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Letter to the Editor

COVID-19-why open and honest public dialogue is needed: Porter's reflections on the ethical dilemmas of age rather than geographical based lockdowns are noteworthy

We thank George Porter for his thoughtful contributions towards the honest and open dialogue that we called for.[1] The question he poses on whether lockdowns should be based on age rather than geography is interesting, but not one we posed or advocated although it is relevant, particularly, to broad public health analysis of Bhopal,[2] which proposes that a move towards population immunity, is a component of a strategy for controlling the pandemic especially if an effective and safe vaccine is not invented.

Porter reminds us that cases have recently gone up in younger age groups, whereas hospital admissions and deaths have risen in the older age groups. Indeed, this was predicted by Bhopal[2] while preparing his article in April 2020 and a strong motivating factor for writing it.

Porter is correct in asserting that Bhopal[2] emphasised that population immunity, a much better phrase than herd immunity, is the only long-term solution to controlling COVID-19, but he emphasised that a safe and effective vaccine is the first preference towards that goal. In the absence of such a vaccine, Bhopal[2] advocated attempting, in a highly controlled and planned way (the opposite of 'letting the virus rip'), to limit infection to young people. Although the population immunity threshold is still under discussion,[3–5] Bhopal[2,6] estimated that 40–50% immunity would bring the pandemic under control. Porter rightly reminds us of ethical dilemmas of this approach.

Porter asks (I paraphrase) why young people (in this context meaning, primarily those aged 18–30 years) should be forced to sacrifice themselves? Bhopal et al.[7] had emphasised that males up to the age of 25 years, particularly children, and females up to the age of 30 years were at particularly low risk of mortality, lower than for influenza, for which they are already often vaccinated. The answer is that they should not be 'forced' to sacrifice themselves. The argument of Bhopal[2,6] was that the harms from the infection were possibly lower than the potential harms to children and young people from lockdowns impeding their education, social relationships and opportunities for personal development. However, if parents of children, and young people themselves, perceive the risks and benefits differently, that is their choice. Bhopal[2,6] has emphasised that infection is going to occur as young people go about their normal lives. There are no plans to vaccinate such young people, and vaccines are not being tested on people younger than 18 years, so their safety vs their effectiveness will not be known for the foreseeable future.

Porter points out another ethical problem. Children and young people would have to be discouraged from seeing elderly people, and this could be ageist, further isolating such people with consequences to their mental health. This is vitally important. Certainly, young people would need to be extremely careful in maintaining hygiene, social distancing and probably wearing face masks when coming close to older and other high-risk populations (including young people at high risk). Society in general, and each family grouping, has to think through whether this approach is feasible or desirable and if so how to make it practical.

Porter pinpoints another crucial issue, i.e., the extent of coronavirus immunity after infection, as well as its duration. Obviously, we will not know the extent of long-term immunity from either natural infection or from vaccination for many years, but at this point, immunity seems to be surprisingly strong from natural infection for a virus infection. More than 50 million cases have been confirmed worldwide, but reinfection is exceedingly rare. Many reinfections will have been missed, but even if only one in 1000 reinfections is diagnosed, this would still be a trivial number in relation to the total. It looks like immunity against this infection is related to the entire immune system, including cellular immunity, and not just antibodies.[8,9]

Porter, presciently, proposes we need a swift change of fortunes. On November 9, 2020, Pfizer released information that their RNA-based vaccine was 90% effective in the phase 3 trial. (Safety data are still to be released.) If the promise of this vaccine is fulfilled, we will soon be on the way to population immunity through the preferred approach, i.e., vaccination, although this may not be true for those younger than 18 years who are likely to be infected anyway, but hopefully mostly after the high-risk population has been vaccinated.

Porter also points out that a population immunity approach is already happening and we need to prevent younger people from transmitting infection to the elderly, effectively implementing an age-based population immunity strategy by default. He then shares several ideas that merit discussion. We agree with his summary that an age-specific lockdown, which we re-emphasise none of us have advocated, has scientific, ethical and practical flaws. Porter sets out the considerable challenges, before concluding that more discussion is required. We hope that whether through societal endeavour or inadvertently, this will not be necessary, especially if the promise of vaccines is fulfilled. If not, we will be discussing these matters for some time.

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