



Establishing Transformational Community among Medical Trainees of African Descent: The Development of Melanin at Mayo Arizona

Sophia Ederaine¹, Ewoma Ogbaudu¹, Lucky Krog¹, Marlene E. Girardo², Olubadewa Fatunde M.D. M.P.H.³, William Rule, M.D.⁴ and Sara Dawit, M.D.⁵

¹Mayo Clinic Alix School of Medicine ²Division of Biostatistics, ³Department of Cardiology, ⁴Department of Radiation Oncology, ⁵Department of Neurology, Mayo Clinic, Scottsdale, AZ
Mayo Clinic, Scottsdale, AZ 85259

Background

- For decades, the road to health equity has clearly indicated the need for greater diversity in health education and medical professions overall.¹
- Despite this knowledge, Underrepresented in Medicine (URiM) including Latinx, African Americans, American Indians, and Pacific Islanders continue to be drastically underrepresented in medical education and health professions.¹
- Recently, the Association of American Medical Colleges stated “the ongoing pandemics — both COVID-19 and racism — have laid bare the dehumanizing and damaging effects of structural racism throughout our country.”²
- In the past year, the academic healthcare community has sent out multiple statements denouncing systemic racism in the United States and outcries to dismantle it.^{4,5}
- In response to their call to action, we established Melanin at Mayo Arizona (MaMAz), an informal affinity work group.
- Our initiative aims to address structural racism and its impact on medicine by reducing isolation and providing a flexible environment for trainees of African descent to succeed socially and professionally.
- Numerous studies have shown the benefits of consistent and culturally sensitive support for students underrepresented in medicine.¹
- Consequently, we developed Melanin at Mayo Arizona to provide mentorship, professional development opportunities, and social connection for black medical students, residents, fellow, and recent alumni.
- We characterize the development of MaMAz and discuss the professional, emotional, and social impacts of this affinity group.

References

- Orom, Heather PhD; Semalulu, Teresa MPH; Underwood, Willie III MD, MS, MPH The Social and Learning Environments Experienced by Underrepresented Minority Medical Students, *Academic Medicine*: November 2013 - Volume 88 - Issue 11 - p 1765-1777 doi: 10.1097/ACM.0b013e3182a7a3af
- Addressing and Eliminating Racism at the AAMC and Beyond. (2020, October). Retrieved March 23, 2021, from <https://www.aamc.org/addressing-and-eliminating-racism-aamc-and-beyond>
- Liebschutz JM, Darko GO, Finley EP, Cawse JM, Bharel M, Orlander JD. In the minority: black physicians in residency and their experiences. *J Natl Med Assoc.* 2006;98(9):1441-1448.
- Shim, Ruth S. "Dismantling Structural racism in academic medicine: a skeptical optimism." *Academic Medicine* 95.12 (2020): 1793-1795.
- Association of American Medical Colleges. AAMC statement on police brutality and racism in America and their impact on health. <https://www.aamc.org/news-insights/press-releases/aamc-statement-police-brutality-and-racism-america-and-their-impact-health>. Published June 1, 2020 Accessed August 22, 2020

Methods

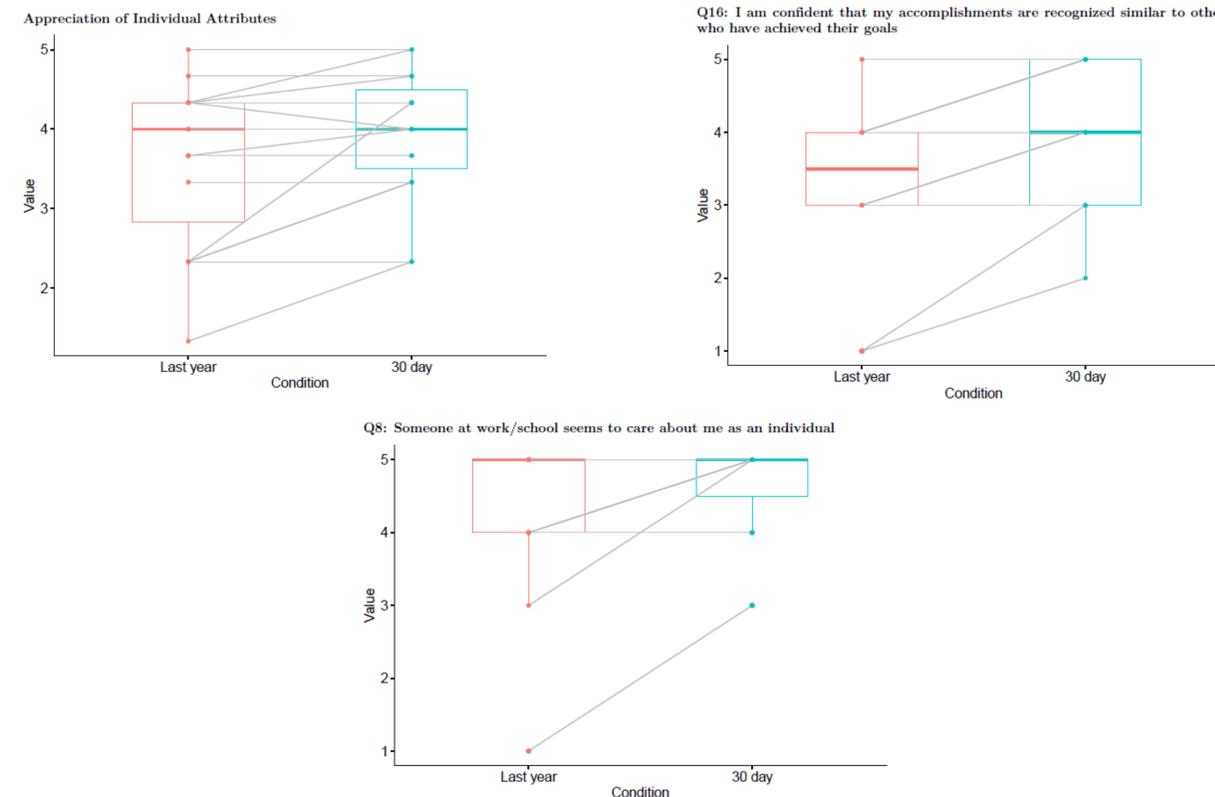
- The Mayo Clinic Graduate School of Medical Education in Arizona trains approximately 230 residents and fellows each year. The Mayo Clinic Alix School of Medicine (MCASOM) in Arizona trains approximately 205 medical students. Mayo Clinic Arizona trainees (medical students, residents, fellows) who self-identified as Black/African descent (n=19) opted into MaMAz, an informal affinity group with goals of promoting authentic longitudinal social networking, friendship, and professional mentorship between trainees with similar lived experiences.
- Trainees virtually/electronically socialized through daily text message thread conversations and virtual monthly meetings to celebrate one another's achievements while discussing health disparities, anti-racism efforts, research opportunities, and ways to navigate the culture of medicine. Participants were given optional surveys including a modified diversity engagement survey.
- Descriptive analysis and statistics were used to summarize differences between the last year (baseline) and 30 days after joining MaMAz. Differences were determined by Pearson chi-square. For graphical presentation, data points from individuals were averaged and plotted together with the resulting bar graphs. Data are represented as mean unless stated otherwise.

Figure 1

- Survey response rate was 100% (n=19, Female=53%, Male=47%). Fifty-five percent of respondents identified as first generation college graduates.
- Prior to joining MaMAz, the attendee groups rarely interacted with one another due to multifactorial factors including multiple campus sites, rigorous work schedules, and the pandemic.
- A modified 12-question diversity engagement survey was administered.

Results

- Questions assessed the behaviors that described an inclusive environment with the following inclusion factors: appreciation of individual attributes, access to opportunity, cultural competency, equitable reward and recognition, respect, and trust.
- Data are shown as the mean of the last year vs 30 days after joining the affinity group, difference and p-value.
- After 30 days of joining MaMAz, survey outcomes showed that participants reported statistically significant improvement among metrics of appreciation of individual attributes (3.63 vs 3.95, p=0.027), cultural competence (2.86 vs 3.34, p =0.043), and equitable reward & recognition (3.63 vs 4.05, p=0.028).
- No statistical significance was seen in access to opportunity (4.29 vs 4.29, p = 1.0), respect (3.75 vs 4.25, p=0.17), and trust (1.92 vs 2.00, p=0.59) after 30 days.
- Further analysis showed the primary goals for joining the group were to help others' succeed and make others' paths easier (90%), to seek informal mentors (70%), to celebrate achievements (70%), and to learn how to navigate the hidden curriculum of medicine (70%).



Discussion

- Very few programs have addressed the social aspects of improving the URiM experience.¹ Multiple studies have shown that blacks experience more social isolation from their white colleagues, are more likely to experience microaggressions & bias; as a result they seek support from other black students and physicians.^{1,3}
- In our study, we found that after 30 days in the informal affinity group trainees noted increased appreciation of individual attributes, cultural competence, and equitable reward & recognition. The creation of this opt-in group facilitated an open, accepting environment that addressed concerns of social isolation, peer-to-peer support, tokenism and navigating racism in medicine.
- Interestingly, the results showed no improvement in systemic factors, such as access to opportunity, respect, and trust. Institutions can play a supportive role by providing explicit support in two manners: a *direct* (e.g. EverybodyIN--discussions and programs targeted towards the general body, led by URiMs) and *indirect* (i.e. supporting activities curated and targeted for URiMs).
- With the paucity of research on initiatives that provide social support specific for URiM trainees, there leaves room for creative and simple interventions to increase the well-being of black medical trainees.¹
- Our results reinforce the need for a supportive niche among colleagues through an informal affinity group to achieve the goal of a sustainable diverse workforce while addressing the unique challenges, needs, and opportunities for black medical trainees.

Conclusion

- Diversity in medical education and the medical workforce is critical for patient care, research, and education.
- The results of this initiative seek to bridge the gap in formal affinity groups and bolster a sense of belonging, inclusion, and cohesion.
- Results reinforce the need for a supportive niche among colleagues through an informal affinity group to achieve the goal of a sustainable diverse workforce while addressing the unique challenges, needs, and opportunities for trainees of African descent.