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COMMENTARY

The Ethical Imperative and Evidence-Based Strategies to Ensure Equity and Diversity in Radiation Oncology

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No series on ethics in radiation oncology would be complete without consideration of the arguments for ensuring equity and diversity in our profession. The leaders of our field are most commonly both white and male, with only 13 of the 95 2016 Society of Chairs of Academic Radiation Oncology Programs member chairs being female, and only 3 being African American (Emily S. Wilson, personal communication, January 28, 2017). Although some believe that with greater time the transformation of the medical student body—at least with respect to gender—will eventually flow through the pipeline to manifest in the leadership of our field, considerable data exist to suggest that this may not necessarily be the case. Although nearly half of medical students are female, and nearly half of all medical oncology fellows are female, only one-third of radiation oncology residents are (1, 2). The situation for racial and ethnic minorities is even more grim (2). In this essay we begin by articulating the reasons we as a field must consider how to ensure equity and improve diversity, then provide a brief review of the data on where we currently stand, and conclude with a discussion of case-based, data-driven recommendations for how to accomplish this. We will explain that the call for a more diverse profession is not only sensible, given the tangible benefits diversity generates for each of us, but also urgent, because the lack of diversity is often a marker for and a result of societal practices that are discordant with ethical standards.

Brief Overview of Relevant Ethical Arguments and Considerations

The ethical imperative for attention to the gender and racial/ethnic composition of our profession derives from the essential moral obligation to respect fundamental human dignity. Human beings are unique in our capacity for rational thought and freely willed action, and our personhood merits respect. Therefore, our actions must always demonstrate respect for persons qua persons. Of note, this "categorical imperative," articulated by Immanuel Kant (3), is the foundation of a deontological, or rights-based, framework of ethics. We must ensure that there is fair equality of opportunity to achieve the senior-most positions in our field because doing so is fundamentally right, not because of any ends that are achieved by doing so. We have an ethical obligation here because the fundamental human dignity we all share requires respect.

Although rights-based arguments for equity can stand alone, teleological or consequentialist arguments can also be articulated to support efforts to improve diversity in the leadership of our profession. The goals of our field are to provide the best possible clinical care, education, and research to our society. To accomplish these ends we need a diverse workforce that reflects the patient population we serve and the society from which we recruit our students.

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Moreover, diversity promotes the broader scholarly mission of our field: considerable evidence shows that when individuals with vastly different life backgrounds and experiences interact, more innovative research questions and solutions emerge. Thus, diversity helps us to serve each of the aims of our profession.

Data have long shown that diverse teams can improve group performance (4), even in scientific areas that seem to be unrelated to demographic characteristics such as race and gender (5). Studies have demonstrated that this occurs not only because newcomers bring new ideas, but also because outsiders can influence group dynamics in a way that brings out ideas that already existed within groups (4). Data in medicine specifically have demonstrated numerous benefits of diversity. Prominent examples include studies showing that student diversity increases the quality of medical student education (6), that women and racial/ethnic minorities are more likely to care for the poor and those on Medicaid (7), that patient-physician race concordance is associated with increased patient utilization of preventive care (8), and that implicit bias, which is less common among physicians from certain racial minority backgrounds, is associated with racial disparities in care (9).

Though these data make a convincing case for increased attention to diversity, they have been met with some apprehension, in part because the tangible benefits of diversity are sometimes challenging to demonstrate, and also because some believe that diversification of the workforce might supersede fairness in hiring practices by permitting selection of less-qualified candidates. Before considering ethical arguments for or against policies such as affirmative action that some believe to unfairly disadvantage the most meritorious applicants, one must first acknowledge that women and racial/ethnic minorities are often passed over even when all objective measures demonstrate equivalent competence to their male or white peers (10-13). Randomized trials show that when an identical curriculum vitae is evaluated, the evaluation depends on the perception of the gender and race of the name associated with the curriculum vitae. The ethical arguments for rectifying this phenomenon to ensure equity are straightforward. We must, as a profession, ensure equitable selection processes so that, at the very least, those women and minorities who are equally qualified as (or more qualified than) other candidates are not disadvantaged by the unconscious biases, overt discrimination, and unlevel playing field that still exist in our broader society. For this relatively limited proposition, the ethical justification is clear.

We then arrive at the more complex discussion of whether policies such as affirmative action are ethically justifiable. Some view such policies to be necessary and justified as a means by which to remediate the historical disadvantage of women and minorities that was perpetuated not only by cultural norms and state laws but also the federal Constitution, with far-reaching effects that have limited social, economic, and educational advancement for many segments of our population. Yet others worry that affirmative action policies unfairly disadvantage those who did not themselves engage in the historically unfair practices or bear direct blame. However, the fact that individuals who benefit from societal inequity might not have specifically created it does not negate the ethical imperative to address the injustice. Even if such disparities were the result of uncontrollable circumstances, one could make an ethical argument for redistributing resources. The Rawlsian hypothetical "original position," in which those deliberating over the principles of justice are stripped of knowledge regarding their own personal characteristics, provides a compelling argument to support policies that maximize the position of the least well off (14). The ethical imperative is only heightened by acknowledging the unfortunate but true fact that atrocities such as trans-Atlantic slave trade, voting rights restrictions, and de jure and de facto segregation were not natural disasters but were instead designed expressly to create disadvantage. In this proper context, one can strongly argue that affirmative action is ethical because, rather than providing unfair advantage, it attempts, in a small way, to rectify a set of disadvantages that are not only unfortunate, but avoidable, and man-made.

Others worry about the downstream effects of admitting "less-qualified" individuals who might ultimately be less able members of the profession, compromising the research advances we generate and the patient care we deliver. This argument, however, raises questions of distributive justice: does selecting based on the "qualifications" that have been emphasized to date truly result in research advances and patient care to the benefit of all in our society, or only certain subgroups? Although recruiting and selecting candidates as we have in the past might continue to improve cancer outcomes in the ways it has in the past, it has not sufficiently changed outcomes for the underserved—and continues to be unlikely to do so. It is possible that the lack of physician diversity and the societal factors that drive it may have contributed to the staggering cancer mortality rates in racial/ethnic minorities and other underserved populations. Despite moving the mark tremendously on cancer survival and quality of life for the overall population, racial/ethnic and socioeconomic disparities have persisted, or even widened in recent years. When one focuses on the good of creating the most "qualified" or "able" workforce, one must consider whether the workforce is truly optimally qualified and able if it includes relatively few women and racial/ethnic minorities, who may be less likely to harbor implicit bias (9) and more likely to care for the underserved and perform research on their behalf.

Scholars and jurists have long engaged in arguments about what factors selection committees might legitimately consider beyond "objective metrics." Unfortunately, evidence abounds to suggest that "objective metrics," including test scores and grades for trainee-level candidates and publication records and grant funding amounts for faculty candidates, are often themselves vulnerable to bias and may not predict which candidates will ultimately contribute the most