GUEST EDITORIAL

Invested development: Radiation therapy access will shape future cancer care

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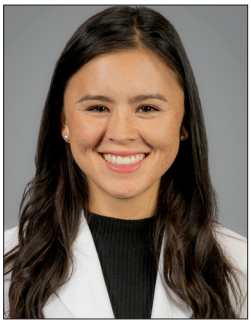

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Radiation therapy (RT) is essential for effective cancer treatment, yet there is a global shortfall of RT infrastructure. Although half of all cancer patients would benefit from RT for curative treatment, palliative care or disease control, most lack access to it because of domestic and international underfunding. Improved RT access will be crucial to preparing for and effectively defending against the growing cancer burden.

Differences in race and socioeconomics strongly correlate with RT access inequities. A 2016 review of 58 studies found that African Americans receive disproportionately less RT treatment than Caucasian patients with the same disease.[1] Variation in patients' education and income levels, treatment center location, and clinician bias likely explain these findings. Moreover, most RT infrastructure is only available at cancer centers in wealthy, developed areas because of RT's high start-up and operational costs. Even in new construction, RT is typically the last resource to be considered.[2] The educational and research efforts associated with the field further contribute to its significant financial and human capital expenses.

Patients' main barriers to RT access are the direct and indirect costs of therapy, namely the burden of travel and time demanded of standard multiple-fraction treatment plans. A 2012 pilot program for hospice patients in Virginia effectively addressed these obstacles and increased palliative RT use by streamlining physician communication, addressing referring physicians' knowledge gaps, and removing the inconvenience of multiple visits through the delivery of single-fraction treatment.[3] While not directly applicable to curative RT therapy, this study demonstrates how effectively lowering the perceived costs of RT increases patient willingness to pursue care. Similar initiatives that debunk the perception that RT is too complex to be standardized and successfully delivered irrespective of socioeconomic context will enhance RT access and use.

Comprehensive cancer care requires RT. Medical students concerned with equitable care have a responsibility to proactively understand the disease landscape we will inherit, and those drawn to oncology must recognize the importance of this niche field. As the WHO estimates the number of cancer-related deaths will increase from 9.6 million in 2018 to 16.4 million by 2040, we should be especially motivated to encourage and prioritize RT development.[4,5]

Fortunately, investment in RT is expected to reap substantial health and economic returns at all income levels worldwide.[2] Wider-reaching and more robust RT access, while costly, will improve our ability to prevent unnecessary death and suffering for all our patients, regardless of where we practice and who we serve.

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References

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