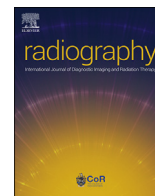




Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



An evaluation of the experiences of radiography students working on the temporary HCPC register during the COVID-19 pandemic



N. Cushen-Brewster, R.M. Strudwick*, C. Doolan, P. Driscoll–Evans

School of Health and Sports Sciences, University of Suffolk, Neptune Quay, Ipswich, IP4 1QJ, UK

ARTICLE INFO

Article history:

Received 14 December 2020

Received in revised form

17 February 2021

Accepted 14 March 2021

Available online 22 March 2021

Keywords:

COVID-19

Education

Student experiences

Pandemic

HCPC

ABSTRACT

Introduction: The COVID-19 pandemic has changed the world's perspective and had a profound impact on all those residing in the United Kingdom, resulting in unprecedented changes being made to the education and training of healthcare students. Universities and practice partners had to respond quickly and work in close collaboration with their wider system partners, Health Education England and the Department of Health, to ensure the changes made within the Health and Care Professions Council (HCPC) emergency measures were implemented.

The aim was to explore the experiences of final year diagnostic and therapeutic radiography students who joined the HCPC temporary register during phase one of the COVID-19 pandemic.

Methods: This study was informed by a phenomenological approach, in which a purposeful sample of seventeen participants comprising of nine students, six practice educators and two academics were chosen to participate. Semi-structured interviews and focus groups were conducted to collect the data via a virtual platform.

Results: The results highlighted three themes, professionalism and transition to registration, benefits and challenges of working through a pandemic, and emotional impact. Students described how they gained confidence and competence during their time on the temporary register and suggested that professional bodies could consider curriculum changes to encompass a final transitional placement similar to their experience. They said they had been well supported but felt a sense of loss having been denied the normal rite of passage associated with completion of their course and graduation.

Conclusion: The results provide insight into how students, practice educators and academics transformed their practice to meet the necessary requirements whilst working during the first phase of the COVID-19 pandemic. They highlight the importance of having good support mechanisms in place and the rewards and challenges for students joining their professional register early.

Implications for practice: Some consideration could be made to changing the curriculum in the future to allow for early temporary registration and paid Band 4 final placements for students working as assistant practitioners.

© 2021 The College of Radiographers. Published by Elsevier Ltd. All rights reserved.

Introduction

The COVID-19 global pandemic has changed the world's perspective and it has had a profound impact on all those living in the United Kingdom (UK), resulting in fundamental changes being made to the training of healthcare students. The most striking of these changes was the emergency measure implemented by the Health and Care Professions Council (HCPC)¹ and the Department

of Health,² which provided third year radiography students at the end of their course, but yet to graduate, with the opportunity of joining the temporary HCPC register.

Government representatives suggested that it was important to ask students to step up to support the NHS during the pandemic and clarified that final year students could be placed on a temporary HCPC register.² At the request of the government the HCPC actively engaged in discussions with other UK healthcare regulators, NHS representatives across the four countries, the Council of Deans for Health and others, to ensure their approach facilitated the NHS in recruiting the workforce it required at this time.¹

* Corresponding author.

E-mail address: r.strudwick@uos.ac.uk (R.M. Strudwick).

Universities were able to nominate final year students to be included on the HCPC temporary register who had completed all of their practice assessments and were deemed to be competent¹ but were yet to formally complete their programmes. These students then had the option to work as registered professionals under the HCPC Emergency Standards. This created many challenges for all those involved and required close collaborative working between HCPC, universities and practice partners. Student safety and welfare remained a high priority when nominating and supporting individuals to enter the temporary register.³

Traditionally, the practice placements of students prioritise their learning needs rather than operational needs, consequently students are not remunerated or considered as part of local workforce establishment. However, in response to COVID-19 pressures, the time students spent in practice had a different focus, they joined the temporary HCPC register, were employed and no longer experienced supernumerary status. Consequently, the students became accountable for the care which they were paid to deliver.

Universities and placement providers support students in practice with practice educators, mentors, link-lecturers, guided reflection and de-briefings. These enablers enhance student learning by helping them to draw meaning from events that happen in the practice environment. It also allows for the early identification and remediation of any problems or issues encountered in the practice setting. However, these models of support are designed to support students completing a supernumerary placement, during which they may experience reduced professional accountability.

Therefore, this evaluation explored the experiences of third year radiography students joining their temporary professional register where they were employed and accountable for the care they delivered during the COVID-19 pandemic.

Aim

The aim of the study was to explore the experiences of final year diagnostic and therapeutic radiography students who joined the HCPC temporary register during phase one of the COVID-19 pandemic

Methodology

Design

A phenomenological approach was used to inform the study's design to gain insight into the students' lived experience. The focus was to obtain detailed accounts from individuals about their perception of the phenomenon being investigated,⁴ therefore, data collection included semi-structured interviews and focus groups. The use of open-ended discourse facilitated the appearance of information relevant to the participants, helping to capture the described lived experience.⁵

Participants and data collection

The population to be studied was reasonably homogeneous and following ethical approval a purposive sample was chosen for this study. Seventeen participants were recruited, including nine radiography students (which represented 14% of the cohort), two academics and six practice educators (PEs), all of whom supported the new registrants during this time. The recruitment and consent processes are detailed in Fig. 1.

All the students participated in semi-structured interviews which were conducted using a schedule of nine questions and were based on the aims of the study, see Table 1.

The students' ages varied from 21 to 54 years. There were five females and four males, all of the students were of white British ethnicity. The demographic data for the participants is illustrated in Table 2.

The students were employed in regional acute teaching hospitals. Two academic staff participated in semi-structured interviews and six PEs participated in focus groups, with ages varying from 30 to 45 years.

The data were collected and recorded in September and October 2020, via Microsoft Teams due to the risk of face-to-face virus transmission. The data collected were rich and detailed, revealing several interesting themes, so to enable thorough discussion, only the student data are presented in this paper.

Data analysis was undertaken using the framework developed by the National Centre for Social Research (NCSR).⁶ All interviews were transcribed and to reduce bias and allow for member checking, all transcriptions were returned to the participants to ensure that they were a true record of the interview/focus group. Minor revisions of the transcripts were made as requested.

A thematic framework was established by revisiting the aim of the study whilst looking at the emergent issues and identifying any emerging themes. The interview and focus groups transcripts were annotated manually by each of the researchers independently. From this, a range of experiences for each theme were considered. The following overall themes emerged from this process:

- Professionalism and transition to registration
- Benefits and challenges of working through a pandemic
- Emotional impact

Ethical considerations

The study was conducted by upholding the principles of good clinical practice (GCP) and ethical approval was received from a local University's Ethics Committee. The researchers ensured that they upheld the domains of the Research Governance Framework,⁷ and adhered to the principles of the General Data Protection Regulations.⁸

Results

Following data analysis three main themes emerged: professionalism and transition to registration, benefits and challenges of working through a pandemic and emotional impact. Each of these themes were further deconstructed under emergent subheadings.

Theme 1: Professionalism and transition to registration

This theme encompasses the thoughts of the students about the rapid transition into a professional role where they had to take on accountability and responsibility. It will be discussed under three sub-themes: resilience, autonomy and readiness to practice.

Resilience

The students mentioned resilience several times when expressing how they coped with the challenges they faced in their

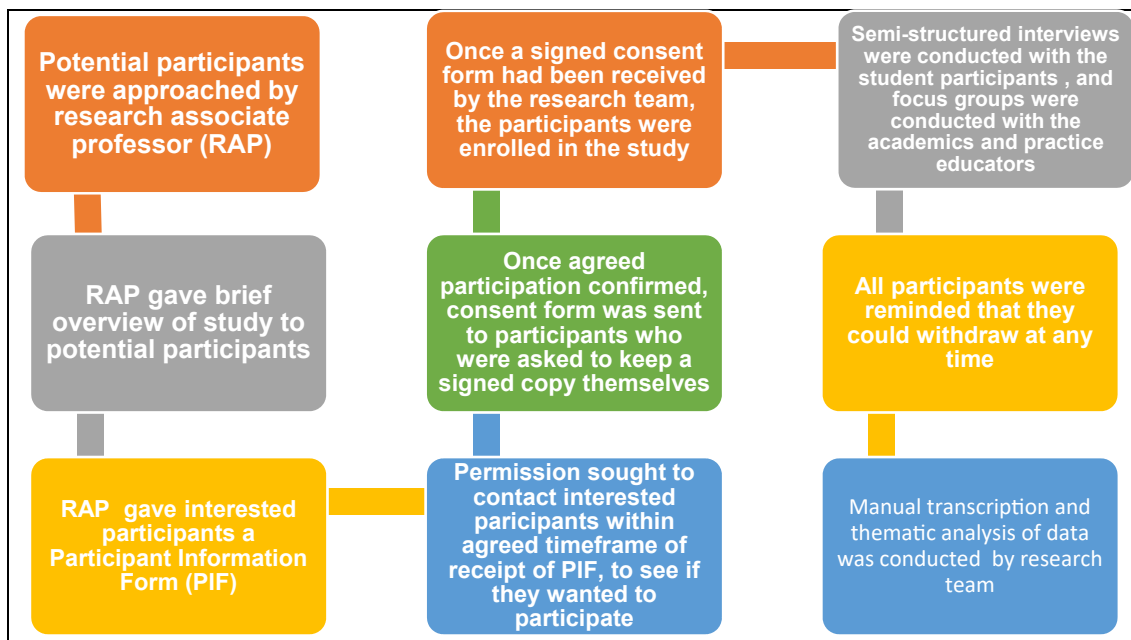


Figure 1. Flow chart of recruitment and consent process.

Table 1
Schedule of Questions for Semi-Structured interviews: Student Radiographers.

1. How has it been for you working on the HCPC temporary register?
2. How did you manage the challenges of student/employee status?
3. How supported did you feel during this time?
4. How did it feel having your educational degree status finished in advance of your initial expectations of your course?
5. How did it feel to be paid for this time?
6. How did you change/adapt to this exceptional environment during the COVID-19 placement?
7. What lessons have you learnt during this period of your training?
8. Did you feel that your contribution to the workforce made a difference in the delivery of care? If so, can you give some examples? If you feel that it did not, why not?
9. What else would you like to share about your experience/placement?

final placement. They described how they ‘were better prepared than they thought that they would be’.

“I think probably that we’re all pretty resilient, more resilient than you realise” (SR3).

“That’s the reality, I just stuck with it and got on with it” (SR6).

“Yes, I learnt about myself and how I coped, and that did help me. I never thought I could do things, but after a few weeks in this situation I realised that I could actually do this job, I am okay and will get through this” (SR9).

Table 2
Demographic and educational data of the student participants.

Number	Age	Course
SR1	30s	BSc (Hons) Radiotherapy & Oncology
SR2	50s	BSc (Hons) Diagnostic Radiography
SR3	20s	BSc (Hons) Diagnostic Radiography
SR4	30s	BSc (Hons) Diagnostic Radiography
SR5	50s	BSc (Hons) Diagnostic Radiography
SR6	20s	BSc (Hons) Diagnostic Radiography
SR7	20s	BSc (Hons) Diagnostic Radiography
SR8	20s	BSc (Hons) Diagnostic Radiography
SR9	20s	BSc (Hons) Diagnostic Radiography

Autonomy

Initially the students suggested they found having autonomy challenging at the beginning of their time as temporary registrants, but soon settled into the decision-making.

“That was quite hard, and I can remember walking from the in-patient area up to SCBU thinking that I don’t know if I can do this on my own and having that two-way conversation with myself ... thinking well of course you can do it, you’ll be fine” (SR5).

“A little bit daunting for the first two days, and then after that I kind of quickly forgot about how I had been before as a student because people just treated me as another member of the team and they had confidence in me” (SR2).

“It’s the increased autonomy and responsibility definitely, I think that’s the number one thing, yeah it was a bit tough, but I got through it” (SR6).

“It was really nice as I was able to do things, it was nice to be trusted to do things” (SR7).

Readiness to practice

The students realised that they were much more ready and well-equipped to practice than they realised.

“I definitely know a lot more than I thought I did. And I should definitely be more confident in my abilities because I do know what I am on about and I do know how to image and how to do the examinations” (SR4).

“I didn’t realise just how well I could handle difficult situations on my own. In the past I have always had someone else there when I was a student. I have realised just how much I do actually know and what I have learnt during this time” (SR7).

The students described how this change to the composition of the course enforced by the pandemic had helped to prepare them to become confident registrants. They suggested that changing the curriculum in the future to allow for the transition to Band 4 assistant practitioners (APs) for final placements for students.

"It felt strange first of all because we started as APs and I felt that was a good thing personally for me because it felt like we got a bit more experience before going to be a full radiographer and having all the responsibilities of a radiographer straight away" (SR4).

"I think starting early was good. I liked the idea of starting work early while I was still studying, I don't know why, I just really liked it" (SR7).

"We started as APs (band 4) and it was a very good transition. It is that little step up without being thrown in at the deep end" (SR8).

Theme 2: Benefits and challenges of working through a pandemic in an acute health care setting

This category presents the challenges and opportunities that the students experienced whilst working through the pandemic. It will be discussed under five sub-themes: teamwork, enhanced personal and professional support, rapidly changing environment and being paid.

Teamwork

Participants described how they enjoyed working with colleagues, being welcomed as part of the team and becoming 'one of them'. They enjoyed the gratitude of colleagues and were keen to contribute. They also found that camaraderie existed across the multi-disciplinary team, with sharing of knowledge and ideas and a strong sense of being 'in it together'.

"There was a really big feeling that we were all in this together and supporting each other. I would just grab an apron / PPE and say "right, do you need a hand?" and people would just go "oh yes that would be great" and you just got on with it" (SR2).

"I have had a lot of thanks from patients and staff for starting early and I do feel like I have helped. I felt like I could help when I was able to go off and do things on my own, like going to theatres and when it was manic in the department I could offer to go and do things on my own. I felt like I was part of the team then" (SR7).

"I think me and the other student starting, was a very positive thing for all the staff and this was echoed in my appraisal with my manager, who said I was an asset to the team and that was really humbling to hear that" (SR6).

Enhanced personal and professional support

Participants described the positive support that they received from radiographers and managers.

"What I found is that when we came back from resus and staff would say, how was it, and this allowed us the opportunity to talk about what we had done and seen, we all had that shared experience to be able to talk about it afterwards. It was actually quite therapeutic in a way" (SR2).

"I think I couldn't have asked for better, everyone was really good. There was a really big feeling that we were all in this together and supporting each other" (SR3).

The participants identified that they were encouraged to ask questions and seek guidance:

"If I did run in to any problems, I would just ask for help, it was quite a nice environment to work in" (SR6).

"Where I was working was good as they started us off on a preceptorship programme. So, they made sure we had booklets to fill in, we had to know all of the equipment and how to use everything. We had people checking up on us to make sure that we were comfortable doing what we were doing" (SR9).

"Very well supported. There couldn't have been any more that anyone could have done. My line manager is brilliant, she's a great radiographer and a great manager and if it's not her, there were other people I could approach" (SR3).

Rapidly changing environment/PPE

The participants talked about how everything was changing on a regular basis and how they had to keep up with this as well as the challenges of wearing full PPE.

"You have to keep looking at your emails because you're getting constant updates and what happens on Tuesday is old news on Friday, so just keeping up to date with what's going on" (SR3).

"It was [difficult]. I had heard of people being in there for 2 or 3 hours in the kit, that was hard. You very quickly got very hot, we joked that we probably lost a couple of stone just sweating it out! Didn't need to go to the gym! We just got very used to it" (SR2).

Being paid

Participants discussed the benefits of being paid during this time, and although this was welcomed, it was not a motivating factor for taking up the opportunity to join the temporary register.

"It was nice to be getting that financial recognition for what you were doing. I wouldn't say it was what drove me when they said do you want to come in and start work, it wasn't my first thought; my first thought was what can I do to get in and help, the pay was a bonus" (SR2).

"It was a bonus because we weren't expecting a wage until what, well August would have probably been the first time we would have got a wage. We managed to get one in June so that was good! It was nice to be able to have a wage again, yeh it was great" (SR8).

Theme 3: Emotional impact

This theme explores some of the emotions faced by the students during this time and encompasses two sub-themes: emotions when faced with COVID-19 positive patients and also the sense of loss of the student's usual end of course 'rites of passage'.

Emotions when faced with COVID-19 positive patients

Some of the participants described the emotional impact of working with a large number of critically ill patients, however this was balanced by an excellent level of support from both colleagues and managers.

"We were dealing with some pretty poorly patients and that brought its own challenges. The first time I went to do some chest X-rays in resus with the most poorly patients, that's when it hit me – what we were dealing with ... that was when it came home to me. I

came home to my other half and said – I have stared it in the face today and it does scare me a bit. It made it real” (SR2).

Some participants described ways that they found for coping when caring for critically ill patients:

“I wanted them to feel like it was almost family that was treating them, rather than strangers that don’t really care. I found that having that in my head really made me feel better, that I’d done the best for them that I could” (SR5).

Loss

Participants described how losing their student status before they had completed their course really had an impact on them.

“I was pretty gutted about that; I enjoy studying and I was hoping to come to the library and look at a few more things. I miss studying. I went to the library at the organisation and spending time in there helped me” (SR2).

“I was gutted, and I know that you couldn’t help it. I was gutted, not that it was a lot less, but I really wanted to have the full experience as a student” (SR7).

“It was a good to gain additional experience prior to applying for work but I was very disappointed when we were asked to leave placement as a student” (SR1).

They described how not been able to graduate or have a proper presentation at the end of their course left them feeling very disappointed.

“It did feel a bit abrupt -the end of our student status, it was all the things we were hoping – we would have our final exams, we’d have a little break, we’d qualify, we’d have our badge presentation, and then obviously graduation, it’s a rite of passage” (SR2).

“We know we’ve qualified, we’ve had the results but it almost doesn’t feel real because we haven’t gone through the same process that every other year group has gone through, it felt like a bit of a let-down after the 3 years of studying, you didn’t get to celebrate the way that you’d like to” (SR7).

Discussion

The main aim of this study was to gain a greater understanding of radiography students’ experience of joining the temporary professional register during the COVID-19 pandemic. The NHS People Plan² emphasises the need for everybody to acknowledge the impact of working in stressful environments and suggests that a coordinated approach needs to be adapted to improve the support for individual’s clinical experience to caring for their health and well-being. The findings from this small-scale study suggest that students very much appreciated the support received from both the NHS Trusts and the University and that this enabled them to develop in confidence and competence, facilitating their transition to practitioner status.

The students had a rapid transition into a professional role as being on the register meant that they were working as an autonomous radiographic practitioner where they had to take on accountability and responsibility.⁹ Their overall feelings were of initial apprehension at being registered early, and participants used the words ‘daunting’ and ‘scary’ relating to working on their own for the first time or being faced with a challenge where they had to

make a decision. This anxiety dissipated quite quickly once they realised that they were competent and were able to perform the clinical tasks requested of them.¹⁰ They said they understood the responsibility they had towards users of their services and the individual responsibility which required them to abide by current legislation and healthcare policy.⁹

The emotional impact of caring for seriously ill patients for the first time was described by some of the new registrants as ‘terrifying’, however, they said the support they received from their colleagues enabled them to ‘debrief’ and cope with the situation. These trends in levels of psychological distress and factors such as exposure to infected people and psychological assistance needed for staff was also identified in a study conducted in China where the pandemic first started. The findings from their study emphasize the importance of being prepared to support frontline workers through mental health interventions at times of widespread crisis.¹¹

Participants described how losing their student status before they had completed their course had an impact on them. They felt disappointed not to be able to experience the normal process such as end of year presentations and their graduation that previous students experienced. They described these as ‘a rite of passage’ and ‘a great loss’ in which they experienced a series of emotions that occurred in different stages as they eventually came to terms with them. However, these feelings are not unusual as what they described echoed elements of the grieving process which is well documented as to how people generally deal with death, loss and grief.¹²

Despite the challenges surrounding their new registration/employee status, there was consensus that remuneration during this period of time had many benefits but was not their main focus. They suggested having greater integration within clinical teams, increased ownership of practice which comes from being fully engaged in one’s work and feeling a sense of pride in one’s profession¹³ was more important. In addition, the new registrants felt empowered and respected for their contribution, demonstrated greater motivation to deliver high quality care, as well as feeling more confident in their roles. They articulated what is described in the literature as ‘spheres of influence’ intrinsic, essential structures in which having knowledge and confidence are at the core.¹⁴

However, several of the new registrants suggested the emergency changes made to their curriculum really helped them to prepare to become confident practitioners and suggested changing the curriculum in the future during times when there is not an emergency situation to allow for early temporary registration and paid Band 4 final placements for students working as assistant practitioners. They suggested that working as Band 4 APs increased their levels of accountability and responsibility for the delivery of care.

Conclusion

This study explored the experiences of final year radiography students who joined the temporary HCPC register during the COVID-19 pandemic, as well as exploring their impact on the delivery of care in the clinical environment. It is acknowledged that there was a small sample size for this study and this therefore limits the conclusions that can be drawn from the study. It is also acknowledged that the experiences described were gained during a global pandemic and a national healthcare emergency and so this limits extrapolation to non-emergency situations.

The findings suggest that although the students were initially daunted by their employee status on the temporary register, the support of colleagues and managers enabled them to quickly become part of the team and they felt that their contributions had been meaningful and appreciated. Students had also appreciated

the emotional support and camaraderie of colleagues, who provided opportunities for debriefing and sharing of experiences.

Students articulated that the experience had enabled them to develop a greater awareness of their competence and how this had given them the confidence to embrace the autonomy and accountability required of them. Although adjusting to the constant use of PPE had been uncomfortable, and students had regretted the loss of the expected rituals of completion. Overall, they had found the experience of working on the temporary register to be positive. Many students explained that they had benefited from the opportunity to consolidate their practice provided by the emergency changes made to their curriculum and that they would recommend that these changes are embedded in future curricula to facilitate the transition of future students to registration.

Conflict of interest statement

None.

References

- Health Care Professions Council. *Communicating during the COVID-19 pandemic*. 2020. Available at: <https://www.hcpc-uk.org/covid-19/advice/applying-our-standards/communicating-during-the-covid-19-pandemic/>. [Accessed 17 November 2020].
- Department of Health (DH). *We are the NHS: People Plan for 2020/2021- action for us all*. London: DH; 2020.
- Lapworth S. *What students are telling us about learning during lockdown*. 2020. <https://www.officeforstudents.org.uk/news-blog-and-events/blog/what-students-are-telling-us-about-learning-during-lockdown/>. [Accessed 14 November 2020].
- Bryman A. *Social Research methods*. 4th ed. Oxford: Oxford University Press; 2015.
- Ingham-Broomfield R. A nurse's guide to qualitative research. *Aust J Adv Nurs* 2015;32(30):34–40 [online].
- Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In: Huberman A, editor. (2002) *the qualitative research companion*. Thousand Oaks: Sage; 2002.
- UK Policy Framework for Health and Social Care Research. 2020. Available at: https://s3.eu-west-2.amazonaws.com/www.hra.nhs.uk/media/documents/Final_Accessibility_uk-policy-framework-health-social-care-research.pdf. [Accessed 8 December 2020].
- General Data Protection Regulations. Available at: <https://gdpr-info.eu/>, 2018. [Accessed 14 November 2020].
- Society and College of Radiographers (SCoR). *Code of conduct and ethics*. 2020. <https://www.sor.org/learning/document-library/code-conduct-and-ethics/1-scope-professional-practice>. [Accessed 17 November 2020].
- Tyne S. *Critical thinking and clinical judgment in novice registered nurses*. 2018. Available at: <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=6101&context=dissertations>. [Accessed 14 November 2020].
- Kang L, Ma S, Chen M, Yang J, Wang Y, Li R, et al. *Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: a cross-sectional study*. 2020. Available at: The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus - PubMed (nih.gov), . [Accessed 27 November 2020].
- Kübler Ross E. *The Kübler Ross model for the 5 stages of grief*. 2018. <https://exploringyourmind.com/kubler-ross-model-5-stages-of-grief/>. [Accessed 17 November 2020].
- Sherman R. *Promoting professional accountability and ownership*. 2019. Available at: Promoting Professional accountability and ownership - American Nurse (myamericannurse.com), . [Accessed 27 November 2020].
- Bradbury-Jones C, Irvine F, Sambrook S. *Empowerment of Nursing Students in clinical practice: spheres of influence*. Wiley Online Library; 2010. Available at: Empowerment of nursing students in clinical practice: spheres of influence - Bradbury-Jones - 2010 - Journal of Advanced Nursing, . [Accessed 27 November 2020].