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## COVID-19: RECOVERY CERTIFICATES

# Patients who have recovered from covid-19: issuing certificates and offering voluntary registration

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In my rapid response of 21 March,<sup>1</sup> updated 9 April 2020,<sup>2</sup> about covid-19 creating extraordinary times demanding imaginative responses,<sup>3</sup> I wrote that people who had recovered from proven infection and were not shedding virus were a potentially invaluable asset. Having recovered, I inferred, they must have at least partial, temporary immunity. I recommended that we give them a certificate indicating that they would be largely, if not wholly, immune to a second infection this year.

I anticipated reliable antibody testing would become available, providing further reassurance on immune status, which is becoming true, although it is a controversial matter.<sup>4</sup> Even a test with 99% sensitivity and specificity only has 83.8% predictive power of a positive test when the prevalence of infection is 5%.<sup>5</sup> (A supplementary file provides 12 simple tables of sensitivity, specificity, and predictive powers of positive and negative tests at population prevalence of the disease ranging from 1% to 20%.<sup>5</sup>)

I proposed that, with care, recovered patients could serve on the front line, not just in healthcare and nursing homes but also in retailers and factories. With their permission they could be offered registration for employment and volunteering purposes. They might earn a premium income turning their disease into an asset for themselves and society. I identified clinical, public health, legal, ethical, and social issues requiring research and scholarship as well as public debate.<sup>1,2</sup> The Royal College of Physicians of Edinburgh hosted a video on this proposal (<https://learning.rcpe.ac.uk/course/view.php?id=707>).

Since then, there has been much scholarly and media based debate especially about “immunity passports,” much of the controversy around antibody testing.<sup>4,6-10</sup> The phrase immunity passport implies a guarantee that cannot be achieved. The World Health Organization cautioned against this on 24 April.<sup>11</sup> I have, however, not changed my mind and think the emphasis on antibody testing is misplaced and is unnecessary, especially as much immunity to respiratory viruses is largely not humoral.<sup>12</sup> It is a matter of probabilities, as there can never be certainties.

Public involvement has been slow despite media publicity. Chile, to my knowledge, is the first country to formally adopt this proposal. Scientific literature records differing opinions but discusses obstacles and benefits.<sup>6-9</sup> It is time to go beyond opinion, but research is just getting under way. The public, scholars, and policy makers together need to debate this idea as a component of exit strategies. I think the

public, and especially those who have been ill, might find the idea more attractive than my fellow scholars and researchers. Is it time for a citizens’ jury?

Competing interests: None declared.

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