

## **CoRIPS RESEARCH AWARDS OCTOBER 2020**

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**CoRIPS Research Grant 191 (Covid)  
£6,761 Awarded**

### **Title of Project**

Experiences of newly qualified therapeutic radiographers who transitioned to work during the covid-19 pandemic.

### **Lay summary of the project**

The Covid-19 crisis continues to have big impacts on how radiotherapy is delivered, how staff do their job and how patients are cared for. Part of the NHS response has been to accelerate final year radiotherapy students into work as radiographers before they have fully qualified. Moving from being a radiography student to staff member is a challenging but exciting shift under the best circumstances: It is quite a different prospect when working practices are unfamiliar and the graduates are joining an established group of people who have been together during an unfolding professional journey. We have already conducted the first part of a research project that looked at the expectations of a group of Welsh radiotherapy study who were just about to start work during the covid-19 crisis. The challenges, opportunities and fears that they reported suggest that there may be a gap between their expectations and the reality in radiotherapy departments. We now plan to 'revisit' them remotely wherever they are now working and interview them about their experiences within their first six months. We want to see how they have settled in to their departments, what helped them fit in, what was challenging and what educational, training or mentoring support would help this. We will also undertake group discussions with the staff from three radiotherapy centres in Wales to explore their views of integrating new staff during the pandemic. Recommendations to support new staff and reduce the risk of them leaving work can then be made.

### **Description of the project:**

#### **Context to application**

The research team has completed and published part one of this project,<sup>1</sup> which captured the expectations of a cohort of therapeutic radiography students in Wales immediately before they became practitioners as temporary registrants on the HCPC covid-19 register. The findings indicated significant covid-19 related anxieties and challenges to psychological, emotional and professional readiness for the transition, which may lead to a form of professional disengagement called 'withdrawal behaviour'. We are now seeking funding to revisit the cohort (and their new colleagues) to undertake parts two and three of the project.

#### **Principal aim of the current study**

To explore the experiences of newly qualified therapeutic radiographers who transitioned to work during the covid-19 pandemic.

#### **Primary research question**

What are the experiences of new therapeutic radiography practitioners within the first six months of NHS working during the covid-19 crisis?

## **Secondary research questions**

- i. How did the reality of transition to work at this time compare to prior expectations?
- ii. What were the facilitators of and challenges to successful transition during the pandemic?
- iii. What are the education, training and preceptorship needs of new therapeutic radiographers that would support transition to working and minimise withdrawal behaviours during covid-19?
- iv.

## **Proposed outcomes**

The student cohort are now spread UK-wide across the range of radiotherapy work environments. This presents a natural opportunity to gain a better understanding of the different experiences of new staff – experiences that can inform appropriate and accessible support to meet the needs of our new staff community during covid-19. Specifically, what are the perceived challenges/barriers to, and opportunities/facilitators of, transition during the pandemic. Identifying foreseeable future concerns will be important in the uncertain milieu. Study findings will be applied to higher education and clinical contexts as appropriate: potentially using a toolkit to be developed and evaluated in future work.

## **Literature review**

The Covid-19 pandemic has had a fundamental impact on working practices in UK radiotherapy departments. Rapidly amended treatment protocols recommend new treatment prescriptions<sup>2</sup> and working patterns that balance health risks to patients and staff with an optimal allocation of NHS resources.<sup>3</sup> Radiotherapy services are experiencing extreme fluctuations in demand caused by restrictions and reduced uptake of upstream diagnostic and treatment services during the first wave of the pandemic:<sup>4,5</sup> a likely second wave is likely to be hugely disruptive to service delivery.<sup>6</sup>

The transition from radiography student to qualified practitioner is a daunting prospect under the best circumstances.<sup>7,8</sup> This challenge has been magnified by the current paradigm shift in working practices that may or may not become a new normal. With evidence of the pandemic affecting the mental health of frontline healthcare workers,<sup>9,10</sup> it is not surprising that radiography students have experienced a range of negative emotions related to the pandemic.<sup>11</sup> This in turn has focussed attention on the educational needs of allied health professionals in the light of covid-19.<sup>12-14</sup> As educators, the need for timely empirical data about student radiographers transitioning from students to practitioners in this period prompted our research team to undertake the current research project. We have completed and published the first part of this work,<sup>1</sup> which captured the expectations of a cohort of fast-tracked therapeutic radiography registrants on the HCPC temporary register. We found uncertainties related to covid-19 added a destabilising component to existing anxieties and challenges. Data suggested significant risks to vital professional socialisation and of incongruence between students' expectations and the reality in clinical departments. Graduate expectations that are incongruent with reality can threaten motivation and job satisfaction, potentially initiating modelling of poor coping strategies, withdrawal behaviours and ultimately staff attrition.<sup>11,15</sup> The current proposal extends this work by revisiting the same cohort to capture their individual experiences within the first six months of work (part two). It will also add the perceptions of qualified radiographers involved in the development and preceptorship of students and new staff members as to how the qualifiers of 2020 were professionally socialised and integrated into the clinical workplace during the pandemic (part three). Findings will inform the vital support that academic and clinical staff can offer to student starting work during an unprecedented crisis.

## **Methodology**

Our research question seeks to understand the experiences, attitudes, behaviours and professional interactions toward the covid-19 phenomenon for a cohort of 2020 therapeutic radiography graduates. A qualitative methodology will enable careful interpretation of perceptions to be distilled into valuable learning for the development of following student cohorts and new practitioners.

The methodology will be underpinned by critical realism, which assumes a realist ontology and a constructivist epistemology ie. a real world exists that is experienced differently by different people. This position mirrors how therapeutic radiography integrates the technical with patient care, and, importantly for the study topic, supports the idea that reality is seen through values but also that values are shaped by reality. The framework of value congruence will guide our study. Congruence theory says that an employee is likely to perform well when their values and expectations are congruent with the patterns, values and culture of the organisation/environment they join.<sup>16,17</sup>

## **Methods**

The proposed qualitative design has two linked parts. *Part two* is a longitudinal element, in that we will re-visit and interview the group of new registrants from our phase one study, referred to as 'the cohort'. *Part three* is a cross-sectional element where focus groups will be conducted with key qualified staff members at each of the three radiotherapy centres in Wales.

A study advisory group comprised of the university radiotherapy teaching team plus student, NHS and PPI representatives will oversee the development and conduct of the study.

### **Part two**

#### *Recruitment*

We have institutional ethical permission and participant consent to re-contact the sample of 11 participants from our part one study via their University email (or alternate if university accounts become de-activated.) The remaining six members of the N=17 cohort student cohort who did not take part in part one will be informed of the research opportunity via alumni channels. People from either recruitment stream who express interest will be sent a study invitation with an electronic Participant Information Sheet and Consent Form. On receipt of signed consent, a mutually convenient time will be agreed for interview (outside of work hours.)

#### *Data collection*

The maximum possible sample size for part two is 17. Data collection will use one–one, semi-structured interviews, conducted online (by PI and EP) as the ex-students are dispersed throughout the UK. An interview schedule will be developed by the study advisory group, based on clinical knowledge/experience of student transition to practice and relevant literature about health and social care during covid-19 and the transition of new students (search strategy and conduct by KW). Questions will explore participants' lived reality versus their expectations and perceptions captured in part one, their confidence to supervise and support current students and facilitators and barriers to their transition.

### **Part three**

#### *Recruitment for part three*

There are three confirmed study sites in Wales. A strategy to recruit staff for focus groups has been discussed with the radiotherapy service manager/deputy at the three cancer centres. Informal enquiries suggest a high level of departmental interest in the proposed work. After gaining R&D approvals at each site, the managers will formally communicate the opportunity to take part in the research to their staff. Inclusion criteria are: working in a radiotherapy centre in Wales; have contact/involvement with new staff working at their centre; willing and able to take part in the focus group as part of their NHS working. Potential participants will be provided with an electronic participant information sheet and consent form at least 24 hours before data collection.

#### *Sampling approach for part three*

The aim is to select a group of between three and six qualified staff at each centre to participate in a focus group at their centre. Such a group size has been shown to balance the opportunity to share

insights whilst maintaining participant confidentiality.<sup>18</sup> If there are sufficient interested volunteers, a purposive sampling frame would select those best placed to explore the research questions i.e. Involved in integrating new registrants into their new role during preceptorship (the clinical lecturers, who has a dual University/NHS role at their respective centre have informally indicated interest in taking part.)

#### *Data collection for part three*

Focus groups were chosen as an effective way to explore intellectual and emotional processes underlying staff behaviour towards new registrants.<sup>19</sup> That specific people share their experiences, attitudes feelings, and habits *in a group* can reveal a deeper and more coherent understanding of a subject or service than may be garnered from interviews.<sup>20,21</sup> Groups will be held in a private meeting room at each centre and audio-recorded with participant's consent. The discussion will be guided by a semi-structured schedule of questions and facilitated by our lead clinical educator (LM). If covid-19 restrictions prevent a face-face group then we will consider conducting the focus groups online (via Blackboard Collaborate): Although this has some advantages, we consider it a less desirable option as sub-optimal group dynamics can limit engaged discussion and non-verbal communication may be missed.<sup>22</sup> In this instances, the facilitator would follow best practice for online focus groups to counter these disadvantages.

#### **Data analysis of both parts**

Data will be professionally transcribed ready for analysis using the framework approach.<sup>23</sup> This analytic is appropriate for semi-structured interview and focus group data<sup>24</sup> from applied health policy research.<sup>25</sup> Themes will be developed within and across participant data. Measures adopted to address threats to trustworthiness and credibility qualitative data identified in COREQ criteria for reporting qualitative research will be:

- Double coding of data (by PB) to check validity of interpretative themes;
- An audit trail to include peer debriefing of theme development with study advisory group;
- Field notes after interviews and self-reflection on potential bias relating to our position as educators. The relationship and rapport we have with participants may aid comprehensive exploration of topics.

#### **Ethical considerations**

We have institutional ethics committee approval for the study (13/05/2020 ref: REC728). Part three does not require NHS REC approval as we are only seeking the views and opinions of NHS Wales staff. Applications for R&D approvals will be submitted to conduct part three at the three study sites. In accordance with the principles of Good Clinical Practice, participants' wellbeing will be paramount at all times. Sensitivity will be exercised as participants may have had covid-19 or know someone who has been seriously ill or died. If participants experience emotional or psychological distress they may withdraw from the study or request that the recorder is turned off and they will be signposted to local professional support services. The existing relationship between the researcher and ex-students will be acknowledged by making it clear that there is no obligation to participate and there would be no consequences for declining participation or withdrawing at any time. Departmental staff will be provided with a schedule of questions beforehand. Participant anonymity will be established by the substitution of personal identifiers with a project pseudonym. Data from staff focus groups will not identify individual departments or sensitive views about the department's response to the covid-19 pandemic. The focus group facilitator will uphold the importance of respecting views, individual circumstances and boundaries. Neither individual departments nor individuals will be identifiable in study dissemination. Data will be stored on a secure password protected PC accessible only by the researcher. Only anonymised data will be shared with the research team.

#### **Public and patient involvement**

The researcher has actively involved the therapeutic radiography academic team, current students and staff from the clinical radiotherapy departments in Wales in study development to ensure this research is relevant to the needs of students, radiotherapy service delivery, and by extension service users. We have engaged with our School Lead for Patient and Public Involvement to arrange for a PPI representative (LR) to become part of the study. Our institutional PPI policy ensures that all PPI volunteers are appropriately supported before, during and after their involvement activities. The PPI representative will be involved in all stages of the research process as a member of the study advisory group – specific activities to include:

- review of participant documents and potential topics to be explored in data collection;
- input on data collection and emerging themes mid-way through data collection and at the end of the data analysis;
- involvement in dissemination of findings at an end-of-study webinar event and other opportunities.

### **Potential impact of the study**

Findings about the education, training and preceptorship needs of new therapeutic radiographers developed through this study will be distilled into recommendations for the support of students towards the end of their pre-registration programmes and during the transition and preceptorship periods for registrants. A new registrant who is more prepared for the covid-19 environment will have a reduced risk of incongruence between their expectations and values and those of their workplace. Value congruence aids integration and group cohesion, especially when clinical teams have built relationships through working in ‘bubbles.’ Group cohesion is an important countermeasure to the withdrawal behaviours and intentions that underpin attrition. Attrition and staff turnover clearly impede the quality of radiography patient care and service delivery. The new registrants may also need additional support for their role in supervising and supporting the following students, who have in turn had their clinical placement learning/experience severely disrupted. Study findings will have particular relevance during the covid-19 period, when staff have reported mood and sleep disturbances, but areas such as resilience and flexibility of graduates in an unpredictable environment should have sustained impact.

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