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EDITORIAL

Global Health in Radiation Oncology: The Intention-Investment Gap

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At a time when the interconnectedness of global health challenges has never been more apparent, Elmore et al report findings from a survey of radiation oncology program directors in the United States regarding their perception of global health training and academic career paths in our field.[1] The results of this survey show much more support in theory than in practice for the development of global health training and expertise in radiation oncology. With a response rate of 60% of program directors, 89% would support residents in pursuing global health rotations, but only 22% would support departmental funding of such rotations. Although 94% indicated that global health is a field worthy of an academic career, only 31% had dedicated funding for global health rotations or research, and only 39% believed that the field had appropriate rigor. The program directors reported that only 8% of their programs had dedicated global health rotations, and only 6% had dedicated instruction on global heath. This work raises important questions about discourse on global health in oncology regarding training and the status of this field as an academic endeavor and career pathway.

Academic global health has become a pressing priority in almost all areas of medicine.[2] It integrates the traditional biomedical paradigm with international and public health through its population-based multistakeholder focus; concentration on poor, vulnerable, or underserved populations; and emphasis on the importance of health systems and structures.[3] Although the field of global health has been a well-established academic discipline outside of oncology for many decades, program directors reported that only 42% of programs had faculty engaged in global health or had an interest in the development of existing faculty to provide global health mentorship. Furthermore, only 16% of respondents understood that global health is a discipline focused on issues of healthy equity within both high-income countries and low- and middle-income countries (LMICs). This finding suggests that their perception of global health is more aligned with the traditional definition of "international health," which has referred to health work with a geographic focus and disease scope limited to LMICs. However, this is not the exclusive focus of global health, and the Global Heath Education Consortium has pointed out that the historical perspective stresses the differences more than the commonalities among countries.[3] Global health refers more broadly to any work that prioritizes improving health and reducing inequalities for all people worldwide.[3]

It is unclear whether the views of the survey respondents regarding academic work in the field of global health refer to the field itself or to the quality of academic activity in the field. Those who have undertaken global health rotations have often valued them highly,[4] and research publications in the field of global health have appeared frequently in the highest impact journals. The methodology of such work derives from diverse disciplines, and the criteria for rigor in each of these methodologies in global health are not fundamentally different from those in other fields. It is true, however, that the critical mass of highly trained academics

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in global health is disproportionately small in relation to the importance of the field and its potential value. Greater resource allocation to clinical training, research, and academic positions in global health is needed to shift this imbalance and to increase the critical mass of academics and academic activity in the field. The American Society of Clinical Oncology and other leading organizations in cancer care are currently working to correct many of the misconceptions about academic work and careers in global health to achieve this goal.[5]

Elmore et al suggest that global health electives should be arranged for those residents with long-term career aspirations in the field, to avoid the perception by program directors that these electives are merely "medical tourism." That pejorative term, which is used in this context to refer to a lack of serious purpose, may be a greater reflection of attitudes toward the field of global health than toward the intent of the trainee or the quality of the rotation. Indeed, all electives are a form of "medical tourism" in that they provide exposure to a field to build a basic understanding and general skill set, which may or may not inform a career path. In that regard, radiation oncology residents spend time during their training on internal medicine, surgery, or pathology rotations. They are not expected to become experts in these disciplines, but to apply the skills learned there to make them better physicians in their own practice, to encourage multidisciplinary academic pursuits, and to broaden their thinking. Global health rotations can also heighten residents' awareness of different cultural practices, socioeconomic challenges, medical presentations of disease, and inequities in access and outcome in health care. Residents can learn how societal and structural factors can create and compound poor health outcomes and about how culture can shape medical knowledge and values.[6]

A 2014 *Lancet* commission on culture and health takes issue with the current focus within medical education on operational competencies, at the expense of "reflection, intuition, experience, and higher order competency necessary for expert holistic, or well developed practice."[6,7] The higher order competencies, which can be fostered in global health training, may better prepare physicians to address organizational, structural, and clinical barriers to health care access and provision. Such training may also enhance the capacity of trainees to understand the circumstances and experiences of their patients. This deserves attention because empathy in medical encounters, defined as an expressed understanding of the experiences, concerns, and perspectives of the patient, is a skill that has been shown to wane over the course of training and that requires the allocation of time and resources to develop and maintain.[8]

Global health training during residency may help trainees to incorporate higher-order competences into their practice. Such training can facilitate understanding of the broader sociocultural and structural context that shapes the experience of illness, access to health care, compliance with treatment, and both medical and psychosocial outcomes. It also increases the likelihood that graduating residents will work to address disparities in care over the course of their career. In that regard, a study of the impact of funded global health electives on the career development of residents in a US obstetrics and gynecology program found that these electives were associated with a 4.6-fold increase in the likelihood of a career that addressed global and/or local disparities.[9]

The current COVID-19 pandemic continues, at the time of this writing, to grip almost every nation in the world. It has generated much fear, suffering, and potentially preventable mortality. However, it has also generated unprecedented international cooperation and collaboration to prevent the spread of the virus; to protect patients, health care workers, and the general population; and to find medical treatments and vaccines that are effective and can be made universally available. The COVID-19 crisis highlights the importance and value of a global health approach to public health, clinical care, education, research, and health policy. The crisis in cancer is not visible to many in the world, but it is starkly reflected in the rising prevalence and mortality rates of cancer, particularly in LMICs, and in the unconscionable lack of radiation therapy facilities in these settings.[10] Investment in global health in academic radiation oncology is essential for global health to develop as a measurable educational competency in our field[11] and an important area of clinical care, research, and education. The data from the Elmore et al study show that there is some support from program directors, and by implication from their departments, for this to occur, but the gap between intention and investment still looms large. Only concerted and dedicated leadership, with resource allocation, will allow global health to become mainstream in radiation oncology and the unacceptable health disparities in cancer care to be meaningfully addressed.

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