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Letter to the Editor

Evaluating the Methods of Surveying Interventional Radiologists' Practices and Wellbeing During COVID-19

From:

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I read with great interest the article entitled "Interventional Radiology in the Coronavirus Disease 2019 Pandemic: Impact on Practices and Wellbeing" (Woerner et al, 2020) (7), especially as a final-year medical student who completed a BSc: Radiological Imaging Sciences-intercalated degree in 2019 and/or 2020 in the United Kingdom. My Diagnostic (DR) and Interventional Radiology (IR) teaching sessions were abruptly halted due to lecturers being redeployed into clinical practice as a consequence of the pandemic, resulting in not only a disruption to study but also increased levels of uncertainty and thus anxiety amongst my cohort, much like the participants in Woerner and colleagues' study.

IR is a novel medical field in increasing demand due to its effectiveness and variety of application, crossing multiple specialty areas (6). This demand is concordant with increased rates of stress and 'burn out' (4) amongst interventional radiologists (IRs) and the authors' cross-sectional study investigates the practical and psychological impact that COVID-19 has had on IRs. A researcher-lead 78 item survey was completed by 422 IRs and included demographics and practice environment sections. Clinician anxiety was also assessed using the Generalized Anxiety Disorder-7 metric and coping strategies were evaluated using the Brief-Coping Orientation to Problems Experienced questionnaire.

An extensive inventory of methods were used to maximize participant recruitment to the study such as direct communication via email or WhatsApp, social media and professional online discussion forums. These methods are all online-based and thus overlook the less technologically capable of clinicians. The authors may wish to also consider posting letters to IRs or distribute leaflets in IR-based hospital departments in order to further maximize recruitment in any future research.

IRs are the primary focus of this study with 157 reporting that they perform both IR and DR roles. The two fields are firmly interlinked, however, significantly differ in terms of operation and functionality (3). The authors may also benefit from modifying and distributing their survey to diagnostic radiologists, thereby providing a comparison of the pandemic's practical and psychological effects between the two groups of clinicians. Insight into any potential differences between the fields may provide a bi-directional learning opportunity in order to minimize the aforementioned effects of COVID-19. Alternatively, the authors state that data on pandemic-related IRs anxiety currently exists and may wish to compare this literature with the current cohort.

It is commendable that not only participant anxiety but also coping strategies were measured, providing valuable understanding of the psychological process that participants undergo when faced with the impacts of COVID-19. There may be merit in utilizing other established psychiatric scales like the Hospital Anxiety and Depression Scale or Beck Anxiety Inventory to contribute to the validity of the study. Furthermore, assessing other pandemic-generated psychiatric components such as depression and post-traumatic stress disorder may beneficially supplement the authors' findings to provide a more detailed psychological profile of IRs. This data may assist with developing more catered and thus conducive support strategies for IRs faced with the additional adversity that COVID-19 exudes (1).

Finally, participants being afforded the option to express their personal concerns via free-text proved to be insightful, with discussion points ranging from administrative inadequacies to personal protective equipment shortages. The authors may wish to include other free text questions in the survey asking participants to suggest improvements or solutions to their current concerns. These suggestions taken directly from the focus group of this study may accommodate the development of targeted support for IRs, helping to mitigate the aforementioned deleterious effects of COVID-19.

Whilst IR may be a relatively new field, its significance, as surgical medicine transitions into the ever less-invasive era, is undeniable (6). Analogously, the wellbeing of its practitioners is crucial in managing the increasingly demanding field evidenced in the growing catalogue of related literature. 5 reported in a study out of 107 radiological residents that 88% accessed mental health resources during the acute phase of the pandemic. 2 reported in a similar investigation, that out of 689 radiologists, 61% selected a 7 out of 10 or higher Likert scale score in response to pandemic-generated anxiety. It is thanks to the rigorous research such as Woerner et al, that the practical and psychological concerns of clinicians amidst the debilitation of COVID-19 are critically highlighted and brought to the fore, as such, I look forward to the results of their future endeavors.

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For this type of manuscript, informed consent is not required.

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