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Letter to the Editor: Brit. J. Anaes.
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Opioids and the COVID-19 pandemic; should those using chronic opioids therapeutically or misusing opioids be added to the list of 'clinically vulnerable people' ?

Editor, Opioids have predictable analgesic actions and are widely used in many clinical settings but they also produce unwanted side effects including respiratory depression, tolerance and are misused. Misuse and poor opioid stewardship in the therapeutic arena are generally accepted as the underlying cause of what we describe as the 'opioid epidemic' or 'opioid crisis' [1]. According to a United Kingdom Office for National Statistics report in 2019 [2] there were 139,845 people in contact with drug services during the 2018/19 period; some of these will be opioid dependent but for many this will not be a single substance misuse. Moreover, a Public Health England (PHE) report suggests 540,000 patients (retrospective) were continuously prescribed opioids for three years [3], some of these may be opioid dependent. It is possible that some patients in the PHE report may have also made contact with drug services. Patients presenting to substance misuse services are likely to be using multiple substances so purist ascription of effect to opioid alone is problematic.

The current COVID-19 pandemic and 'opioid epidemic' or dare I say pandemic have clearly intersected and there is an excellent, thought provoking opinion piece on this by Becker and Fiellin [4]. The thrust of several papers on opioids/COVID-19 and the main narrative revolves around opioid prescribing, access to opioids and sociological considerations [e.g., 5-6]. What about side effects of opioids in COVID infection? Is the opioid epidemic fuelling the COVID-19 pandemic ?

As we know opioids depress respiratory drive [7] and long term use is immunosuppressive [8] although direct clinical trial evidence for the latter is lacking [9]. That said some of the seminal early work showing opioid immunosuppression is based on data showing increased infections in addicts [10]. COVID infection is more likely to produce adverse outcomes in immunosuppressed patients and this is part of the scientific evidence for shielding in this

patient group. The respiratory effects of COVID-19 infection are known only too well to anaesthetists and intensivists and ventilation of acutely unwell patients has been the mainstay of treatment and of ICU workload. Opioids may be required for pain management in COVID-19 patients [11] and paradoxically, opioids have been suggested in COVID-19 palliative care, for patients experiencing the sensation of suffocation [12].

In those using opioids chronically or misusing opioids, where immune depression and a propensity to respiratory depression is likely, COVID-19 infection may be all the more deadly. At the time of writing I am not aware of any published clinical data to support this prediction although Shanthanna et. al., suggest that chronic pain patients taking opioids might be more susceptible to COVID-19 [13]. Individuals who are opioid dependent also present with a range of additional co-morbidities, social deprivation and homelessness. Whilst not suggesting these are a direct consequence of opioid misuse they may be linked and combining to a major public health issue. With respect to COVID-19 protection the UK Government defines a category of clinically vulnerable people where those with 'mild to moderate respiratory disease' and those with a 'weakened immune system as the result of certain conditions or medicines they are taking' are advised to take extra care [14]. *Surely those using chronic opioids therapeutically or those misusing opioids should be included in the clinically vulnerable group*?

Professor David Lambert
Dept of Cardiovascular Sciences (Anaesthesia)
University of Leicester

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