

Technical Cooperation Programme

September 2013

Expanding radiotherapy services in Kenya

The challenge...

With over 38 million people, Kenya is one of the most populated countries in East Africa. As in most countries, cancer figures are rising. However, the availability of radiotherapy services is limited to one comprehensive public radiotherapy unit at the Kenyatta National Hospital (KNH) in Nairobi, which is unable to meet the country's growing cancer care needs. Patients often have to wait for up to four months to receive treatment. Furthermore, 80% of these patients are diagnosed at a late stage due to inadequate diagnostic services.

Kenya urgently needs to expand and establish new radiotherapy services, and to acquire additional trained staff to run the expanded services. Because training radiation therapy technologists (RTTs) outside the country is costly, Kenya needs a training school and programme for RTTs to sustain and advance radiotherapy services.

The project...

Under a national technical cooperation project, the IAEA has upgraded the KNH radiotherapy centre and helped expand radiotherapy services to the second public referral hospital in Eldoret. Three regional centres have been established in Mombasa, New Nyanza and Nyeri.

As part of the upgrade of the centre, a new cobalt radiotherapy machine and a simulator for the planning of radiation therapy were installed. In addition, construction of a bunker for a linear accelerator is underway.

The project also helped to establish a training programme to ensure the availability of trained human resources who can provide radiotherapy and nuclear medicine services in the country. Private Practice Partnerships (PPP) were initiated with leading private hospitals in Nairobi so that RTT students could be trained locally.



RTT student receives local training on linear accelerator at Aga Khan University Hospital (AKUH).

The project provided a number of fellowships for the training of three radiation therapy technologists and two course coordinators to manage the new RTT school, in Cape Town, South Africa.

The impact...

The team trained under the project has now started Kenya's first RTT training programme, which covers diagnostic, nuclear medicine, radiotherapy and ultrasound. Through the programme, six students received an 18 month post-diagnostic higher diploma and will graduate in December 2013 as the first RTTs trained in Kenya. With more professionals trained in radiotherapy and nuclear medicine, the KNH cancer therapy centre will be able to address more cancer cases, limiting waiting times and increasing the possibility of early diagnosis and higher chances of survival. The locally established programme cuts the costs of sending students abroad for training and allows for a larger number of trainees to receive training at the same time.

The acquisition of a new cobalt machine and simulator has already improved Kenya's capacity to provide radiotherapy to patients and treat cancer more effectively. Since the installation of the new equipment, the number of patients receiving radiotherapy has increased from 100 to 160 patients per month. The addition of a new linear accelerator to the KNH cancer centre will further help manage the cancer burden in Kenya.

Technical cooperation project KEN/6/019: Expanding Radiotherapy Services and Establishing a Training Programme for Radiation Therapy Technologists