

CoRIPS RESEARCH AWARDS OCTOBER 2020

Dr Christina Malamateniou

**CoRIPS Research Grant 193 (Covid)
£10,800.00 Awarded**

Title of Project

Assessing the impact of Covid19 on Radiography academics and researchers: a mixed methods, exploratory, world-wide study

Lay summary of the project

In the last 10 months Covid19 has claimed the lives of more than 1,000,000 people globally, leaving many with long-term symptoms of breathlessness and chronic fatigue, known as “long Covid19 syndrome”.

Frontline staff includes radiographers, medics, nurses and many other allied-health professionals. Their contribution in fighting this pandemic has received public recognition, with tributes to those lost to Covid19 but also those who sacrificed their own family balance, health, and those working long hours to help their patients. The toll of Covid19 on the physical and mental health of frontline radiographers has still not been fully appreciated, and it will be further exacerbated by a long and challenging winter lying ahead.

Academics, researchers and educators in Radiography are fighting their own battles, often going unrecognised. Therapeutic and Diagnostic radiography academics (hereafter referred to as radiography academics) had to quickly adjust placement patterns, online curricula, reformulate research projects, design new ways of remote learning, redesign lab spaces and resources, offer emotional support and personal tutoring for many more students, work often antisocial hours, at the expense of their families, offering maximum flexibility to students while chasing deadlines for the new academic year. The nature of the changes on government policy mean that massive changes have had to happen with very little notice. All while having their own health concerns, experiencing burnout, having shielding family members, caring responsibilities and often home-schooling. Some of these professionals have also taken on clinical responsibilities during the pandemic and others have continued part-time roles they undertake to maintain their skills. Our proposal is to understand the impact of Covid19 on academics and explore recommendations to help manage mental and physical challenges

Review of the literature and identification of current gaps of knowledge

Covid19 has had and will continue to have immense impact on human life and health. It has so far, only ten months in, claimed the lives of more than 1 million people and the toll is very likely to increase much further during the coming winter for the populous northern hemisphere¹. Although it has been shown to mostly affect older people, predominantly men, with pre-existing conditions and disproportionately people of colour and of poorer income, it has also claimed the lives of many young, healthy people without pre-existing conditions and good access to healthcare. This has mainly occurred when healthcare systems around the world became too overwhelmed to care for those affected by Covid19.^{2,3} It has also not only become very quickly one of the leading causes of death but also has left behind increased morbidities, called collectively “long Covid19” and characterised by continued shortness of breath and debilitating chronic fatigue, which has left many people unable to work properly for months after they were first infected⁴.

It has also caused, in parallel to physical health, a mental health epidemic. The first results have been seen on frontline staff ^{5,6,7,8}, who had to work long shifts, often in full personal protective equipment (PPE) to cater for the influx of patients at the peak of the first wave of the pandemic. Images and videos of healthcare workers, exhausted, burned out, crying and collapsing emotionally from the magnitude of what they were experiencing were distributed all over the world⁹. Often healthcare frontline workers have had to stay away for long periods of time from family and their older parents or children due to fears of cross-contamination¹⁰. However, while these professionals worked hard on the frontline another drama has been happening for those who had to stay and work from home during the imposed lockdowns that followed.

At home workers have been the unsung heroes during this pandemic and we just start to recognise, understand and evaluate the impact of covid19 on this subgroup and adjust our approach to prevent a huge toll on physical and mental health, which will only further overwhelm healthcare systems at a time we need them more than ever. The subgroup of at home workers include many radiography educators, academics and researchers whose personal and professional lives were also turned upside down in different ways and had to quickly adjust while facing their own challenges. Work patterns have changed, delivery of teaching and conduct of research has been transformed, all these while often working around the clock and during challenging personal circumstances. This has impacted physical and mental health in ways that are not yet understood but seems to have a disproportionately negative impact for single parent families, of poorer income, on people with disabilities or known mental health issues, as well as older individuals^{11,12}.

Research in other domains have indicated that there have been huge shifts in out ways of working, indicating that during the lockdown employers facilitated “a wide range of activities for team collaborations such as, virtual team stand-ups, formal meetings, and after-work virtual drinks”. There is no doubt however, that the nature of work has changed. However, there are currently very few studies discussing the impact on academia and research and none for radiography^{13,14}

The aim of this research project is to fill in this gap in literature by identifying the challenges, their impact and offering suggestions and recommendations to ensure this part of our workforce is better prepared to deal with this pandemic. This is vital for long-term planning as, at the moment, it seems that this pandemic intensifies rather than slows down.

This will also ensure core functions provided by academics, like teaching and research within Radiography, are protected and sustained, to ensure our students are supported, so they can contribute as frontline staff during this crisis and our research can give much needed answers to clinical questions raised by Covid19.

Methodology to be adopted

The methodology to be used will employ a mixed methods research design, to explore the experiences of radiography academics during this pandemic. **The epistemological approach** employed will be constructivism, as the experience will be unique for every individual, based on their own support networks, individual personal, health and family circumstances and work arrangements¹⁵. This will allow an open-ended, flexible approach and to openly listen to what participants say and what they need, without making assumptions. **Initial consultation and PPI** on research design has been sought early with the charity MIND, psychologists within City, University of London but also in early informal discussions with radiography academics, from the UK and beyond.

Methods: Snowball Sampling will be used¹⁶ so initial participants will recruit other participants by forwarding the electronic survey link. However they all need to fulfil the inclusion criteria. **Inclusion criteria:** Participants will need to be able to fill in an electronic survey, be over 18 years of age, be

trained as a radiographer (this would include sonographer and nuclear medicine technologist but also radiological technologists as they are known in other parts of the world) and currently working in a research, teaching or other academic capacity in this field, anywhere in the world. Emeritus or retired academics for longer than 2 years will be excluded from this study, as their work patterns might differ significantly. **Recruitment of study participants** will be i) via email to the PI's and Co-Is' professional network contacts, ii) via the ISRRT and professional bodies, iii) via social media.

Data collection methods: 1) A focus group with radiography academics, researchers and other healthcare professional academics will help devise the survey questionnaire (maximum 8 people) with participation from Europe, North America, Africa to ensure time-zones allow. This will be organised online on Microsoft teams and will be recorded, for data analysis. The draft questionnaire will be shared with another group of researchers/academics from Asia and Oceania for further feedback. This has been based on advice we have received in communication with the health psychologists at City University of London.

2) An electronic survey will be designed on Qualtrics and distributed in the recruitment ways described above. The survey will be open from January 2021 to March 2021. The language of the survey will be English, to ensure analysis but we appreciate this might be a limitation. Reminders will be sent every 3 weeks on social media and a gentle reminder will be sent by the ISRRT half way through the survey to ensure uptake is maximised. The survey will comprise both closed type and open ended questions: a) demographic non identifying questions, b) the CORE10 short mental health assessment questionnaire, c) generic questions about physical health, d) changes in work patterns resulting by Covid19 and e) support best practice or needs assessment to ensure this informs further recommendations for future planning. Completion of the survey will take no longer than 15 minutes.

An informed written e-consent¹⁷ will have to be signed or filled in electronically before any data collection occurs by the participants in the focus group. As the survey will be anonymous, completion of the survey will imply consent; however a separate consent button will be added to make this process more explicit.

Data analysis: Thematic analysis will help us discover the emerging themes and subthemes. This will be used for the open-ended questions of the survey and for the focus group. Descriptive statistics will be used for the demographics, CORE10 questionnaire and any other closed type questions.

Duration: the whole project from beginning to end will last 12 months (January 2021-January 2022).

Trustworthiness of data: To ensure this project will deliver on its intended aims there is a sound research design, a realistic timescale (please refer to the Gantt chart below), and appropriate methodology and data collection methods, as described above. This project has been informally discussed with members of the public, psychologists, the MIND charity and with radiography academics. Ethical concerns have been addressed (please see last paragraph below).

Ethical considerations

Ethics approval will be sought from University College Cork and City, University of London, as a twinned study between the two institutions. The study is very likely to receive approval by the end of 2020.

Informed written consent will be sought by all participants.

Data confidentiality and participant anonymity in all aspects of the research design will be maintained: collection, analysis and synthesis of research findings. The team will ensure a safe and trusting environment is established, which is particularly important for the focus group participants. Participants of the focus group can exit at any time point, if they wish to.

There is no exit point for survey participants as this is anonymous, to ensure people can speak freely about issues affecting them which might be very personal.

The CORE10 can identify people at risk of harm or self-harm. As this survey is anonymous, individualised mental health support cannot be offered. However there will be a statement at the start

and the end of the questionnaire explaining what people need to do if they identify themselves as at risk and how they need to contact special psychological support services or websites. Data will be saved in encrypted hard-drives in a drawer that operates with a lock and is located at the University premises and the office of the PI. All data will be discarded safely after the write up and dissemination has concluded and not been kept longer than 5 years.

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