EDITOR'S CHOICE SA-CME

Improving Diversity, Inclusion, and Representation in Radiology and Radiation Oncology Part 2: Challenges and Recommendations

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The ACR Commission for Women and General Diversity is committed to identifying barriers to a diverse physician workforce in radiology and radiation oncology (RRO), and to offering policy recommendations to overcome these barriers. Part 2 of a 2-part position article from the commission addresses issues regarding diversity and inclusion in the context of career choices and professional advancement. Barriers to improving diversity and representation in RRO are reviewed. Discussion focuses on the development and implementation of concrete strategies designed to eliminate the current subspecialty disparity and highlights the need for the ACR to introduce programs and incentives with targeted and achievable goals with measurable outcomes. Recommendations are made aimed at fostering an environment of inclusion and diversity, so as to secure a successful future for all members of the RRO workforce. The future of radiology will be enhanced by increasing diversity and representation in the professional workforce, which will allow us to better address the varied needs of increasingly diverse patient populations, and to mitigate disparities in healthcare access, delivery, and outcomes. By leveraging diverse backgrounds, experiences, and skills of those in RRO, we will create new, effective ways to not only educate our trainees, medical colleagues, and patients but also improve delivery of health care and our service to society.

Key Words: Diversity, underrepresented minorities, health disparities, health policy, radiology, radiation oncology

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Those who cannot remember the past are condemned to repeat it.

—George Santayana

INTRODUCTION

In this two-part position article from the ACR Commission for Women and General Diversity, we review the current status of diversity in radiology and radiation oncology (RRO) and highlight the challenges that minority groups face in their professional careers. Part 1 focused on the moral imperative, public health, and business case to promote and leverage diversity [1]. Part 2 addresses career choices and professional advancement. Why are women and minorities underrepresented in RRO? What unique challenges do these historically disadvantaged groups face in contributing fully to our medical specialties? Our commission summarizes the challenges and opportunities for fuller participation particular to women and URMs in radiology. Recommendations are provided, designed to foster an environment of

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diversity and inclusion, so as to secure a successful future for all members of the RRO workforce.

ISSUES REGARDING DIVERSITY AND INCLUSION IN CAREER CHOICES AND PROFESSIONAL ADVANCEMENT

Challenges Particular to Women in Radiology and Radiation Oncology

Unlike URMs, women have entered and exited the medical school pipeline in increasing numbers and now comprise 50% of medical school classes (Figure 1). Previous studies and data from the Association of American Medical Colleges (AAMC) demonstrate that residency choices for both genders are the traditional high—patient contact fields of internal medicine, family practice, and for women, obstetrics and gynecology [2]. General surgery is an interesting anomaly, where female representation has steadily climbed during the past 5 years. These career choices are certainly reasonable and appropriate, as the medical system needs ever increasing numbers of physicians practicing in the outpatient arena.

More interesting are the reasons for disparate male and female representation in RRO residency programs. Baker et al found that the program director's gender did not affect female representation in diagnostic radiology residencies [3]. In 2 recent studies of medical students in radiology clerkships, no significant differences were identified between men and women in factors determining career choice, including competitiveness in

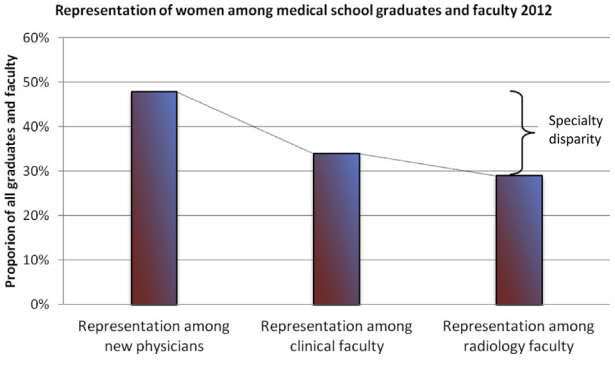

Fig 1. Women accounted for 48% of medical school graduates in 2012 [1], for 34% of all academic clinical faculty M.D.s, and for 29% of radiology faculty [2,3]. Women represent 51% of the U.S. population [4].

1. Association of American Medical Colleges. FACTS: applicants, matriculants, enrollment, graduates, MD/PhD, and residency applicants data. Available at: http://www.aamc.com/data/facts/. Accessed November 14, 2013.
2. Brotherton SE, Etzel SI. Graduate medical education, 2012-2013. JAMA 2013;310:2328-46.
3. Association of American Medical Colleges. U.S. Medical School Full-time Faculty Distribution by Rank and Gender, 2012 Washington, DC: Association of American Medical Colleges; 2013. Available at: www.aamc.org/download/311372/data/2012_figure2.pdf. Accessed 11 November 2013.
4. US Census Bureau. Population estimates. Available at: http://www.census.gov/popest/data/national/asrh/2012/index.html. Accessed February 4, 2014.

securing a residency position, role as a consultant physician, lack of mentors, and the technology-based nature of the specialty; flexible hours were not often cited as a motivator to consider diagnostic radiology [4,5]. The authors recommended early exposure using a required clerkship and increasing the availability of female mentors.

Medicine will undergo tumultuous changes during the next decade; predictions are for more radiologists and radiation oncologists as salaried employees, and decreased wages. This uncertainty, along with housing costs and accumulating debt, may lead students to consider shorter residencies The median debt for graduating medical students is now $175,000 [6]. Repayment may exceed $400,000. For a 2-physician couple, the debt load may seem overwhelming.

Unique to women are pregnancy, postpartum recovery, and childcare challenges. The United States has no policy requiring adequate maternity and paternity leave or daycare facilities, and these rarely exist in medicine [7]. In most families, both parents work, yet women provide the greater share of childcare. Without a welcoming atmosphere allowing protected time off during the first year following childbirth, women finish training exhausted and seek careers with fewer demands on time. Once women complete RRO residencies, many enter academic practices. Female representation in academic medicine increased overall from 15% in 1970 to 35% [8], less than the expected 48%. Women and men are represented in equal numbers at the assistant professor level. Women do not rise through the ranks at the same pace as men, and many remain assistant professors for their entire careers. The percentage of female full professors in academic radiology departments is 18%, much less than the 26% in the fields of pediatrics and obstetrics and gynecology [8].

In a Masters of radiology panel discussion focusing on attracting female residents and promoting female leadership, several experts representing academic medical centers, private practice groups, and the military reported on their own experiences and those of their colleagues in promoting diversity [9]. Members of private practice groups focus on willingness to serve the group, including taking on positions beyond the standard workday such as clinical work on nights or weekends and service on hospital committees. Attendance at meetings held before or after standard working hours can be difficult for women responsible for childcare. Without additional participation in activities that benefit the group, women are considered to be second-class citizens. An exception is in the area of breast imaging, which is performed mostly by women [10,11] uniquely positioned in the field and closely allied with physician colleagues.

Women in the military and academia face the challenge of choosing a promotional track and adhering to its requirements. Mentors, male and female, are critical, especially during the early years of a career. Promotion