Snapshot of European advanced Therapeutic Radiographers/Radiation Therapists: a mix-method study

Snapshot of European advanced Therapeutic Radiographers/Radiation Therapists: a mix-method study

Oliveira C[1,2], Barbosa B[1,2,3], Couto J[4], Bravo I[3], Hughes C[5], McFadden S[5], Khine R[6,7], McNair H[6,8]

[1] Radiotherapy Department, Instituto Português de Oncologia do Porto (IPO Porto), Porto, Portugal.
[2] Escola Internacional de Doutoramento, Universidad de Vigo, Pontevedra, España.
[3] Medical Physics, Radiobiology Group and Radiation Protection Group, IPO Porto Research Centre (CI-IPOP), Instituto Português de Oncologia do Porto (IPO Porto), Porto, Portugal.
[4] Radiography Department, Faculty of Health Sciences, University of Malta, Msida, Malta.
[5] School of Health Sciences, Ulster University, United Kingdom.
[6] European Federation of Radiographer Societies, Utrecht, Netherlands.
[7] Institute of Health Sciences Education, Faculty of Medicine & Dentistry, Queen Mary, University of London, United Kingdom.
[8] The Royal Marsden NHS Foundation Trust, Radiotherapy and The Institute of Cancer Research, Surrey, United Kingdom.

Background

One in four patients who need radiotherapy (RT) do not receive it, and this is projected to increase by 2025 as the workforce capacity decreases. Flexibility in models of care enables the use of existing resources at maximum capacity. Advanced Therapeutic Radiographers/ Radiation Therapists (TR/RTTs) undertake evolved roles through service redesign, working across all advanced practice (AP) pillars: (i) clinical practice (ii) leadership and management (iii) education, and (iv) research.[1] This AP will optimise the patient experience and treatment pathways of cancer patients however, limited information exists on the range of advanced practitioners in RT. This study aimed to research AP among TR/RTTs across Europe and identify educational gaps.

Methods

A mix-method study including a self-designed and validated survey targeted to TR/RTTs working in AP across Europe and semi-structured interviews conducted with European key stakeholders.
Quantitative data was summarized using descriptive statistics (Excel and SPSS), and qualitative data (survey open questions and interview transcriptions) were thematically analyzed[2] (NVivo) and followed the COREQ checklist.[3]

Results

Of the 189 survey participants from 21 European countries, 66% work in informal AP, where the most common roles involved activities associated with patient care. 33 interviewees working (or studying) in 16 European countries represented practitioners,

managers, educators, professional bodies, postgraduate students, and regulators gave their personal and local perspectives.
Four overarching themes (see table 1) emerged from the thematic analysis. They highlighted the importance of consistency in job titles, harmonization of education models and curricula for TR/RTTs' registration, definition of AP requirements, support for working across all AP pillars through job plan and workforce planning.
The survey showed that the research is neglected in AP roles. Interviews presented the possible causes: no protected time, limited staff skills, no research culture, lack of management support, workload due to staff shortages, no funding, and clinical priorities. 52% of survey participants identified further educational needs in identifying RT-specific or tumour-site content and leadership and management skills. Interviewees stressed leadership training, motivation, and recognition as key to career progression, boosting job satisfaction and team acceptance of AP roles.

Table 1. Themes and subthemes

Themes	Subthemes
Advanced Practice Drivers & Outcomes	
	Clinical significance
	Professional significance
	Organizational significance
Advanced Practice Challenges *vs* Enablers	
	Governance & role development
	Workforce & organization
	Practice across 4 pillars
	Education & training
Current *vs* Future Advanced Practice	
	Clinical practice roles
	Education roles
	Leadership & management roles
	Research roles
Becoming & Being Advanced Practitioner	
	Development of competence & capability
	Professional maturity
	Challenging professional boundaries
	Pioneering innovation

Conclusions

Neither the profession nor education of TR/RTTs is harmonized across Europe, which is highly reflected in advanced-level practice. This study highlights a policy gap in education and professional requirements to practice at an advanced level among TR/RTTs.
Future research should include perspectives from other healthcare professionals, policymakers, patients, and their representatives to complement the exploration of contextual factors.

References (max n=3)

1. Health Education England. Multi-professional framework for advanced clinical practice in England. Published online 2017.

2. Braun V, Clarke V. *Successful Qualitative Research: A Practical Guide for Beginners*. SAGE; 2013.

3. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007;19(6):349-357. doi:10.1093/intqhc/mzm042

Disclaimer

This work was co-funded by the SAFE EUROPE project under the Erasmus Sector Skill Alliances programme [grant agreement 2018- 2993/001-001]. The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Helen McNair is funded by a National Institute for Health Research and Health Education England (HEE/NIHR), Senior Clinical Lectureship and supported by the NIHR Biomedical Research Centre at The Royal Marsden NHS Foundation Trust and the Institute of Cancer Research, London.