



Invited African-American Radiation Oncology Grand Rounds Speakers: DEI or Die?

Ifeanyi Ekpunobi¹, Donnae Farquharson¹, Shearwood McClelland III^{1,2}

¹Department of Radiation Oncology, University Hospitals Seidman Cancer Center Case Western Reserve University School of Medicine, Cleveland, OH, United States

²Department of Neurological Surgery, University Hospitals Seidman Cancer Center Case Western Reserve University School of Medicine, Cleveland, OH, United States

ABSTRACT

Background: Invitations for grand rounds are typically used to evaluate faculty promotion in Radiation Oncology. To shed light on potential barriers to career progression, we conducted a study examining the racial and gender demographics of invited speakers and the inclusion of diversity, equity, and inclusion (DEI)-related talks among African-American radiation oncology speakers.

Materials and methods: Radiation oncology programs in the US were contacted to obtain a list of speakers invited to their institution along with their topics presented between January 2021 and December 2022. Speakers were categorized demographically by race and gender; speaker demographics were determined by facial recognition and internet investigation. Non-faculty were eliminated from analysis. Talk topics were categorized as either DEI or non-DEI from the speaker's talk title. The Fisher's exact test was used for statistical analysis, with significance set at $p < 0.05$.

Results: A total of 252 invited speakers and their associated talk topics were obtained from 51 radiation oncology programs. Of these speakers, 98 were female (38.9%) and 16 were African-American race (6.3%). The invited talk topic was DEI-related in 7% of total cases. Among speakers not of African-American race, this was 4.2% (10/236); among African-American speakers, it was 50% (8/16). This difference reached statistical significance ($p < 0.0001$).

Conclusions: A significant proportion of invited African-American radiation oncology grand rounds/visiting professor talks are focused on the topic of diversity, equity, and inclusion (DEI), compared with less than 5% of non-African-American invited speakers. Targeted efforts to expand African-American representation in non-DEI topics are needed to ensure and expand diversity in Radiation Oncology.

Key words: radiation oncology; radiation oncology department

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Introduction

In medicine, grand rounds are a formalized medical meeting occurring on a regular basis where professionals with specific expertise present their findings in biomedical research. Over

the centuries, grand rounds have developed from bedside teachings to didactic lectures. This progression has become a major part of not only medical education but also prestige. Traditionally, invitations to present at grand rounds/visiting professorships are a sign of national/international

Address for correspondence: Shearwood McClelland III, MD, Department of Radiation Oncology, University Hospitals Seidman Cancer Center, 11100 Euclid Avenue, Lerner Tower Office Suite B161, Cleveland, OH 44106, United States; e-mail: drwood@post.harvard.edu

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expertise, which play a large role in the academic faculty promotion process.

Medical faculty from underrepresented groups, particularly African-American (AA) race, have been historically less likely to receive promotion in academic medicine compared with Caucasian colleagues [1]. This finding combined with the underlying underrepresentation of these groups, as African-Americans comprise 3.3% (172) of radiation oncologists in the U.S., has served to perpetuate limitations in not only representation but in career advancement [1, 2]. These findings raise questions regarding various social and environmental factors limiting potential opportunities for these physicians for recognition and promotion.

Previous studies have conducted qualitative comparison of representation in department academic chairs, which summarizes the discrepancies of AA radiation oncology specialists, and have found that AA radiation oncologists have been overly represented in the topics of diversity, equity, and inclusion (DEI) compared with non-black radiation oncologists [3].

Increasing the diversity of medicine plays a critical role in improving the design and functionality of healthcare. This study was conducted to analyze the proportion of invited African American radiation oncology speakers and their related topic of conversation.

Materials and methods

The study conducted a retrospective observational study of invited speakers from radiation oncology departments across the United States. Several programs were contacted and submitted archived lists of speakers from the date of January 2021 to December 2022. Data was organized based on the speaker’s race, ethnicity and gender. Speaker demographics were confirmed through a previously published methodology of facial recognition and internet investigation [4–6]. Speakers who were not deemed as faculty members (i.e. residents, medical students) were excluded from the analysis. Racial categories included White, Black/African American, Asian, or Other, while ethnicity was defined as Hispanic or non-Hispanic (consistent with the definitions used by the United States census). Individuals who presented on multiple occasions were accounted for only once. Data

analysis was performed and statistical significance was assigned at $p < 0.05$ using the Fisher’s exact test (GraphPad Software, San Diego, California). Baseline parameters were condensed into numerical values of variables, and depicted into several tables and a bar graph.

Results

A total of 252 invited speakers and their associated talk topics were obtained from 51 radiation oncology programs (Tab. 1). Of these speakers, 98 were female (38.9%) and 16 were of African-American race (6.3%). The invited talk topic was DEI-related in 7% of total cases. Among speakers not of African-American race, this was 4.2% (10/236); among African-American speakers, it was 50%

Table 1. Demographics of grand rounds speakers

Characteristic	No. (%)
Race	
African-American	16 (6.3)
Non-African-American	236 (93.7)
Sex	
Female	98 (38.9)
Male	154 (61.1)

Table 2. Classification of grand rounds topics

Characteristic	No. (%)
DEI	18 (7.1)
Non-DEI	234 (92.9)
Year	
2021	106 (42.1)
2022	99 (39.3)
Unknown	47 (18.7)

DEI — diversity, equity, and inclusion

Table 3. Number and percentage of African-American (AA) and non-African-American (non-AA) speakers with diversity, equity, and inclusion (DEI) versus non-DEI topics

	AA	Non-AA
DEI	8	10
non-DEI	8	226
% DEI	50.0%	4.2%

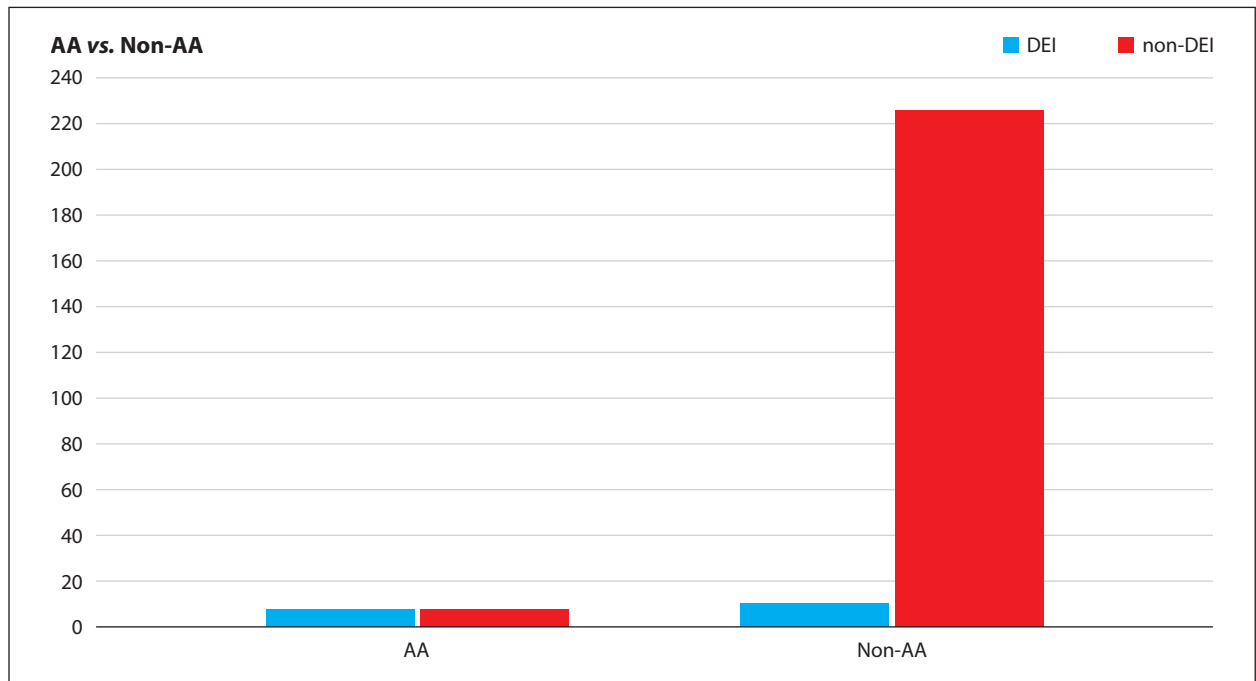


Figure 1. Number of African-American (AA) and non-African-American (non-AA) speakers with diversity, equity, and inclusion (DEI) versus non-DEI topics

(8/16) (Fig. 1). This difference reached statistical significance ($p < 0.0001$).

Discussion

A recent study examining the overall paucity of African-American physicians in academic medicine highlighted three main drivers: 1. Disparities in National Institutes of Health (NIH) grant funding (African-Americans receive only 2% of NIH R01 funding), 2. Absence of mentorship, and 3. Increased activities not resulting in promotion (often referred to as the “minority tax”) [7]. A key barrier contributing to the third component is the limited opportunities African-American physicians receive for national recognition. These opportunities are pivotal for developing a reputation for national expertise essential for promotion from junior faculty (Instructor/Assistant Professor) to senior faculty (Associate Professor) and, ultimately, full professorship. Without these opportunities, African-Americans are often relegated to junior faculty status years and even decades longer than their Caucasian colleagues.

Our study shows that upon review of the Radiation Oncology grand rounds speakers nationwide from 2021-2022, there is a marked underrepresent-

ation of African-American invited speakers, with only 6.3% of speakers being African-American. Invitations for grand rounds/visiting professor speakership are a sign of national expertise and are used to evaluate faculty promotion and advancement in Radiation Oncology.

Furthermore, our findings suggest that African-American speakers are significantly overrepresented in DEI topics and underrepresented in non-DEI topics ($p < 0.0001$). While it is crucial to have AA representation on DEI panels, it is equally essential to acknowledge the valuable contributions that AA radiation oncologists make to patient care and the advancement of the field outside of DEI initiatives. Therefore, it remains vital to ensure that appropriate representation accounts for these roles.

There are several limitations of this study, most prominently, our classification of race as African-American versus non-African-American, which inherently limits the scope of this analysis to include other underrepresented minority groups and also limits an analysis by ethnicity. The facial recognition method used in this study may be criticized as race was not based on traditional survey-based self-reporting methodologies. However, the methodology used in this study of facial recognition has

been found to be comparable to survey-based methodologies in previous analyses of the Radiation Oncology workforce where both the survey-based [8] and facial recognition based [5] methods revealed the overall proportion of underrepresented minorities in Radiation Oncology faculty to be 5% (47 African-American and Hispanic Radiation Oncology faculty). Another limitation is the relatively poor response rate; although we were able to obtain data involving more than 250 grand rounds speakers, there were a substantial number of radiation oncology programs that failed to provide the requested data, which inherently introduces bias and limits the generalizability of our findings. Finally, given the relatively low numbers of African-Americans in this study, we did not perform an analysis of the intersectionality of gender and race; it is our hope that future investigation with larger sample sizes will be able to adequately address this important topic, particularly, since among African-Americans in Radiation Oncology (and throughout medicine), the minority gender is male.

Conclusion

Only approximately 6% of invited grand rounds/visiting professor talks in radiation oncology departments in the United States involve African-American invitees. Of these invitees, 50% of talks are focused on the topic of diversity, equity, and inclusion (DEI), significantly greater than the 4% of non-African-American invited speakers. Targeted efforts to expand African-American representation in non-DEI topics are needed to ensure and expand diversity in Radiation Oncology. Such efforts will help to ensure that the diverse population of patients is adequately served. Furthermore, increasing overall African-American representation in invited talks should serve to address the disproportionate disparities in delayed/nonexistent promotion from junior faculty regularly experienced by African-American physicians in academic medicine.

Conflict of interest

Authors declare no conflict of interest.

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