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Letter to the Editor

## Should lockdown be based on age rather than geography?



I read with interest the recent editorial on the need for frank and honest discussion over the correct course of action regarding COVID-19.<sup>1</sup> In particular, the call for an age-based, rather than a geographical, lockdown is an interesting idea worthy of further discussion and, arguably, supported by recent developments in the UK.<sup>1</sup>

The latest UK coronavirus statistics tell an interesting story. Cases have gone up in younger age groups, with university students appearing the exhibit the steepest increases. Meanwhile, hospital admissions and deaths have risen in the older age groups. This implies that while the rising number of cases is being driven, in part, by younger people, it is the older generations that are bearing the brunt of COVID-related morbidity and mortality.

Professor Raj Bhopal argues that herd (or as he calls it, population) immunity is the only stable way of controlling a virus such as SARS-CoV-2.<sup>4</sup> In July, he called for the adoption of a population immunity approach limited to young people, hopefully resulting in large numbers of partially or fully immune individuals.<sup>4</sup> According to his analysis, at least 50% of a population needs to be immune to properly achieve control of the virus.<sup>4</sup> Given that young people exhibit little morbidity from COVID-19, it seems logical that they should make up the majority of this 50%. Given the recent statistics, such an approach might seem reasonable, but there are important considerations that must be discussed.

Firstly, it presents an ethical dilemma. At the start of the pandemic, herd immunity approaches were widely rejected in the UK. They were seen as effectively admitting defeat, letting the virus run unchecked through the country and causing needless amounts of risk and death. Why should young people (in this context meaning primarily those aged 18—30 years) be forced to sacrifice themselves?

The ethical problems do not stop there. A herd immunity approach limited to young people would have to sharply discourage or even ban them from seeing elderly people. Indeed, it may be even necessary to bar individuals over a certain age from visiting various establishments to prevent them being infected before herd immunity is established. Measures to shield older people have already been accused of being ageist, further isolating an already socially deprived demographic. Exaggerating this trend is likely to further damage the mental health of older people. Finally, and fundamentally, we are still unsure as to the extent of coronavirus immunity following infection, as well as its duration.

Despite these flaws, it is important to discuss new ideas. With winter on the way, rising case numbers and a stretched NHS, the UK needs a swift change of fortunes. Moreover, given the rapid rise in cases in young people, one could argue that a population immunity approach is already beginning to happen. If we cannot prevent younger age groups from getting COVID-19, then the next logical step may be to prevent them from transmitting it to the elderly, thus implementing an age-based population immunity strategy.

Even now, many people are reluctant to visit their elderly friends and relatives, and many old people are afraid to socialise. This 'pseudo-isolation', along with its detrimental effects to the well-being of the elderly, is likely to continue for months or even years if we do not manage to effectively control SARS-CoV-2. It is arguable that a short and complete period of isolation for the elderly would be preferable to months or even years of shielding.

In summary, an age-specific lockdown has scientific, ethical and practical flaws. Indeed, the implementation of such a lockdown would present its own unique set of considerable challenges. Despite this, it may be our only option to successfully control COVID-19, and more discussion of its practicalities is required.

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