Special edition of the Red Journal highlights the need for radiation oncology services in LMICs

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The July 1, 2014 edition of the *International Journal of Radiation Oncology, Biology, Physics (Red Journal)*, the official scientific journal of the American Society for Radiation Oncology (ASTRO), features a special section of 10 articles focusing on global health and radiation oncology in low- and middle-income countries (LMICs.)

Three papers examine the overall need for more and the current opportunities to provide radiation oncology in LMICs, C. Norman Coleman, MD, FASTRO, highlights the work and the four main principles of the International Cancer Expert Corps. This multi-national effort is working to establish a mentoring network of cancer professionals to collaborate with LMICs to help develop expertise in cancer care. An article by David A. Jaffray, PhD, and Mary Gospodarowicz, MD, FASTRO, explains the need to address the disparities in access to cancer care among LMICs and also within LMICs. The authors emphasize that all cancer and radiation therapy organizations should advocate on behalf of cancer patients who do not have access to radiation therapy and show that radiation therapy plays an important role in the curative and palliative management of cancer. Drs. Jaffray and Gospodarowicz highlight the work of the Union for International Cancer Control, a group of more than 800 member organizations working to help reduce the global cancer burden.

In another article, Niloy Datta, PhD, Massoud Samiei, PhD, and Stephan

Bodis, MD, examine the present status and projections for 2020 in radiation therapy infrastructure and human resources in LMICs. The projected rise in cancer incidence will create a dramatic increase in demand for radiation therapy. The authors propose 12 steps that can be taken at national and international levels to help narrow the gap in access to radiation therapy treatment.

Another group of three articles explores the specific radiation oncology needs of Africa, focusing on active projects in Senegal and Botswana. Brandon J. Fisher, DO, et al, describe the need for radiation therapy treatment in Africa, where there are fewer than one teletherapy unit per 10 million people. The authors highlight specific examples of lack of access to megavoltage machines and brachytherapy services, and charge public, private and governmental organizations to develop initiatives to remedy these disparities. John P. Einck, MD, et al, review the implementation of high-dose-rate (HDR) brachytherapy in Senegal through Radiating Hope, a nonprofit organization that provides radiation therapy equipment to countries in the developing world. Senegal, a country in West Africa, has one of the highest incidence rates of cervical cancer in the world. The team from Radiating Hope trained the staff at the Institut Joliot-Curie Cancer Center how to administer HDR brachytherapy treatment and how to develop treatment-planning approaches. Jason A. Efstathiou, MD, DPhil, et al, explain the work of the BOTSOGO (BOTSwana Oncology Global Outreach) initiative, a partnership between Massachusetts General Hospital/Harvard Medical School, and the oncology community and government of Botswana. The authors describe BOTSOGO's efforts to improve cancer care in the country through on-site visits, tumor boards and training in various oncologic specialties.

Brandi R. Page, MD, et al, investigate whether cobalt teletherapy or megavoltage linear accelerator machines are the best solution to meet the growing need for radiation therapy treatment in the developing world,

outlining the advantages of using linear accelerator machines vs. the advantages of using cobalt machines. The authors explain that cobalt machines are more viable for developing countries starting a radiation therapy program due to the decreased cost of equipment; however, the use of current techniques and procedures could have a lower treatment cost, and these should not be overlooked. In another article, Nina A. Mayr, MD, FASTRO, et al, examine the responsibilities of radiation oncology societies, including ASTRO, to help address disparities in worldwide access to radiation oncology treatment. The authors highlight ASTRO's International Education Subcommittee (IES) and the efforts of the IES to provide educational outreach and to foster relationships with LMICs so that U.S. radiation oncology residents can serve rotations in LMICs.

Two additional articles look at the global cancer issue from the perspective of U.S. physician trainees. Luqman Dad, MD, et al, present a four-year report on the Association of Residents in Radiation Oncology (ARRO) Global Health Initiative. The initiative helps to create a path for future work in underserved regions for trainees who have a strong interest in global health. This report outlines evidence supporting the continuing need for resources and trainee initiatives in global health. Jeffrey Burkeen, MS, et al, provide commentary from the perspective of a medical student about how countries with high resources can help provide the radiation oncology expertise needed in LMICs. The authors highlight current opportunities and programs in global health and suggest a targeted education and training plan for medical students who are interested in global health and/or working in LMICs and other underserved areas.

"Radiation therapy plays a vitally important role in curing or palliating common cancers, yet its underuse in many developing nations is staggering," said Anthony L. Zietman, MD, FASTRO, editor-in-chief of the Red Journal, a radiation oncologist at Massachusetts General

Hospital in Boston and associate director of the Harvard Radiation Oncology Residency Program. "These articles make suggestions and give pragmatic examples as to how we might organize the pool of willing human talent to begin to meet these urgent needs. It is our goal that this issue of the Red Journal ignites a discussion about effective strategies."

More information: www.redjournal.org/

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