

Transforming Cancer Care through Capacity Building of Theranostic Facilities in Pakistan – A Success Story of IAEA-Pakistan Collaboration

S. Fatima (1) ; YR. Paracha (2)

(1) Nuclear Medicine & Oncology (NM & O) Division , Pakistan Atomic Energy Commission , Islamabad, Pakistan; (2) Nuclear Medicine & Oncology, Pakistan Atomic Energy Commission, Islamabad, Pakistan

Background and context

Pakistan is committed to reaching healthcare benchmarks by 2030 through various programs under the umbrella of SDG3. Noncommunicable diseases, including cancer, pose a significant burden on Pakistan's morbidity. Theranostics, an innovative aspect of nuclear medicine, targets different disease states by applying specific targeted therapy based on precise diagnostic tests. Theranostic is rapidly evolving field which has revolutionized cancer care but Pakistan lacked theranostic facility till 2017.

Aim

The objective of this international collaboration was to develop theranostic capabilities & capacity through the International Atomic Energy Agency's (IAEA) technical cooperation program.

Strategy/tactics

PAEC, through its network of 20 cancer hospitals, addresses a significant portion of the country's cancer burden. For the past six decades, Pakistan has collaborated with the IAEA to enhance cancer care through its TC program. The IAEA has supported Pakistan in improving healthcare infrastructure, strengthening cancer control programs, and promoting the safe & effective use of nuclear and radiation technology. Pakistan has aligned its Technical Cooperation Programme with the IAEA's Medium-Term Strategy

Programme/Policy

IAEA technical cooperation (TC) primary mechanism for transferring nuclear technology to Member States, helping them to address key development priorities. National TC projects are usually designed to address pertinent issues and to either develop infrastructure or train professionals in newer nuclear modalities.

Process

The first theranostic facility in Pakistan was established in 2017 through IAEA's TC program, with the installation of a fully automated theranostic labelling module. Under IAEA TC projects, such as PAK6023, 6024, 6025 and 6027 focused on strengthening cancer diagnosis and treatment facilities, targeted treatments for neuroendocrine tumors, liver and prostate cancer were established. Through these national TC projects about 2-3 million euros were secured for theranostic infrastructure development and human resource capacity building. Recent collaborative efforts led to the installation of another fully automated theranostic module in the southern region of Pakistan under PAK6027 TC project. Through fellowships & scientific training programs, about 45 doctors, medical physicists, & radiopharmacists have been trained in the field of theranostics under IAEA TC projects. Additionally, scores of other healthcare workers have received training through expert missions

Outcomes

The IAEA's technical cooperation program has bolstered Pakistan's national capacity by introducing targeted cancer treatment. .

What was learned

These projects have pioneered theranostic facilities in Pakistan but have also expanded existing infrastructure. Through capacity-building efforts by the IAEA, new cancer treatment techniques have been introduced in Pakistan, benefiting hundreds of cancer patients with novel therapies.

Image(s):

Number: **001165**

Speaker: **S. Fatima**

Category of abstract : **Fundraising campaign report**

Theme : **3. Healthcare systems & policies**

Topic : **Mobilising international networks**

Preferred Presentation Type : **Oral poster Presentation in Geneva and inclusion in the digital library**

UICC Member Organisation : **No**

Travel Grant : **No**

Official congress language acceptance

Presenting author needs to be registered

All information correct

Abstract not previously presented

Corresponding author

Authority to act

Original author

Privacy policy

Declaration of conflict of interest

Conflicts of interest : **No**

Updated on: **Thursday, April 4, 2024 6:39 PM**