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Provide Vaccines, Not Require Immunity or Vaccination Passports … For Now

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The problem with writing papers on the pandemic is that things change rapidly. Papers get out of date and irrelevant. This was written prior to the vaccine roll out. However, Gerke et al's excellent contribution[1] has only got *more* relevant.

I began writing on immunity passports at the beginning of the pandemic[2] and was told "immunity to COVID-19 is a mystery"[3] and immunity passports should not be introduced. It is not such a great mystery as now several vaccines have been developed and are being rolled out.

Recent Research into Immunity

Indeed, a Public Health England study of 20, 787 healthcare workers has just been reported[4] showing that the risk of reinfection with COVID-19 is low for at least 5 months. The participants were given antibody tests, and a group of 6, 614 were found to be positive for the relevant antibodies, taken as evidence of a previous infection.[5] Throughout the trial (which is continuing), participants underwent regular testing (for active infection and antibodies), regardless of symptoms and also reported symptoms.[6] The two groups have now been compared.

In the group where there was evidence of infection, only 44 potential reinfections were identified, with different degrees of certainty around the reinfections within that group leading the researchers to report a range of 83- 99% protection against reinfection.[5] Reportedly, a high proportion of the 44 (66%) reinfected were asymptomatic (Hunter)[7] meaning that the minimum protection against symptomatic reinfection was 94% (Riley)[7]. Asymptomatic reinfections may still infect others, and a high viral load was detected in some those participants.[5] However, the reduction in infections of any kind means that there is a reduced risk of transmission in the group as a whole.

This study suggests that natural immunity is at least good as vaccine immunity both at protecting people and preventing transmission.

Liberty Principle

As Gerke et al note[1], the ground for the restriction of liberty in a pandemic is a risk of harm to others. This is the ground for quarantine, isolation, lockdown and mandatory vaccination. If a person has immunity (whether natural or vaccine-acquired) and is not a threat to others, there is no grounds to restrict their liberty.

There is and has been an urgent ethical issue in the excessive liberty restriction of those who may present no threat to others. People with natural or vaccine immunity have been restricted from socialising, working, going to school or university and so on.

The response has been that we do not know how much immunity prevents transmission. This is a feeble response. We should be doing research into immunity and transmission, such as the SIREN study, as a matter of urgent priority. Not only are people's liberty at stake but also their lives – the consequences of shut down of health services is that people with non-COVID illnesses will die from cancer, heart disease and many other diseases.

And the question of transmission cannot be avoided now vaccines are being rolled out – we need to know whether people who have been vaccinated present a threat to others. Otherwise lockdown and the associated huge economic, social and non-COVID health related costs will be increased.

The SIREN study suggests that natural immunity reduces the chance of transmission by around more than 90%. In the UK, public health messaging has been that both those with natural and vaccine immunity should still continue obey stay-at-home orders because there is a chance they will infect others, although this chance seems to be radically reduced.

One unaddressed question in the COVID pandemic is what level of threat to others justifies the restriction of liberty. I have elsewhere presented an algorithm for answering this question in relation to mandatory vaccination.[8]

Vaccination and Immunity Passports in Employment

So, one issue is that if people who are immune are not a threat to others, they must be free to return to work. This is important for many people who are not being supported by the state and must work to provide for themselves and their families.

One of the prominent objections to immunity passports was moral hazard: that introducing privileges to immunity would encourage people to seek it, infecting themselves and increasing spread of disease. However, this does not apply once vaccines are widely available: people have an alternative to natural infection which is safer and more socially desirable – vaccination.

Should employers be able prevent those who are not immune from returning to work, in the age of vaccine roll out?

A simple harm to others argument can be made. If someone is not vaccinated (or naturally immune), the represent a threat to others in the workplace and so can be prevented from entering the workplace. An analogy would be banning smoking in the workplace. Because non-smokers are at risk from passive smoking, smoking should be banned in the workplace to prevent this harm to others.

But there is a relevant disanalogy between smoking and COVID. People can now protect themselves from COVID by getting vaccinated; non-smokers cannot reasonably protect themselves from smoke in the air (absent breathing apparatus or extraordinary smoke extraction).

So people have a reasonable choice, once there is a vaccine, about whether they have immunity. Vaccine passports are in this way different to immunity passports – the "moral

hazard" of vaccination passports is that people will choose to go and get vaccinated, which is exactly what public health officials want

(It is also worth asking what exactly is the moral hazard of self-infection. If immunity reduces transmission as it appears to, it is a positive. One problem is that immunity may not occur or people may pass on the infection before acquiring immunity. Some have argued for safe infection sites to facilitate safe self-infection.[9] Another objection is that the individual may get sick, placing health services at risk and risking This is highly age dependent and unlikely with people in younger ages.)

The upshot of this is that employers may have an obligation to make vaccines available to their workers but not to require vaccination.

Some people can't be vaccinated for health reasons, such as history of allergic reaction, immune problems or other relevant medical conditions. Others will choose to refuse for or religious or other personal reasons. These people will not be protected.

Do employers have an obligation to ensure other employees are immune to protect these groups? Employers do have a reason to protect those who cannot be vaccinated for health reasons. These cases will be infrequent. Perhaps this can be accommodated by alternative workplace arrangements. Or perhaps sufficient numbers will eventually be vaccinated to create herd immunity so that they are protected.

I have elsewhere argued that mandatory vaccination can be ethically justified.[8] Employers requiring vaccination passports is a form of mandatory vaccination. However, as I argue there, the novelty of the mRNA and modified adenovirus vaccines means that confidence in long term safety cannot be extremely high at this stage. It is better, I argued, to offer payments or other incentives to encourage vaccination. Employers could offer bonuses to employees who choose to be vaccinated.

The strongest argument for mandatory vaccination in the workplace and vaccination passports to work is where there are vulnerable employees or clients who can't themselves be vaccinated, the vaccine is proven to be safe and less liberty restricting methods (including payments and incentives) have failed. We have not reached that point yet.

The reason that it is appropriate to ban smoking in the workplace is justified is because non-smokers cannot protect themselves from smoke in the air and not smoking is perfectly safe. If vaccines were as safe as breathing clean air, then they could be mandated in the workplace.

As a side note, employers do not have an obligation to protect people who remain vulnerable by choice: religious or other value-based reasons.[10]

So my conclusion is that employers should not require vaccination or immunity passports at this point but rather make vaccines available to their employees (if they are not otherwise available). They have reasons to accommodate employees with alternative lower risk arrangements but not others who refuse vaccination for religious or other reasons.

They might, but it is supererogatory. If novel COVID vaccines are shown to be as safe as other vaccines in the long term, mandatory vaccination and vaccination passports could be considered. An immunity passport would be an acceptable alternative if vaccination passports were introduced.

Endnotes

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