



IAEA

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Atoms for Peace

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Improving radiotherapy quality in Asia and the Pacific

The challenge...

The number of cancer patients is increasing both in developed and developing countries. Cancer of the cervix, head and neck, breast, prostate and oesophagus are common in most of the countries participating in the Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (RCA) and radiotherapy, including brachytherapy, is an essential treatment. However, even patients who are diagnosed at early or curable stages suffer from recurrences because they cannot be treated optimally due to inadequate quality assurance programmes and lack of expertise and facilities for radiotherapy. All these factors result in poor treatment outcomes, leading to high morbidity and mortality. To address the problem, this project was developed to improve the quality of treatment of cancer patients.

The project...

The project aimed to enhance the quality of radiotherapy by improving brachytherapy treatment and training radiotherapy technologists; this training is essential as the technologists administer radiotherapy treatment. The project also aimed to build regional capabilities for radiotherapy equipment maintenance and repair by identifying equipment and instruments that require constant maintenance, as well as available local resources.

Assistance was provided through expert team missions that conducted comprehensive clinical quality audits (QUATRO - Quality Assurance Team on Radiation Oncology) in radiotherapy. Eight training courses were held. These included training for radiotherapy technologists, as well as training on QUATRO audits in radiation oncology. Equipment was also provided to support regional capabilities.

The impact...

- Quality assurance programmes have been established in many of the participating countries and are being upgraded to accepted international standards.
- QUATRO audits have been carried out at the main radiotherapy centres in eight participating countries, which has provided comprehensive information to help the countries identify actions needed to improve the quality of radiotherapy services.
- 130 professionals were trained in brachytherapy treatment for common types of cancer in the region, so patients can now be provided with high quality radiotherapy treatment.
- 30 professionals have been trained in conducting QUATRO audits.



A teletherapy unit in Sri Lanka.