SCMPCR
South Asia Centre for Medical Physics and Cancer Research
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QUALITY EDUCATION AND HEALTH SCIENCE FOR PATIENT BENEFIT

SCMPCR Report

The Future of SCMPCR: Building Capacity in Medical Physics and Cancer Care in South Asia

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Introduction

The South Asia Centre for Medical Physics and Cancer Research (SCMPCR) has emerged as a leading regional platform dedicated to strengthening cancer care, education, and research across South Asia. Since its establishment, SCMPCR has focused on addressing the growing demand for trained medical physicists, radiation professionals, and healthcare workers through structured education, hands on training, and community-based awareness programs.

Cancer remains one of the leading causes of death in low- and middle-income countries. Limited access to trained professionals, modern technology, and continuous education remains a major challenge. SCMPCR was founded with the vision of reducing this gap by creating a sustainable ecosystem of education, training, and professional development in medical physics and radiation sciences.

Vision and Mission

The long-term vision of SCMPCR is to become a regional center of excellence for education, research, and capacity building in medical physics and cancer care.

Mission Objectives

- To provide high-quality education and training in medical physics and radiation sciences
- To develop skilled professionals capable of delivering safe and effective cancer care
- To promote research, innovation, and international collaboration
- To strengthen healthcare systems through structured training programs
- To support cancer awareness, prevention, and early detection initiatives

Key Program Areas of SCMPCR

SCMPCR operates through multiple structured programs designed to meet different educational and professional needs.

1. Hands-on Training Programs

Hands-on workshops focus on practical learning in clinical environments. These programs emphasize:

- Radiotherapy quality assurance
- Dosimetry and treatment planning
- Imaging and treatment verification
- Practical exposure to modern radiotherapy equipment
- These workshops are conducted in collaboration with national and international hospitals and universities.

2. E-Learning Programs (ELP)

SCMPCR launched its e-learning platform to expand access to education globally. These programs allow professionals to learn without geographical barriers. Key features includes:

- Live interactive lectures
- Expert-led sessions from global institutions
- Recorded content and study materials
- Assessment and certification
- E-learning programs cover topics such as:
- Medical physics
- Radiation oncology
- Brachytherapy
- Diagnostic imaging
- Radiation safety and quality assurance

3. In-Service Training Programs

These programs are designed for professionals already working in hospitals. Training is conducted within healthcare facilities to strengthen practical skills in real clinical environments. Focus areas include:

- Equipment commissioning
- Quality control and assurance
- Clinical workflow optimization
- Safety protocols

4. Awareness and Community Outreach

SCMPCR actively conducts cancer awareness programs, especially in underserved and rural regions. These programs focus on:

- Breast and cervical cancer screening
- Early detection and prevention
- Community education and awareness
- Women’s health and public engagement

5. Self-Help and Patient Support Programs

SCMPCR has introduced structured self-help groups for cancer patients. These groups provide:

- Emotional support
- Peer interaction

- Awareness on treatment and recovery

Growth and Impact:

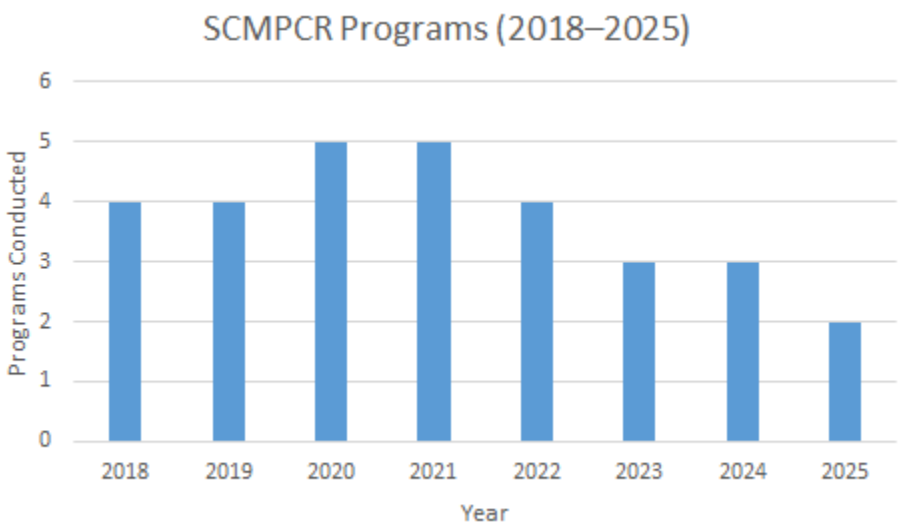

Figure 1.Number of training, education, and outreach programs organized by SCMPCR from 2018 to 2025.

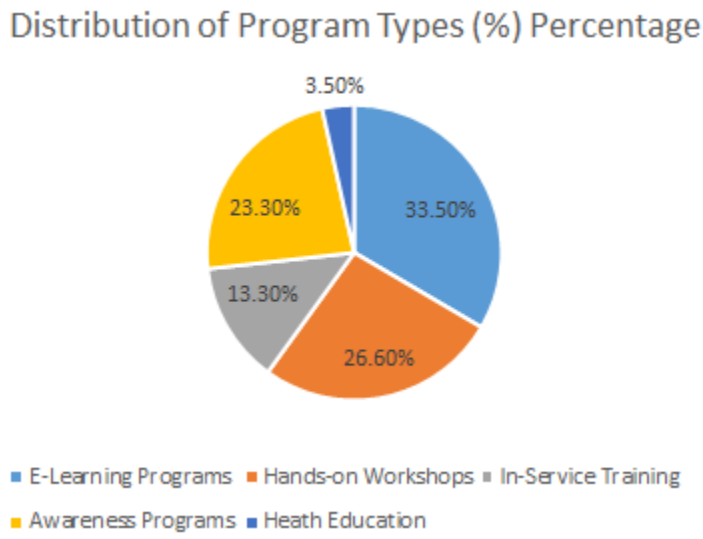

Figure 2.Distribution of SCMPCR activities across different program categories.

Future Direction of SCMPCR

1. Accredited Learning Programs

SCMPCR plans to establish internationally accredited residency and fellowship programs in:

- Medical Physics
- Radiation Oncology
- Clinical Imaging
- Artificial Intelligence

These programs will align with global accreditation standards and offer structured mentorship.

2. Expansion of Digital Learning Platforms

- Future plans include:
- Hybrid learning models
- Virtual simulation based training
- Global expert lecture series

3. Research and Innovation Hub

SCMPCR aims to become a regional research hub by:

- Promoting clinical and translational research
- Supporting young researchers
- Collaborating with international universities

4. Capacity Building in Low-Resource Settings

- Special focus will be placed on:
- Rural healthcare facilities
- Training of technicians and technologists
- Mobile screening and diagnostic programs

5. International Collaboration

SCMPCR will strengthen partnerships with:

- Universities and hospitals worldwide
- International professional societies
- Global cancer organizations

Conclusion

SCMPCR continues to play a transformative role in advancing medical physics education, cancer care, and professional development across South Asia. Through structured training programs, international collaborations, and community-driven initiatives, the organization is shaping a sustainable future for cancer care. Its commitment to quality education, research excellence, and social responsibility positions SCMPCR as a leading institution in the region and a model for similar initiatives worldwide