

## **CoRIPS RESEARCH AWARDS OCTOBER 2020**

**Dr Sarah Naylor**

**CoRIPS Research Grant 191 (Covid)**  
**£9,147.38 Awarded**

### **Title of Project**

Exploring Diagnostic Radiographers' experiences through the Covid 19 pandemic

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

This project will explore the experiences of diagnostic radiographers working in clinical practice throughout the Covid 19 pandemic. The participants will be qualified radiographers working at different levels within the NHS. The radiographers will take part in focus groups carried out using a remote platform. Six to ten participants will be invited to take part in each focus group. The focus group will be facilitated by two members of the project team. A series of open questions will be used to guide the focus group discussion. Data collection via focus groups will be followed up by eight semi-structured interviews to gain insight into individual stories.

The findings of the project will contribute to the current body of knowledge on the working practices of diagnostic radiographers. In these unprecedented times adaptations are being continually made to the working practices of diagnostic radiographers in the clinical environment. This project will explore these experiences and identify any learning and development needs moving forward into the future.

The results will be disseminated using a variety of methods including conference presentations and publication in a peer-reviewed journal.

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

#### **Aim**

The aim of the study is to explore the clinical experiences of diagnostic radiographers during the Covid-19 pandemic.

#### **Primary Research question**

What were the experiences of Diagnostic Radiographers working in clinical practice during the Covid-19 pandemic?

#### **Secondary research question**

What support, education or training would facilitate effective working practice?

#### **Outcomes**

Strategies will be suggested to be used by diagnostic radiographers in the future  
Guidance will be suggested on how to support, educate and train diagnostic radiographers working through a pandemic

## **Review of the literature**

In December 31 of 2019 the World Health Organisation was notified regarding cases of pneumonia with unknown aetiology in Wuhan City. A rapid global spread of the disease led to the declaration of a pandemic known as Covid 19. There was much uncertainty around the nature and spread of the virus leading to concern about the impact on the health service. A multinational study exploring the physiological outcomes and associated physical symptoms among healthcare workers during the Covid 19 outbreak found that headaches was a most commonly reported symptom, suggesting this is associated with personal protective equipment (PPE) (Chew et al. 2020). Migraines were also reported, possibly related to increased adverse psychological experiences. There were also reports of lethargy and fatigue. They recommend timely psychological support and interventions for health care workers (Chew et al. 2020). A UK based study exploring the challenges faced by frontline workers in health and social care amid the pandemic using interviews as a method of data collection found a lack of preparedness for the pandemic with no clear strategic policy (Nyashanu et al. 2020). Participants expressed a severe shortage of PPE, feelings of anxiety and fear, challenges of enforcing social distancing, and social shielding responsibility for family members (Nyashanu et al. 2020). A viewpoint from a doctor in Chicago was that hospital personnel will be stressed by the challenges of a prolonged response to the pandemic and emphasises the importance of self-care, ensuring workers get adequate rest and are able to attend to personal needs such as the care of a family member (Adams and Walls, 2020). A recent article in the BMJ suggests health workers dealing with the current situation may experience moral injury or mental health problems (Greenberg et al., 2020). Moral injury can occur when exposed to trauma that a person feels unprepared for, stressing the need for preparing and supporting staff for encountering moral dilemmas they may face during the pandemic. They also raise the issue of after-care once the crisis is over, and the need for supervision (Greenberg et al., 2020). The Society of Radiographers (2020) recognise the need to support the well-being emotional and mental health of radiographers, recognising that with the increased demands on imaging services people may experience significant stress and anxiety. Despite these challenges an editorial in the Lancet identified that health co-workers have shown an incredible commitment and have demonstrated compassion in these challenging and dangerous conditions (Lancet, 2020).

## **Methodology**

The overarching approach to this research is phenomenology. Interpretive Phenomenological Analysis (IPA) is concerned with a detailed examination of an individual lived experience and how they make sense of that experience (Smith and Shinebourne 2012; Willig 2017). This study will be exploring the lived experience of diagnostic radiographers working clinically during the Covid 19 pandemic. The ideographic nature of IPA means that it will involve a small number of participants focussing on each case in great detail (Smith and Shinebourne 2012). In being ideographic IPA focuses on understanding the meaning of an individual experience. It is thought that by probing deeply into participant's accounts general themes that are common to others can be illuminated or affirmed (Willig 2017). In keeping with this qualitative methodology, focus groups will be used as the primary source of data collection. These will be semi-structured with use of an interview guide. Findings from the focus groups will be used to inform an interview guide for eight semi-structured interviews using participants drawn from the focus groups.

For convenience three separate focus groups will be held at different times to maximise participation. Focus groups and interviews will be held virtually via an on-line platform and recorded. A homogenous group of diagnostic radiographers will facilitate rich discussion, reducing any hierarchical issues that may present with a mixed group. Facilitation of the focus group will keep any hierarchical issues to a minimum and the practice of reflexivity will ensure that any potential influence is acknowledged.

Data collected will be transcribed verbatim and analysed using IPA. The important factors to consider when undertaking the analysis include double hermeneutics, reflexivity, immersion in the data and the balance of emic and etic positions. The interpretive process must be grounded in the participant's

account of the experience in their own words (Eatough and Smith 2008). Stages of analysis will include initial review to look for patterns, or themes. These emerging common issues will then be discussed in order to interpret the data and explore meaning (Liamputtong, 2010).

This reflective process aims to reduce the influence of the researcher and maximised the validity of the findings.

In order to establish the credibility of this study, different strategies will be utilised, including member checking, peer-review, reflexivity and by providing a rich description of the participants accounts in the write up (Green and Thorogood, 2018).

Purposive sampling will be utilised. The target is for six to ten participants per focus group followed up by eight individual interviews. Diagnostic radiographers will be contacted via the professional body network. There will be no coercion and participants will be provided with an information sheet electronically to inform their decision to participate or not

### **Ethical Considerations**

Ethical approval will be sought from the University of Derby ethics committee. This project will not require NHS ethical approval.

Informed consent will be obtained from all participants in the study. A Participant Information Sheet will be provided before the focus group or interview is held, which will explain the background to the study, and the reason that it is being undertaken. The information sheet will clearly state what participants will be doing (participating in a virtual focus group or interview) and draw attention to anything they may object to. The information sheet will also address the issues of confidentiality, withdrawal and debriefing. Once participants have read the information sheet they will be asked to verbally indicate before the start of data collection that they have consented to participate and stating that they are happy to participate in the research project.

This study will not be using a deceptive or covert approach. All participants will be informed of the rationale behind the study.

Extensive debriefing should not be necessary for this study, as there will not be any deceptive/covert research methods used. Participants will be told that in the event of any issues being raised by the research, they can be counselled on a one to one basis by the lead researcher. To enable this, participants will be provided with the lead researchers contact details. All participants will be thanked for their time and informed of the planned output from the study

All participants will be informed of their right to withdraw in the Participant Information Sheet. Participants may withdraw at any point until data collection, without giving any reason. However, once the focus group has commenced, they will not be able to withdraw their responses, as they will be integrated and may have influenced other responses, and so it will not be possible to identify individual respondents.

The study will comply with the General Data Protection Act 2018, Freedom of Information Act. The confidentiality of participants will be ensured. Pseudonyms will be used in any write up and publications of the findings. Individual workplaces will not be identified.

### **Patient and Public Involvement**

This proposal has been reviewed by public governors from one NHS trust who consider the project to be valid. As this project is focussing on diagnostic radiographers working clinically, Sarah Booth, who has been working clinically through the pandemic has been invited to join the research team. Below is some of the feedback received.

*“I think this is an excellent subject area regards a submission for funding. With the impact of covid 19 on how the clinical workforce has had to adapt there is great opportunity to both reflect on and plan*

for new ways of working taking into consideration the learning that will come out of the proposed focus groups. All of which contributes to improving and enhancing patient care as well as further developing the roles of clinicians for the future.

From a public perspective this proposal demonstrates a clear example of how the NHS can fully utilise the knowledge, skills and experience of clinicians by drawing on the learning and ability to develop the potential for new ways of working.”

### **Potential Impact**

The findings, highlighting the experiences of diagnostic radiographers will raise issues that may need addressing regarding training, education or support mechanisms for the present or in preparation for the future. This information will be valuable to the radiographers, managers and education providers.

### **1. References:**

Adams, J.G. and Walls, R.M., 2020. Supporting the health care workforce during the COVID-19 global epidemic. *Jama*, 323(15), pp.1439-1440.

Chew, N.W., Lee, G.K., Tan, B.Y., Jing, M., Goh, Y., Ngiam, N.J., Yeo, L.L., Ahmad, A., Khan, F.A., Shanmugam, G.N. and Sharma, A.K., 2020. A multinational, multicentre study on the psychological outcomes and associated physical symptoms amongst healthcare workers during COVID-19 outbreak. *Brain, behavior, and immunity*.

Eatough, V. and Smith, J.A., 2008. Interpretative phenomenological analysis. *The Sage handbook of qualitative research in psychology*, 179, p.194.

Green, J. and Thorogood, N., 2018. *Qualitative methods for health research*. sage

Greenberg, N., Docherty, M., Gnanapragasam, S. and Wessely, S., 2020. Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *bmj*, 368.

Lancet, T., 2020. COVID-19: learning from experience. *Lancet (London, England)*, 395(10229), p.1011.

Liamputtong, P., 2010. *Research methods in health: foundations for evidence-based practice*.

Nyashanu, M., Pfende, F. and Ekpenyong, M., 2020. Exploring the challenges faced by frontline workers in health and social care amid the COVID-19 pandemic: experiences of frontline workers in the English Midlands region, UK. *Journal of Interprofessional Care*, pp.1-7.

Society of Radiographers 2020. Wellbeing, emotional and mental health support and resources available from <https://covid19.sor.org/wellbeing,-emotional-and-mental-health/support-and-resources/>

Smith, J.A. and Shinebourne, P., 2012. *Interpretative phenomenological analysis*. American Psychological Association.

Willig, C., 2017. Interpretation in qualitative research. *The SAGE handbook of qualitative research in psychology*, pp.274-288.