

INTERNATIONAL EXCHANGE PROGRAMS CAN PLAY A PIVOTAL ROLE IN GLOBAL ONCOLOGY INITIATIVES FOR PROFESSIONAL SKILL DEVELOPMENT OF POSTGRADUATE TRAINEES AND SPECIALISTS. POSITION STATEMENT BASED ON THE PIONEERS EXPERIENCE

A. N. Abbasi,¹ Muneeb uddin Karim,² Calogero Casà,³ Andrea D'Aviero,⁴ Benazir Mir Khan,⁵ Luca Tagliaferri,³ Bilal Mazhar Qureshi,¹ György Kovács,⁶ Vincenzo Valentini³

¹ Department of Radiation Oncology, The Aga Khan University (AKUH), Karachi, Pakistan.

² Shaukat Khanum Memorial Hospital & Research Center, Lahore, Pakistan

³ Fondazione Policlinico Universitario A. Gemelli IRCCS, Roma, Italy

⁴ Mater Olbia Hospital, Olbia, Sassari, Italy

⁵ Department of Radiation Oncology, Princess Margaret Hospital, Toronto Canada

⁶ Gemelli-INTERACTS, Universit Cattolica del Sacro Cuore, Rome, Italy

PJR January - March 2022; 32(1): 24-27

Lower- and middle-income countries (LMIC) face many challenges not only in terms of availability of equipment but in terms of trained personnel as well. To overcome this problem in the future, we want to share our views and experiences of international academic networking. Here, as an example we wish to share our experiences of an academic exchange program was established between post-graduate residency programs of Radiation Oncology units of Pakistani Aga Khan University Karachi and Italian University Universit Cattolica del SacroCuore, in Rome (PIONEERS: Pakistan Italy, Oncology Network ExpERienceS Project). We made our learning objectives to enhance our professional training via mutual learning in a conducive environment. The program was set up to enhance our quality of patient care.¹ Moreover, we intended to share our views regarding the extension of this collaboration to include research project.²⁻⁵

Sandra Turner and Margot Lehman from Australia had elaborated on the objectives of radiation oncology training in their published manuscript.⁶ They emphasized the fact of preparing proficient specialists instead

of preparing good candidates appearing in post-graduate exit examinations. Our team had commented on this thought-provoking manuscript in the same journal. Exit examinations conducted at the end of postgraduate structured training cannot be regarded as a destination. They are indeed an important milestone for a lifelong learner.⁷

Our teams based in Pakistan and Italy emphasize the importance of transnational collaboration in health care research and training has already been evident and is being mentioned in the literature. Worldwide research collaboration provides health investigators with opportunities to share data, experiences, and methods that can offer the basis for new and important considerations on existing practices. Moreover, in the context of some areas requiring more specific training and dedicated expertise - such as interventional radiation therapy, also known as brachytherapy - dedicated clinical and research activities in high volume centers should be proposed.⁸⁻¹²

Even in the absence of a proper national cancer registry and data on demographics and characteristics of various cancers in our country, practicing clinicians

Correspondence : Dr. A. N. Abbasi
Department of Radiation Oncology,
The Aga Khan University (AKUH),
Karachi, Pakistan.
Email: nadeem.abbasi@aku.edu

Submitted 5 November 2021, Accepted 28 December 2021

witnessing the point that now they are diagnosing more cancers in their clinics than ever before. For instance, squamous cell carcinoma of the head and neck is due to the use of chewable tobacco in the form of beetle nuts, beetle leaf, various other types, gutka (a form of chewable raw tobacco which is very popular in Southern Pakistan) along with the combination of some of these harmful substances. A trainee resident will get unique exposure to the management of these tumors in a high-volume tertiary referral university hospital in Pakistan. In our opinion, this will give him or her a global vision of cancer care and will enhance his or her clinical acumen.

Global radiation oncology training and practice initiatives are being acknowledged and appreciated by many practicing radiation oncologists across the world.¹³ We envision our international trans-institutional educational exchange programs as an important integral component of this theme. This issue has been taken as a national priority by Health policy makers in developed countries and their objectives and goals in this scenario are being implemented. Being in a developing country, we are still struggling to develop our policies. Due to limited sources, lack of funds, and increased demands, we cannot provide state of art treatment facilities to all of our patients. The overall expenses of cancer treatment are enormous, and lack of resources is a major factor, which plays a vitally important role in the poor outcome of this disease in our country. Due to lack of awareness, most patients with cancer, present late and by the time diagnosis about their tumor is established, palliative treatment can only be offered in the majority of the cases.

With the above-stated critical facts, we are facing another issue in the management of cancer. Other countries of the world had learned the hard lessons and it has been realized that cancer management is not a one-man show. Multidisciplinary management is a mandatory component of any management process. To involve key stakeholders in the form of all related relevant specialties before starting a comprehensive management plan for each patient. In lower- and middle-income countries (LMIC), where there is not only a lack of advanced resources but also the availability of qualified and professionally trained staff. Provision of effective quality care and clinical services can be made possible with multi-

disciplinary team work and making collaborations and seeking assistance from colleagues in developed countries. Patient's trust in the healthcare system and confidence can be increased significantly just as an assurance of not being treated by a single clinician in resource-limited settings but being looked after by a multidisciplinary site-specific team. Developing a multicenter consortium and a web-based system for standardized heterogeneous data collection are the two primary objectives of the proposed training and research project. Any participating institute's procedures, data storing technologies, and quality management systems are not influenced by it. Furthermore, the privacy of all patients is preserved in this proposed system.

The challenges of international research require devotion and commitment to the overall objectives and innovative problem-solving skills for the betterment of any joint venture. Global partnership in health research is an integral part of research especially in rare diseases where the expertise, skills, and patients are dispersed. Colleagues involved in research are keen to share knowledge and experience, work together across countries, and overcome common barriers to maximize the impact of combined efforts to bring diagnoses and treatment to patients.

With transnational collaboration, investigators take into consideration the impact of research in a different culture and setting. Through sharing of ideas, high-quality practice is encouraged and evidence-based care of patients is facilitated. Improvements in information technology and communication systems, the rapid and comprehensive exchange of information, expertise, and ideas across international societies have been facilitated, resulting in the widespread formation and dissemination of experience and knowledge, but open new fields and challenges for medical education:¹⁴ a multicentric education could be easily answered by various educational methodologies, for example, online sessions, structured topic reviews (STR) on-site education, dedicated tutorial or problem-based learning (PBL), etc. During the COVID-19 Pandemic, we all have learned various issues related to distance learning education via video conferences.


Different studies from multi-centric institutes have been proved to be advantageous across the borders, for recognizing risk factors, testing theories, and

developing appropriate and cost-effective treatment. However, careful supervision and scrutiny of such projects are mandatory, to make compliance with ethical standards and maintenance of an appropriate balance in the impact of the mutual benefit of participating institutes. Acquisition of new research skills and expertise can be facilitated by global affiliations and the boundaries of research methods and capabilities can be pushed further. A worldwide joint venture in health research is a logical and economical way for enhancing knowledge and upgrading research skills. It would be more challenging to provide advanced research tools available to institutions and countries in LMIC in their resource-limited settings without the cooperation of international teamwork. Our learning objectives-based structured study plan plunk the learner on the driving seat and self-study plan is the foundation of our innovative system which we had published in the International Journal of Radiation Oncology Biology Physics in November 2020.¹⁵

In principle, we strongly believe that to find out global oncology solutions we all must work together and set up examples via innovative ideas like this PIONEER program of postgraduate training which was initiated after deliberations between two professors from two different countries, Italy and Pakistan. We are hoping that after the publication of this position paper more innovative practical ideas will emerge which would go through phases of strategic visioning and ideation. Our two universities teams can share our learning objectives and outcomes-based study plans with other professional teams who wish to work on Global Oncology initiatives via postgraduate change programs for trainees and specialists.

References

1. Karim MU, D Aviero A, Khan AMH, Abbasi AN. Importance of International Exchange Programme in Postgraduate Training. *J Coll Physicians Surg Pak*. 2018; **28**: 981-2.
2. Tagliaferri L, KovÆcs G, Autorino R, Budrukkar A, Guinot JL, Hildebrand G, et al. ENT COBRA (Consortium for Brachytherapy Data Analysis): interdisciplinary standardized data collection system for head and neck patients treated with interventional radiotherapy (brachytherapy). *J Contemp Brachytherapy*. 2016; **8**: 336-43.
3. Lucas AO. International collaboration in health research. *Bull World Health Organ*. 2005; **83**: 482.
4. Damiani A, Masciocchi C, Boldrini L, Gatta R, Dinapoli N, Lenkowicz J, et al. Preliminary Data Analysis in Healthcare Multicentric Data Mining: a Privacy-preserving Distributed Approach. 1 [Internet]. 2018 [cited 2021 Sep 20];14.
5. Tagliaferri L, Budrukkar A, Lenkowicz J, Cambeiro M, Bussu F, Guinot JL, et al. ENT COBRA ONTOLOGY: the covariates classification system proposed by the Head & Neck and Skin GEC-ESTRO Working Group for interdisciplinary standardized data collection in head and neck patient cohorts treated with interventional radiotherapy (brachytherapy). *J Contemp Brachytherapy*. 2018; **10**: 260-6.
6. Turner S, Lehman M. Are we training the next generation of proficient radiation oncologists, or just better examination candidates? *J Med Imaging Radiat Oncol*. 2016; **60**: 389-92.
7. Abbasi AN, Karim MU, Qureshi BM, Hafiz A, Ali N. Comment on: Are we training the next generation of proficient Radiation Oncologists, or just better examination candidates? *J Med Imaging Radiat Oncol*. 2017; **61**: 156.
8. Tagliaferri L, Vavassori A, Lancellotta V, De Sanctis V, Barbera F, Fusco V, et al. Can brachytherapy be properly considered in the clinical practice? Trilogy project: The vision of the AIRO (Italian Association of Radiotherapy and Clinical Oncology) Interventional Radiotherapy study group. *J Contemp Brachytherapy*. 2020; **12**: 84-9.
9. Tagliaferri L, KovÆcs G, Aristei C, De Sanctis V, Barbera F, Morganti AG, et al. Current state of interventional radiotherapy (brachytherapy) education in Italy: results of the INTERACTS survey. *J Contemp Brachytherapy*. 2019; **11**: 48-53.

-
- 
10. Autorino R, Vicenzi L, Tagliaferri L, Soatti C, Kovacs ProfG, Aristei C. A national survey of AIRO (Italian Association of Radiation Oncology) brachytherapy (Interventional Radiotherapy) study group. *J Contemp Brachytherapy*. 2018; **10**: 254-9.
 11. Kovacs G, Tagliaferri L, Valentini V. Is an Interventional Oncology Center an advantage in the service of cancer patients or the education? The Gemelli Hospital and INTERACTS experience. *J Contemp Brachytherapy*. Termedia; 2017; **9**: 497-8.
 12. Tagliaferri L, Pagliara MM, Boldrini L, Caputo CG, Azario L, Campitelli M, et al. INTERACTS (INTERventional Radiotherapy ACTIVE Teaching School) guidelines for quality assurance in choroidal melanoma interventional radiotherapy (brachytherapy) procedures. *J Contemp Brachytherapy*. 2017; **9**: 287-95.
 13. Kong BY, Carter C, Nowak AK, Hovey E, Lwin Z, Haghighi N, et al. Barriers and potential solutions to international collaboration in neuro-oncology clinical trials: Challenges from the Australian perspective. *Asia Pac J Clin Oncol*. 2021;
 14. Cas C, Marotta C, Di Pumpo M, Cozzolino A, D Aviero A, Frisicale EM, et al. COVID-19 and digital competencies among young physicians: are we (really) ready for the new era? A national survey of the Italian Young Medical Doctors Association. *Ann Ist Super Sanita*. 2021; **57**: 1-6.
 15. Karim MU, Qureshi BM, Abbasi AN. Impact of a Learning Objective-Based Self-Study Plan in an Introductory Rad. Oncology Curriculum. *Int J Radiat Oncol Biol Phys*. 2020; **108**: 836-7.