees and institutions

research regarding racial/ethnic disparities and approaches to ameliorate racial/ethnic disparities in headache care and outcomes. Research that informs and detects disparities is the first step toward identifying solutions and ultimately eradicating racial disparities in the care of those with head and facial pain disorders. In addition, robust research that addresses each of the fourth generations of health disparities research, as outlined in part 1 of this manuscript, is lacking in headache medicine. We advocate for funding for research that seeks to better understand and remedy headache disparities in AAs as well as diverse inclusion in headache-related studies/research. This will undoubtedly require building trust in diverse, especially AA communities. We cannot assume we understand trust levels in these communities or assume all AA communities are the same. Community-based focus groups, engagement, and participatory research may help to better understand perceptions and beliefs, similarities, differences, and provide data as it pertains to communities. An IOM report recommends "engagement of African American (AA) communities to eliminate health disparities."[3] Mixed methods research (MMR) methodology ascertain information and data from the integration of qualitative and quantitative studies. MMR studies draw upon the strengths of both quantitative and qualitative research approaches to address contemporary issues in health services and have the capacity to examine the nature of the problems facing public health such as disparities.[4,5] Strategies to approach cross-cultural care in headache medicine have been suggested.[6] Qualitative studies, community-based participatory research, and MMR may provide methods to obtain data to understand the interplay of culture and headache medicine within communities. Focused and ethical recruitment and retention of AA men into headache trials should be a priority. We believe this patient population is being underserved, needs to be better understood, needs targeted therapies, should not be ignored, and that headache trials should at least be representative of the current U.S. demographics and epidemiological data. The inclusion of ethnic/race and sex variables and dissemination of findings in future headache studies may be insightful.

PROFESSIONALISM AND INCLUSION

Headache medicine is a subspecialty; therefore, we feel it should be remembered that fellowship applicants and graduates will have already completed medical school, internship, and residency. These accomplishments should warrant a high degree of mutual respect and professionalism between colleagues in the specialty. We encourage fellowship programs to have interest to include and make intentional efforts to recruit and train candidates from different backgrounds. A study by the Association of American Medical Colleges (AAMC) indicated that 54.6% of Black or AA, 36.0% of Latinx, and 33.6% of American Indian or Alaska Native medical school graduates considered practicing in an underserved area. A greater percentage of White (16.7%), Asian (14.8%), and American Indian or Alaska Native (14.3%) medical school graduates compared with Latinx (10.1%) and Black or AA (3.9%) groups reported they did not plan to practice in an underserved area.[7] It is more likely that racial/ethnically diverse providers will provide service to their own ethnic group.[8] Specifically, a randomly assigned experimental study demonstrated that AA men seen by AA male physicians agree to more invasive and preventive services than AA men seen by non AA male physicians.[9]

One important concept to recognize and acknowledge is the so-called "Hidden Curriculum" in medicine. The "hidden curriculum" refers to medical education as more than the simple transmission of knowledge and skills; it is also a socialization process consisting of what is implicitly taught by example day by day. Recognizing that mentors and faculty are committed to diversity is essential to transforming culture.[10] In addition, diversity and inclusion certificate programs have been created for neurology trainees.[11] We believe the fundamental principles could be adapted and taught in programs or curricula to members of national headache organizations to address issues of diversity, equity, and inclusion in headache medicine.

Moreover, we advocate for more racial diversity on study sections, scientific committees, and other critical decision-making platforms. A recent study evaluating 1.2 million U.S. doctoral recipients from 1977 to 2015, found that demographically

underrepresented students innovate at higher rates than "majority" students, but underrepresented students' novel contributions are discounted and less likely to earn academic positions. The researchers suggest that the devaluing and discounting of underrepresented groups (women and non-whites in this study) may partly explain their underrepresentation in influential positions in academia.[12] Innovative approaches to science especially from populations UIM should be valued. This may have particular significance for proposals to the NIH and other grant funding bodies. It has been shown that after controlling for the applicant's educational background, country of origin, training, previous research awards, publication record, and employer characteristics, black applicants remain 10 percentage points less likely than whites to be awarded NIH research funding.[13] There must be an intentional effort to credit innovations. There should be a recognition of talent from those UIM. Once this talent is recognized, these individuals should be given an opportunity to serve on study sections and other critical decision-making platforms. Intentional recruitment may be necessary.

ORGANIZATIONAL/DEPARTMENT LEADERSHIP BUY-IN FOR RACIAL/ETHNIC DIVERSITY

Leadership buy-in is essential for the promotion of racial/ethnic diversity in organizations and departments. There is significant evidence in the business world that diversity in leadership results in increased innovation, creativity, and performance including financially. The findings in "Why Diversity Matters," published in 2015 by Kinsley and Company[14] that diversity and inclusion resulted in a competitive advantage and was an enabler for growth in the business world, held up when re-examined 3 years later.[15] Five key findings are highlighted below:

1. The relationship between business performance and diversity persist.
2. Leadership roles matter, companies in the top 25% for diversity on executive teams were 21% more likely to outperform on profitability and 27% more likely to have superior value creation.
3. It is not just gender. Companies in the top 25% for ethnic/cultural diversity on executive teams were 33% more likely to have industry-leading profitability.
4. There is a penalty for opting out. Companies that remained in the bottom 25% for both gender and ethnic/ cultural diversity were 29% less likely to achieve above-average profitability than were all other companies in the data set examined.
5. Local context matters. Diversity is not a 1 size fits all situation and requires and examination for gaps.[15]

Moreover, diversity has been demonstrated to improve group thinking, objectivity, and innovation.[16] Although people may tend to work harder cognitively and socially in diverse groups, hard work can lead to better outcomes.[17] This type of work is limited in academia. We feel these findings in business can be used as a point of reference or foundation for exploration in academic medicine and other medicine-related organizations. Clearly, we are specifically highlighting AA men in headache medicine in this paper.

Last, a study that surveyed over 6000 hospitals found that hospitals with higher proportions of racial and ethnic minorities in executive positions and on the board reported more initiatives to reduce disparities of care. These hospitals had increased efforts to advance equity via leadership and strategic planning, increasing workforce diversity and sensitivity to cultural issues, increasing data collection on metrics of disparities, and specific efforts to reduce disparities, including community outreach and engagement than other hospitals. Moreover, in contrast to the researchers' hypothesis, they found a pattern that greater numbers of women in leadership positions were associated with fewer diversity initiatives of all types. Except for the chief diversity officer (CDO) role, white women C-suite executives were often associated with the lowest scores for diversity initiatives. White male CDOs were associated with the lowest scores across all domain scores for dimensions of promoting equity of care. This study may suggest that gender diversity alone may not be enough for the advancement of racial/ethnic diversity and equity initiatives in hospital settings and highlights the

potential advantage of racially diverse leadership especially when it comes to diversity and equity initiatives in hospitals.[18] We feel the findings of this study are notable, but external validity (from hospitals) to other health-related organizations is unknown. We opine value should be placed on racial/ethnic diversity, equity, and inclusion from the leadership of medicine-related organizations and substantial resources allocated to implement diversity measures.

INCREASED LEADERSHIP/SPEAKING/ MODERATING OPPORTUNITIES IN NATIONAL HEADACHE ORGANIZATIONS

Unfortunately, some of the anecdotal experiences outlined in part 1 of this manuscript are about the lack of opportunities to serve on committees and in leadership in the national headache organizations. Some of us UIM who are members of national headache organizations have served in leadership roles at our respective academic institutions and in other prominent neurological societies such as the American Academy of Neurology. All that to say we have something to contribute and are motivated to do so if given the opportunity. We believe that increased leadership, speaking, and moderating opportunities in national headache organizations may serve as a significant recruitment tool wherein trainees and junior faculty see people who look like themselves serving in these roles. It will communicate that the AA male perspective is important, matters to the national headache organizations and that there is hope for future opportunities for them to significantly contribute and serve in leadership roles in national headache organizations.

IMPLICIT/EXPLICIT BIAS TRAINING

The concept of unconscious bias was first introduced in the 1990s and the first online test in 1998, The Implicit-Association Test (IAT). While many implicit bias training programs have been created and employed by a wide range of employers and industries over the years, they remain controversial because of their connection to race and unproven efficacy based on research that continues to be carried out on the programs.[19]

Most training programs contain the following 3 components:

1. Taking a pretest to assess baseline implicit bias levels.
2. Completing implicit bias training task.
3. Taking a posttest to re-evaluate bias levels after training.[20]

Unconscious bias training may be adjunct and part of the solution but not the magic bullet for equity or solving headache-related disparities in and of itself. Although an in-depth review of bias training interventions is beyond the scope of this opinion piece, a few training methods and interventions show promise in addressing implicit biases. Counterstereotyping and cognitive retraining may reduce stereotyping and prejudice on implicit measures.[21,22] Interventions that include intentional strategies to overcome biases, evaluative conditioning, identifying the self with the outgroup, and exposure to counterstereotypical exemplars show promise of efficacy but more studies are needed.[22] Moreover, clinical relationships (ie, patient-provider) can be restored after perceived racial biases upon recognition and positive subsequent action.[23]

DIVERSITY PANELS/FORUMS/LUNCHEONS WITH OPEN DISCUSSION

This is a good follow-up to implicit bias training to facilitate open communication and dialog especially if carried out soon after implicit bias training is complete. Developing cultural humility requires developing curiosity about the context in which others live. During our medical training, cultural sensitivity and humility are seldom if ever emphasized in favor of the enormous amount of medical knowledge and clinical skills we must obtain. Creative workshops, diversity panels, and luncheons are an ideal way to help physicians recognize bias without provoking defensiveness.[24]

ADDRESSING DIVERSITY TAX

We feel valuing and giving credit for diversity, equity, and inclusion (DEI) work is paramount in addressing the diversity tax.[25] Value can be expressed in time (protected and compensated for), RVUs, promotional qualifications, and other resources and should be given to those who perform this work. We believe this

work to be important and that it should not be considered a hobby or something separate. Instead, DEI work should be integrated into the moral fabric of departments and organizations. If carried out properly, there may be less of a burden of DEI on 1 or a certain group of UIM individuals, thus helping to eliminate a diversity tax. Furthermore, the integration of DEI may harness an increased spirit of collaboration among colleagues and promote an inviting, welcoming, and safe place for all, including UIM, to successfully pursue professional endeavors. Importantly, we do not believe AA men should be "expected" or required to assume roles in diversity equity and inclusion.

SENIOR MENTORSHIP

Mentors can play an important role in gaining explicit knowledge. They can also provide guidance to help enhance implicit knowledge or the "hidden curriculum" of professionalism, ethics, values, and the art of medicine not learned from textbooks.[26] Headache medicine is increasingly becoming evidence-based and may be moving toward personalized/precision medicine. Nevertheless, there is still a great deal of art to the practice of headache medicine. In the context of diversity, we would expect learning, growth, and development on the part of both the mentor and mentee. This could be transformative overtime for the subspecialty of headache medicine from a diversity perspective. Although mentees have been shown to slightly prefer mentors who they feel can identify with them,[27] we do not believe matching race/ethnicity or gender to be a prerequisite of senior mentorship.

FORMING AND BUILDING ALLIANCES AND PARTNERSHIPS

From society and foundational perspective, alliances can be formed, partnerships established with organizations with emphasis on serving underrepresented groups in medicine (eg, National Medical Association, National Hispanic Medical Association, Historically Black Colleges and Universities). Examples of ways to build alliances include but are not limited to the following:

1. Engaging in dialog and assessing needs with organizational leaders and utilize resources to help meet needs.
2. Establishing liaisons with organizations.
3. Coordinating or co-facilitating organizational programs.
4. Establish or extend established outreach programs such as the AHS's Resident Education Assessment and Care for Headache "REACH" program to include Historically Black Colleges and Universities (eg, Meharry Medical School, Howard Medical School, etc.).
5. Look for opportunities for collaboration (ie, a common ask in advocacy efforts).
6. Create or Establish Commonplace blogs "Storyboards" a collaboration where patients and providers of underrepresented groups of color share brief stories or anecdotes that inform and help other providers avoid bias, (ie, www.microaggressions.com) but for headache providers in conjunction and collaboration with other organizations.

DIVERSITY LEADERSHIP TRAINING PROGRAMS

We feel it is critical that leadership be reflective of the demographics of well-respected national headache organizations (eg, AHS, National Headache Foundation, American Migraine Foundation, etc.) members and the populations their members serve. Identification and mentorship of potential leaders are paramount. To that extent, it may be necessary for organizations to engage with their members from underrepresented groups for the purpose of senior leadership. The AHS initiated an Emerging Leaders program in 2016. There have also been Women in Headache programs within the AHS. However, at the time of the drafting of this manuscript, the authors are unaware of any focus on increasing racial/ethnic diversity in leadership within any national headache organization and or any AA men in senior leadership positions. More racial/ethnic diversity within the national headache leadership is needed. Diversity leadership programs could be considered to help cultivate the leadership skills of UIM members of an organization. National health-related organizations such as the American Academy of Neurology (AAN) have implemented Diversity Leadership Programs which include mentoring, a reading curriculum, executive coaching, leadership retreats, and AAN-assigned group projects. Leadership projects

may but do not always have to focus solely on issues of diversity (eg, avoiding a diversity tax) but always include projects highly relevant to the field of neurology and organization.[28] People of underrepresented groups in medicine have leadership capacity and skills that extend beyond issues of diversity, equity, and inclusion. Until ready for such a program (eg, enough diverse faculty, mentors, etc.), an organization could sponsor racial/ethnic diverse members to participate in leadership development programs offered by other highly reputable leadership development focused or medical-based organizations such as the AAMC.[29]

HEADACHE AWARENESS, EDUCATION, AND LITERACY WITH FOCUS ON UIM TRAINEES AND INSTITUTIONS

Headache awareness, education, and literacy is needed nationally.[30] This does not exclude AA communities. In addition to headache programs at Historically Black Colleges and Universities aforementioned, opportunities to increase headache medicine awareness, education, and literacy in AA communities may exist via social media outlets (partnering with influencers), radio, television, conferences, civic, neighborhood, and community platforms. A theoretical model of headache literacy has been proposed as a way to help eradicate disparities in headache medicine.[31] It has been demonstrated that adult learners of color knowledge about health issues and self-efficacy significantly improved as a result of health literacy instruction and that infrastructures to continue to teach health literacy can be developed in partnership with health care providers and centers.[32] Mentoring could be established as a result of headache programs within or as a result of these programs as well. These efforts may also increase a pipeline for brilliant minds in these communities to pursue headache medicine-related professions.[33] In addition, culturally diverse focused lectures, lecturers for plenaries, and moderators in national headache conferences may demonstrate the value of AA men in headache medicine on a national scale.

FOCUSED AND SUPPORTED THE RECRUITMENT OF AA MEN INTO HEADACHE MEDICINE

There are examples in academic neurology departments such as at Stanford University and the University of Michigan where a Diversity and Inclusion or a DEI Committee has been established. This committee is committed to the support and recruitment of underrepresented individuals from all backgrounds. We believe that strategically and thoughtfully implementing our "potential solutions," as described above, will greatly assist in the recruitment and retention of AA men into headache medicine. National headache organizations could form a similar DEI committee or task force and provide them with resources to facilitate the implementation of strategies and solutions, such as described in this manuscript, to address the recruitment of AA men and other equity issues in headache medicine. Moreover, purposeful engagement with neurology, family medicine, internal medicine, and dental and orofacial program directors of residencies that support and graduate many providers UIM may result in the recruitment of more AA men into headache medicine. This will likely require an intentional investment of resources (time, finances, creative ideas, and innovations). At the same time, we believe if these and similarly aligned inclusive solutions are implemented, the headache medicine environment may feel more supportive for AA men.

SUMMARY

Herein, we provide observation of equity issues from UIM subspecialists in headache medicine. Although this work focuses on AA men, we believe the principles and solutions this work examines may also address the needs of other UIM in our subspecialty. Our call to action in support of AA men in headache includes professionalism and inclusion, societal/department leadership buy-in, implicit/explicit bias training, senior mentorship, increased leadership/speaking/moderating opportunities, formation and building alliances and partnerships with organizations with an emphasis on training and serving underrepresented groups in medicine, diversity leadership training, diverse recruitment and inclusion in headache-related studies/research, funding for headache disparities research, and support and outreach to the AA community. Suggested first steps include the yearly or biyearly requirement of diversity/implicit bias training for all in the leadership of departments and headache organizations; the creation of a special

task force for DEI formed within national headache organizations that composition includes the leaders of the organization's committees, special interest sections, and 2-3 others with a passion for social justice and diversity issues to help formulate a strategic DEI plan with SMART (specific, measurable, achievable, relevant, time-based) goals; allocated resources and symposium time to address racial/ethnic issues including disparities, biases, antiracism, and other social injustices within headache medicine. There should be AA men and other UIM in positions of prominent leadership in organizations. These would serve as a good foundation for additional progress and growth in the future. Achieving equity for AA men and other groups UIM is a multifactorial process and will likely require iterative actions in perpetuity. This is a critical time in the United States where we have an opportunity to acknowledge and address equity challenges of the past and present and move forward to a more cohesive, collaborative, and inclusive future.

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