

Distance-assisted Training for Nuclear Medicine Technicians (RAS/6/029)

Objectives: To improve the quality of nuclear medicine services in Regional Co-operative Agreement (RCA) countries by raising the standard of basic training for technologists.

Background: Technicians working in nuclear medicine in developing countries, where good training facilities are not available, do not usually have the opportunity of overseas training since this has traditionally been available only for scientists and medical physicians. However, the largest group of nuclear medicine personnel are technicians responsible for the routine performance of clinical studies. The level of training for technicians varies considerably throughout the RCA countries, and, in some cases, there is insufficient demand to justify national training courses. This project aims to assist the development of skills-based training for this group using distance-education methods.

A pilot scheme phase I for the project conducted under the Australian funded regional project RAS/6/022 was concluded in 1998 which involved three countries: India (8 students), Malaysia (2) and Sri Lanka (3). Phase II was initiated in 1999 involving the phase I countries and was concluded in 2001 with 12 students. Several countries in the RCA region, namely Bangladesh, China, India, Korea, Pakistan, Philippines, Sri Lanka, and Thailand are now applying the distance assistance training (DAT) study material (developed by the Agency) to train nuclear medicine technologists in their own countries. Currently, about 290 students from 124 medical departments are undergoing this training with Agency support in the form of expert services and printed DAT material. A CD-ROM version of the 12 modules of the DAT material was prepared in 1998. Keeping in view the rapid growth and development taking place in the field of nuclear medicine, there is a need to update the DAT material as well as to create additional documents. Countries such as Indonesia and Viet Nam would like to start the training and would need supervision and support. The developed materials have formed the basis for sister projects in AFRA and ARCAL.

National Commitment: Support systems have been established in countries that participated in the pilot testing. Other participating countries have also established a similar network of key individuals to co-ordinate activities at a local level and provide essential feedback. Until now, the project has been implemented at the regional level by the West Mead Hospital, Sydney, Australia, through extrabudgetary funding from the Government of Australia. It is expected that the Diagnostic Physics Group at the West Mead Hospital, Sydney, will continue to play a leading role in the implementation of the extended project at the regional level. China has translated the materials into Chinese language and Korea is doing the same into Korean. The University of Sydney, Australia, has agreed to give certificates to successful DAT students after sitting and passing an exam by the university, and a faculty diploma to the student after completion of two years.

Agency Input: The Agency will continue to provide administrative, financial (for implementing specific technical contracts to update or create new DAT modules, group training activities, and expert services) and technical backstopping support.

Performance Indicators:

- Number of countries using the DAT material for training technologists in their own countries.
- System of assessment developed and in place in the participating countries.

Expected Results: At the end of the project, at least nine countries will have the capability to continue technologist training using the developed materials. Courses will be conducted in additional countries where training has not yet been conducted.

Project Impact: The quality of healthcare in the region will be enhanced by the upgraded and standardized educational qualifications and resultant higher motivation of nuclear medicine technicians. Several countries will be able to conduct their own training programme using the experience and resources already developed.