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***‘A fascinating time to be involved with research’ Exploring the impact of COVID-19 on postgraduate psycho-oncology researchers***

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On behalf of the British Psychosocial Oncology Society Executive Committee.

**Keywords:** cancer, COVID-19, PGR, postgraduate researcher, psycho-oncology, qualitative research, survey methodology, United Kingdom

**Key points**

- To explore UK postgraduate researcher (PGRs) COVID-19 experiences, the British Psychosocial Oncology Society (BPOS) conducted an online survey.
- 23 respondents' qualitative data were analysed thematically and summarised using the strengths, weaknesses, opportunities, and threats (SWOT) framework.
- COVID-19 offered opportunities to develop online skills, resilience, and adaptability, whilst opening wellbeing conversations.

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version of Record](#). Please cite this article as [doi: 10.1002/pon.5885](#).

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- PGRs reported practical difficulties, social isolation, unhealthy work/life balance and concerns about future careers.
- PGRs have had an unprecedented and continually evolving experience; BPOS and relevant institutions must continue to provide adequate support and development opportunities to safeguard their futures.

## Introduction

In its capacity to develop and support future researchers, the Executive Committee of the British Psychosocial Oncology Society (BPOS) was prompted to survey the impact of the COVID-19 pandemic upon UK post-graduate students **undertaking psychological, behavioural, social science or applied research degrees. Such students commonly undertake their studies independently, with supporting institutions organising supervision. The impact of COVID-19 has been explored from the perspective of medical students, but not necessarily allied research roles [1].** This survey complemented our UK professionals' study [2] and builds upon contemporaneous research such as the National Postgraduate Research Experience Survey (NPRES) 2021 [3], providing context-specific data.

## Aims of the study

To explore the views of psycho-oncology post-graduate research students (PGRs) regarding the impact of the COVID-19 pandemic on learning and research.

## Method

### Design

A cross-sectional qualitative survey.

### Materials

An online survey of UK psycho-oncology PGRs administered via QUALTRICS from December 2020–February 2021, during the second UK 'lockdown'. The survey included demographic and open response questions (Figure 1).

### Participants

Students **of mixed oncology disciplines** undertaking psychological, behavioural, social science or applied post-graduate research degrees (e.g., PhD, MRes, DPhil).

### Procedure

The survey was advertised through the BPOS membership (**students n=19**) and wider email/social media networks.

## Ethics

Ethical approval was received from Leeds Beckett University (REC reference: 84470).

## Data analysis

Data were analysed thematically [4] by four authors (LK, SM, KA & SA). Extracted codes were grouped into over-arching and sub-themes. The SWOT framework [5] was used to organise sub-themes into events that had occurred (strengths and weaknesses) or were anticipated (opportunities and threats).

## Results and study sample demographics

23 PGRs provided sufficient data for analysis **following 30 responses to the survey** (Table 1).

## Survey findings

The overarching themes 'Changes to research context and methods' and 'PGR experience and development' are described below. Appendix A shows the sub-themes.

### Theme 1: Changes to research context and methods

**Strengths and Opportunities:** PGRs recognised the unique opportunity COVID-19 provided for understanding patient experiences and adapting research methods:

*'...it has been a fascinating time to be involved with research, seeing the impact of COVID in the clinical setting and observing the fast pace of research in the midst of so many challenges.'*

Students viewed adjusted research methods, principally the adoption of online interviewing **positively and** accepted its' **future** continued use **to increase recruitment and interventions, with scale and cost benefits**. They also recognised that online research could be beneficial for isolated **patients to gather regularly, virtually during lockdown**. The skills acquired through the rapid adaptations positively encouraged some PGRs' awareness of their potential:

*'I believe PGRs like myself, while it may have felt overwhelming, should pride themselves in a sense of mastery - we survived the worst of it and continue to prove our resilience and adaptability...'*

**Weaknesses and Threats:** Research settings (e.g., care homes) or methodologies (e.g., ethnography) meant active or planned studies had to be redesigned. Changes to service delivery (clinics/pathways/practice) increased pressures upon potential healthcare collaborators and participants, resulting in slow progress. Timelines were extended to negotiate practical issues causing considerable worry **about meeting course deadlines:**

*'The next phase of my project is delayed due to the site research and development office not accepting new study applications due to capacity issues...'*

Although most survey respondents were not self-funded, delays **also** caused financial uncertainty:

*'I suspect I will have to focus on a new setting and methodology. This essentially means starting my PhD again. I don't know how this will affect my funding.'*

**PGRs working clinically, part-time were required to suspend their research studies to dedicate more time to their clinical role.** For those continuing with clinically based research, novel emotional challenges were encountered around face-to-face contact with the at-risk cancer population:

*'I was very anxious to be in such close contact with extremely vulnerable patients for fear of passing COVID to them...'*

Remote recruitment and data collection, reduced opportunities for PGRs to gain experience of in-person contact with patients and healthcare professionals, creating practical challenges and influencing collaboration possibilities. There was concern about the impact of COVID-19 on data quality **due to interviews not being face to face or from reduced recruitment:**

*'The research question will only be partially answered by a small cohort of patients, so I feel the project will suffer as a result'*

## **Theme 2: PGR experience and development**

**Strengths and opportunities:** COVID-19 led to changed perspectives and priorities. The circumstances heightened the desire for a research career for some, building resilience, new skills, and adaptability:

*'I think that this whole situation has made me more keen to pursue a career in research as my PhD work has probably saved me over the past year....Although the research is really challenging it has helped me to see that this is what I really love doing.'*

COVID-19 emphasised the importance of wellbeing, work/life balance and resources that should be available.

In general, overwhelming praise was expressed for institutions and supervision teams:

*'[Supervisors] have been very encouraging and reassuring when I have felt that I am falling behind. We had a very good training session about online research strategies which helped a lot.'*

**Weaknesses and threats:** Concerns around COVID-19 were apparent, as was difficulty negotiating lockdowns, **unique challenges including lack of working space or resources (technology/equipment), and the erosion of boundaries for home working/schooling.**

Many PGRs had clinical, charity or teaching roles, which increased workload pressure:

*'...Study leave has been cancelled. Annual leave which I had saved for study has had to be used to cover childcare.'*

Many felt a sense of isolation, missing both learning experiences and social support; although often available online, face-to-face was preferred:

*'I feel I have missed out on the social support and the ability to ask the smaller, procedural and 'get started' questions that I would have been able to ask in an office setting.'*

This was further impacted by reduced **conference and general** networking opportunities, an important aspect of career development.

For some, the consequence of so many life adjustments reduced productivity, motivation and impacted psychological health:

*'I experienced burnout while attempting to push through the psychological impact of the pandemic and deadlines of the PhD.....it is difficult to return to the pre-pandemic levels of motivation and focus.'*

The uncertain landscape posed a threat to future career prospects and ambitions:

*'I feel so unsure of myself and it is really impacting the decisions for what I should do next when I was so sure before. I hope my confidence comes back gradually. I am worried about future jobs...'*

### **Strengths and limitations of study**

Motivation to participate may have included polarized experiences which could bias findings. Also, retrospective accounts may not convey the uncertainty surrounding how long COVID-19 and the restrictions would last, which made forecasting and planning at the time very difficult.

**Future studies could involve global postgraduates as there are likely to be similarities and differences in the impact of COVID-19.**

**Extensions of this study could utilise a theory-based analysis, with the ultimate goal of understanding postgraduates' support needs further.**

### **Conclusion**

COVID-19 significantly impacted psycho-oncology PGRs during an already demanding programme of study. Nevertheless, there was overwhelming expression of appreciation for the support offered by supervisory teams and institutions and PGRs have shown discipline, adaptability, and resilience. However, threats to future research careers included reduced networking and fears around availability of opportunities **for professional development, echoing wider research [3]. In addition, only 63% of respondents to the NPRE survey agreed their well-being support needs (a new criterion for the 2021 survey) were met, whilst the mentality of being depressed, stressed and anxious was considered normal. Whilst many institutions have general support in place (extension processes and remote support), ongoing development and wellbeing support will be required to safeguard the future for a cohort of PGRs whose introduction to a research career has been a time of unprecedented challenge. Organisations who support PGR communities, such as BPOS, should continue to monitor and respond to the changing COVID-19 landscape. This survey illustrates that further exploration of PGRs' support needs is required to inform the**

development of theory driven interventions to support postgraduates in a wider context.

### **Acknowledgements**

We thank the survey respondents for participating, and colleagues who assisted in the direction and progress of the study.

### **Data Availability Statement**

The supporting data are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

## Figures and Tables

Figure 1: Survey questions

### **Multiple choice demographic questions**

1. In what region of the UK is your academic institution located?
2. What type of research degree are you currently working towards?
3. Are you completing this degree full-time or part-time?
4. Is your research degree self-funded, funded by your institution, externally funded or otherwise? (A free text option given for details of funding arrangements and/or extensions caused by the COVID-19 pandemic)
5. What year of study are you currently in?
6. Are you completing the degree alongside another role?
7. What is your research area/topic? (Free text, with option not to answer)

### **Open text questions:**

- 1. How has the COVID-19 pandemic impacted your research/student experience?  
Please describe:**

- a. any challenges, changes or issues caused by the COVID-19 pandemic to your research (e.g., research area, recruitment, methodology, timelines etc)
- b. how these challenges/changes/issues have been addressed

- 2. Please tell us about any positive changes to your research as a result of the COVID-19 pandemic (e.g., positive changes to research plans, methodology, use of technology, working with participants and collaborators, personal working arrangements etc).**

- 3. Please tell us about any personal changes you have made to adapt to the research/student experience during the COVID-19 pandemic (e.g. managing caring responsibilities, work-life balance, finances, remote working)**

- 4. Thinking about the research support, training, or supervision you have received during the COVID-19 pandemic:**

- a. what support, advice or training has been provided by your academic institution or supervisory team?
- b. what other types of support/training/supervision would you like to have received?

- 5. Please tell us about any long-term impact the COVID-19 pandemic may have on your research, student experience or future career plans**

- 6. Please use the box below to share any further information or views about your research or student experience during the COVID-19 pandemic**



**Table 1: Demographic data**

<b>Region:</b>	<b>n. 23</b>
East Midlands	1
Northeast	1
Northern Ireland	2
London	4
Scotland	1
Southeast	2
Southwest	4
West Midlands	1
Yorkshire and Humber	7
<b>Level of study:</b>	<b>n. 23</b>
PhD	18
Other	5
<b>Study time:</b>	<b>n. 23</b>
Full time	12
Part time	11
<b>Additional role:</b>	<b>n. 14</b>
AHP	4
Nurse	2
Medic	2
Counselling	2
Teaching/Academic	3
Charity / Finance	1
<b>Year of study</b>	<b>n. 23</b>
1 <sup>st</sup>	4
2 <sup>nd</sup>	6
3 <sup>rd</sup>	4
4 <sup>th</sup>	8
5 <sup>th</sup>	1
<b>Funding:</b>	<b>n. 20</b>
Self (full or part)	4
External (full or part)	9
Charity (part)	2
University (full)	5

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## Appendices

### Appendix A: Summary of SWOT

Strengths	Weaknesses	Opportunities	Threats
<b>Theme 1: Changes to research context and methods</b>			
<ul style="list-style-type: none"> <li>• research interviews conducted during COVID-19 could enable the experiences of both it and cancer to be captured.</li> <li>• online research was convenient, used fewer resources could facilitate wider recruitment and PPI.</li> <li>• the accessibility of online research could reduce isolation for participants.</li> </ul>	<ul style="list-style-type: none"> <li>• service delivery changes increased pressures on potential HCP collaborators and gatekeepers and participants and slowed study progress. Could mean a whole study replan.</li> <li>• research timelines extended as other research was prioritised and by ethical amendments. Increased personal and professional responsibilities also increased delays and hence worries.</li> <li>• face to face data collection within the vulnerable cancer population carried emotional challenges.</li> <li>• remote research reduced student clinical experiences and presented practical challenges.</li> </ul>	<ul style="list-style-type: none"> <li>• witnessing the ability of research to rapidly adapt to enforced change created interest in future research.</li> <li>• recognition that research skills gained will be useful in the future.</li> <li>• there was interest in seeing the impact of the pandemic in data which could be richer and more complex if reflective of COVID-19 experiences.</li> <li>• the use of online data collection is likely to continue post COVID-19 as what is possible has now been shown and can enable wider collaboration and recruitment.</li> </ul>	<ul style="list-style-type: none"> <li>• fear surrounding extended timelines.</li> <li>• uncertainty around funding.</li> <li>• questioning of validity of data collected prior to COVID-19.</li> <li>• concern about reduced quality or content of data.</li> </ul>
<b>Theme 2: PGR experience and development</b>			
<ul style="list-style-type: none"> <li>• COVID-19 added perspective to research degree</li> </ul>	<ul style="list-style-type: none"> <li>• difficulties balancing academic duties, increased</li> </ul>	<ul style="list-style-type: none"> <li>• COVID-19 has allowed researchers to build resilience</li> </ul>	<ul style="list-style-type: none"> <li>• fear and uncertainty around available career</li> </ul>

<p>concerns and allowed priorities to be reconsidered.</p> <ul style="list-style-type: none"><li>• experiences throughout COVID-19 have confirmed desire for research career, research could sometimes even offer respite.</li><li>• working from home/online offered good work/life balance opportunities, allowing more time for skill development and alternate priorities.</li><li>• there has been good online support provided from institutions and supervision teams.</li></ul>	<p>workload and home life alongside fear and anxiety caused by COVID-19.</p> <ul style="list-style-type: none"><li>• restricted access to necessary working space, resources and technical support.</li><li>• missing out on face-to-face student experience and social support. Online support, learning and networking are not as beneficial as face to face.</li><li>• difficulty adjusting to working from home impacting confidence, motivation and productivity.</li></ul>	<p>and novel skills useful for future remote research.</p> <ul style="list-style-type: none"><li>• working from home has become the norm and may continue in the future.</li><li>• COVID-19 has shed light on support which could have been provided from institutions, and emphasised importance of wellbeing and work/life balance.</li></ul>	<p>prospects in the future.</p> <ul style="list-style-type: none"><li>• reduced networking with others may have an impact on future career prospects.</li></ul>
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