Experts emphasise importance of multidisciplinary approaches involving nuclear techniques at World Cancer Day event

At a panel discussion on World Cancer Day, world-renowned experts highlighted the importance of facilitating synergy between various nuclear techniques to prevent, diagnose and treat cancer.

"We will strive to continuously improve the services we offer our Member States so they can provide better care — and hope — for their people," said IAEA Director General Yukiya Amano. "IAEA experts from all technical departments, and from many scientific disciplines, put together packages of services that help countries improve access to modern cancer treatment."

Panellists examined the various ways in which nuclear techniques can support the prevention, diagnosis and treatment of cancer and help countries worldwide to achieve better disease management for their patients. The discussion centred on four main areas: nutrition, diagnosis and follow-up, radiation oncology and radiotherapy, and quality assurance.

"Millions of people are counting on us to keep pushing the cancer agenda forward," said Princess Dina Mired of Jordan, President-elect of the Union for International Cancer Control. She emphasised the importance of political will and proper management in the fight against cancer.

The IAEA is heavily involved in the fight against cancer through the application of nuclear techniques including radiotherapy, brachytherapy and diagnostic radiopharmaceuticals. These efforts contribute to the achievement of United Nations Sustainable Development Goal 3 (ensure healthy lives and promote well-being for all at all ages).

"Cancer care should be carried out comprehensively…we have incorporated a cancer control program into our national health system," said keynote speaker Nila F. Moeloek, Indonesia's Minister of Health. Sustainable collaboration and coordination with all stakeholders is key, she added.

Alan Jackson, Chair of the Continuous Update Panel on Nutrition and Cancer & Professor of Human Nutrition at the University of Southampton, United Kingdom talked about the role of nutrition and physical activity in the prevention and management of cancer.

"There are a range of opportunities that are being developed and promoted involving isotopic techniques in the prevention and treatment of cancer," Jackson said. "There is an emerging international collaboration involving the link between nutrition and cancer."

Joanna Kasznia-Brown, a UK radiologist and member of the International Committee of the Royal College of Radiologists, discussed the role of medical imaging in cancer management, including diagnosis and the development of the treatment plan. "If we catch the cancer in its early stages, we can treat patients with much better results," she said.

Mack Roach III, Professor of Radiation Oncology and Urology, Director, Particle Therapy Research Program & Outreach, Department of Radiation Oncology at the University of California-San Francisco, emphasized the importance of the multidisciplinary management of cancer, and in particular the role of radiotherapy.

"Radiotherapy continues to be one of the oldest, most effective and cost-effective treatments for cancer available today," Roach said. Improvements in computers, imaging and material sciences have resulted in major advances in the accuracy and safety of radiotherapy, he added.

Jake Van Dyk, President of Medical Physics for World Benefit & Professor Emeritus of Oncology and Medical Biophysics, Western University, London, Ontario, Canada discussed the use of medical physics as an integral part of the path towards a cancer-free world.

"Medical physicists are important members of a radiotherapy team," Van Dyk said. "They are critical for positive patient outcomes, and training of the next generation of medical physicists, radiation oncologists and radiation therapists is critical."

Ntokozo Ndlovu, Radiation Oncologist & Senior Lecturer at the University of Zimbabwe discussed the role of nuclear techniques for cancer treatment in Africa.

"The IAEA has been instrumental in building capacity in radiotherapy in Africa," Ndolovu said. "This project led to the creation of the African Radiation Oncology Network (AFRONET), a telemedicine initiative to improve the quality of clinical decisions and radiotherapy treatment, strengthen the education of medical residents and improve treatment outcomes."

"The IAEA World Cancer Day event highlighted the importance of advances in radiation medicine in fighting cancer as well as nutrition for prevention and served as a bridge between science and policy," said May Abdel-Wahab, Director of the IAEA's Division of Human Health.

— By Matt Fisher