A Bright View of World Cancer Day 2024: Radiation Therapists' Role

World Cancer Day is an annual event that brings people from all over the world together to raise awareness of cancer and its prevention, detection, and treatment. It is observed on 4 February. As we commemorate this significant day in 2024, it is critical to highlight the invaluable contributions of healthcare professionals, particularly radiation therapists, who play an important role in the journey of cancer patients.

Radiation therapy is an important part of multidisciplinary cancer treatment. It involves the use of high radiation doses to destroy or shrink cancer cells (1). Radiation therapists are critical members of the healthcare team; they are responsible for the accurate provision of these treatments and the assurance of the patients' well-being throughout the procedure.

In recent years, advances in medical technology have made radiation therapy more precise and suited to patient needs. Radiation therapists use cutting-edge technology, such as linear accelerators and image-guided radiation treatment (IGRT), to target tumours accurately while sparing nearby healthy tissues. This level of precision reduces side effects while it increases the efficiency of the treatment.

Radiation therapists collaborate with oncologists, medical physicists, and other healthcare providers to create individualised treatment programmes. Their responsibilities go beyond operating equipment; they give emotional support, educate patients about the treatment process, and ensure a comfortable and safe environment during therapy sessions. This collaborative and caring approach adds greatly to the overall well-being of cancer patients (2).

Radiation therapy constantly evolves due to technical advances. Therapists adapt and use novel procedures, such as intensity-modulated radiation therapy, stereotactic body radiation therapy, deep-inspiration breath hold, stereotactic radiosurgery, stereotactic radiation therapy and proton therapy. The technique that is used is moulded to improve treatment outcomes and reduce side effects. Radiation therapists must keep up with these changes to provide the best therapy possible.

To work on machines such as the Hi-ART linear accelerator, CyberKnife™, tomotherapy or proton therapy, radiation therapists require a high level of training in the technologies. This specialised field requires a thorough understanding of radiation physics, anatomy, treatment planning and IGRT (3). They also must be able to set up patients in advanced positions and to use immobilisation devices designed for different anatomical sites. Typically a minimum of a bachelor's degree in radiation therapy technology is required, although some roles may require master's degrees. Continuing education and certification are important to stay updated with the latest advancements in the field. Overall, a comprehensive education in radiation therapy technology is necessary to work effectively on the new equipment and to provide optimal patient care.

There is an emotional toll on radiation therapists due to working with cancer patients and the constant need to update their skills. Nevertheless, their dedication and commitment contribute to the triumphs that are seen in improved survival rates and the enhanced quality of many cancer patients’ lives.

As World Cancer Day 2024 passes, let us acknowledge and honour the vital efforts of radiation therapists in the fight against cancer. Their precision, individuality, teamwork, compassion, and adaptability have a significant impact on the lives of those who combat this difficult disease. As we continue to campaign for increased awareness and support for cancer patients globally, we must also highlight the unsung heroes such as radiation therapists, who play an important part in turning the tide against cancer.

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