COVID-19 Vaccination Passports: Are They a Threat to Equality?

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In several countries, governments have implemented so-called 'COVID passport' schemes, which restrict access to venues such as bars or sports events to those who are vaccinated against COVID-19 and/or exempt vaccinated individuals from public health measures such as curfews or quarantine requirements. These schemes have been the subject of a heated debate. Concerns about inequality have played an important role in the opposition to such schemes. This article highlights that determining how COVID passports affect equality requires a much more nuanced analysis than is typically assumed. I identify a range of broadly egalitarian considerations that could be affected by the introduction of COVID passport schemes. While these schemes could undermine certain aspects of equality, I argue that they could also be used to *promote* equality. The magnitude and severity of these different effects, both promoting and undermining equality, depend on how precisely these schemes are framed and the local context in which they are implemented.

Introduction

Many countries have introduced so-called 'COVID-19 vaccination passports' (or simply 'COVID passports'),[1] which confirm that their holders are vaccinated against COVID-19. These certificates allow for access to venues and services, such as restaurants, university campuses or public transport, to be restricted to those who have been fully vaccinated against COVID-19, and/or to exempt those who are vaccinated from public health measures such as curfews or quarantines. Among the first such schemes was Israel's 'green pass'; other countries, including Denmark, France, Germany, Italy and Qatar, as well as several Canadian provinces and the state of New York, have implemented similar schemes (Canadian Press, 2021; Henley, 2021; Murphy, 2021).

Concerns about equity are frequently raised as a reason not to implement COVID passports (Dye and Mills, 2021; Osama *et al.*, 2021). For example, in the UK, MPs from across the political spectrum as well as civil rights groups condemned them as 'divisive and discriminatory'[2]; Canadian Prime Minister Justin Trudeau cautioned, in March 2021, that domestic use of vaccine certificates raised issues of equity and fairness (Tasker, 2021). However, it is far from obvious in what ways COVID passports might affect equality and what this means for the overall assessment of such schemes. This article identifies different aspects of equality that might be affected by vaccination passports. While the debate has focussed on how COVID passports would undermine equality, I argue that they could, in principle, also contribute to equality, once we take into account that the pandemic and the various measures introduced to curb it have, in many countries, been highly unequal in their impact. At the same time, it is reasonable to worry that COVID passports, if not accompanied by explicit efforts to prevent inegalitarian effects, could undermine equality, particularly when vaccination rates are lower in disadvantaged and marginalized groups, as has been the case in many countries. Importantly, the magnitude and severity of both positive and negative effects on these different dimensions of equality depend on how precisely COVID passport schemes are framed and implemented as well as on local context.

Rather than arguing for or against COVID passports, all things considered, the article aims to contribute to a more nuanced debate about, and more balanced assessment of, such schemes. By identifying a range of

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considerations of equality that COVID passports could affect, the article helps identify the questions we might want to ask as part of such an assessment.

COVID Passport Schemes: Some Preliminaries

As COVID vaccines began rolling out in wealthy countries in the spring of 2021, the debate about when and how to ease the restrictions meant to curb the spread of SARS-CoV-2 intensified. Policymakers considered whether those who had been vaccinated could resume activities that had been halted in earlier stages of the pandemic, such as visiting restaurants, nightclubs, gyms or sports events, or whether the vaccinated could be exempted from measures such as curfews. If vaccination reduces the likelihood not only of developing severe forms of COVID-19 but also of transmitting SARS-CoV-2, passport schemes could allow governments to ease restrictions and thus reduce or avoid some of the social and economic costs that come with them. In the autumn of 2021, as COVID-19 incidence again increased in many countries, governments were again considering the introduction of restrictions that would apply only to the unvaccinated, or extending the application of COVID passports to new settings.

A number of clarifications regarding COVID passports should be borne in mind. First, policymakers have not always spelt out clearly which rationale(s) are meant to undergird these schemes. Different arguments have been offered, both in public and academic debates, to support vaccination passport policies. For example, some accounts see them as a way of incentivizing vaccination (e.g. Barak-Corren *et al.*, 2021; Wilf-Miron *et al.*, 2021),[3] whereas others see them as a way of imposing restrictions selectively only on those who have not yet been vaccinated and therefore pose a higher risk of spreading SARS-CoV-2 than the vaccinated (e.g. Hall and Studdert, 2021; Klaus, 2021; Persad, 2021). While I do not assess these different lines of reasoning here, I return to some of them in the discussion below when the reasons offered in support of such schemes are relevant from the perspective of equality.

Second, an important element of the discussion about vaccination passports is the effect of COVID-19 vaccination on the transmission of SARS-CoV-2. We know that COVID-19 vaccinations do not achieve 'sterile immunity'; rather, vaccination reduces, but does not eliminate, the risk of infection and thus the possibility of transmitting the virus to others.[4] Not only is it difficult to assess to what extent vaccination reduces transmission; the extent of any such effects may also depend on the type of vaccination and the specific variant of SARS-CoV-2 in question. In May 2021, a systematic review of studies on the major vaccines then in use in North America and Europe concluded that, even though vaccination did not *eliminate* the risk of transmission, it reduced the risk to the point where 'it can be assumed that vaccinated individuals no longer play a significant role in the epidemiology of the disease' (Harder *et al.*, 2021: 21, my translation). The subsequent proliferation of new variants of the SARS-CoV-2 virus, however, has complicated the picture because vaccination seems less protective against transmission of these variants (Wilder-Smith, 2022). While this development is sometimes taken to undermine the case for COVID-19 passports altogether, this is too quick: the effects of vaccination on transmission are more important for some rationales for vaccine certificates than others: if, for example, the rationale for such policies is that the vaccinated pose a greater risk than the unvaccinated, information about how vaccination affects transmission will be crucial; in contrast, it will be much less important if the goal is to incentivize vaccination.

Third, while *vaccination* passports are different from *immunity* certificates, which are issued on the basis of natural immunity acquired through COVID-19 infection rather than vaccination,[5] some countries are opting for schemes where not only vaccinated individuals are offered exemptions but also those who can prove recovery from a recent COVID-19 infection. Some policies also allow exemptions for individuals who can show a recent negative test result and/or those who cannot be vaccinated for medical reasons. The focus of the present discussion is exemptions for the vaccinated; the further exemptions that are part of many real-world policies pose different questions that I do not answer here.

Fourth, while the article draws on debates in different jurisdictions, COVID-19 passports have almost exclusively been considered in wealthy countries; in large parts of the world, access to vaccination remains limited (Figueroa *et al.*, 2021), making vaccination passports a moot point. Even among the countries where vaccination passports have been considered or implemented, the details of the schemes differ in certain respects; some of the concerns I raise in this article may therefore be more applicable in some contexts than in others. The purpose of the article is to offer an assessment of the equality-based concerns about such schemes rather than about the specific schemes implemented in individual jurisdictions.

Relatedly, I focus on the domestic implementation of vaccination passports rather than their application in the

context of international travel, where they have been used to, for example, exempt the vaccinated from quarantines required of unvaccinated travellers, or to preclude unvaccinated passengers from air travel. The limited availability of vaccines in low- and middle-income countries makes the use of vaccination certificates for international travel a very different, and arguably more problematic, proposition than the domestic use of vaccination passports (Jecker, 2021; Voigt *et al.*, 2021; World Health Organization, 2021).

Finally, while public debates on this issue typically use the term 'equity', I will stick with the language of 'equality' and 'inequality' commonly used in philosophical discussions. I interpret 'equality' broadly to include both distributive and relational concerns: whereas distributive equality is concerned with the fairness of outcomes (e.g. in opportunities, wellbeing, health or resources), relational equality is concerned with how individuals treat or regard one another (Voigt, 2020). I also include in the discussion concerns, such as fairness or solidarity, that philosophers often keep distinct from equality. A broad understanding of equality is, I think, helpful for this discussion because it helps us pick up concerns that have been raised in the public debate, where 'equity' is often used to denote a broader range of considerations than philosophers would typically capture under 'equality'.

How Vaccination Passports Could Promote Equality

While equity is typically seen as speaking against vaccination passports, this section argues that these schemes could, in fact, promote equality in certain respects. As I argue in this section, they could, first, help reduce the negative impact of COVID restrictions, which in many countries have fallen disproportionately on disadvantaged groups; second, to the extent that vaccination passports reduce the risk of infection in certain settings, they benefit those who are most at risk from COVID.

Reducing the Burden on the Disadvantaged

We know that, in many countries, both the risk of being infected with SARS-CoV-2 and the burdens experienced as a result of public health measures have been highly unequal across different population groups, disproportionately affecting disadvantaged, low-income and racialized groups (e.g. Czeisler *et al.*, 2021; Matthay *et al.*, 2021). To the extent that vaccination passport schemes reduce the risk of infection in certain settings and/or allow for other public health measures to be eased or avoided, they could help prevent further, disproportionate harms to these groups and thus be conducive to equality.

One particular mechanism worth highlighting here concerns the burdens on different occupational groups. Working from home became the norm for many employees during the pandemic, not only lowering their risk of exposure to SARS-CoV-2 but also protecting them from income loss and job insecurity. However, remote work is not possible for large parts of the workforce. In the USA, for example, Baker's (2020) analysis suggests that only 25 per cent of the workforce can work from home. Workers who continue to work in person face not only a higher risk of contracting COVID-19 but also of increased risk of job insecurity and job loss, as well as the emotional toll that comes with these risks. This also includes, as Baker emphasizes, that workers in this group 'may have to choose between going to work and being exposed and staying home to protect themselves or care for a family member' (e6).

Not surprisingly, the occupational groups that cannot shift to remote work are disproportionately low-income positions, which also often lack other protections, such as health care or sick leave (Baker, 2020: e6). If COVID passports reduce the risk of transmission in workplaces such as restaurants or shops, that reduces the health risk for workers in these settings. In addition, COVID passports could improve job security, for example, by increasing business because customers are more comfortable to access these services or by helping to avoid stricter public health measures, such as temporary closures.

This suggests that, at least in principle, COVID passport schemes could help alleviate some of the unequal effects of the pandemic, at least in contexts where disadvantaged and marginalized groups have borne the brunt of the pandemic and public health measures. In addition, governments can develop strategies to channel the benefits of a passport-facilitated easing of public health restrictions to the worst-off (Hassoun and Herlitz, 2021). Equality could then, in fact, be a reason *in favour* of COVID passports.

Creating Safer Spaces for Those Most at Risk from COVID-19

There is also an important inequality in terms of susceptibility to severe disease from COVID-19. The likelihood of complications is much higher for older relative to younger individuals, and for those with certain pre-existing conditions (some of which also follow a social

gradient). This not only results in differences in morbidity and mortality from COVID but can also have indirect effects, for example, when those who are more vulnerable self-isolate and avoid social contacts so as to reduce the likelihood of infection. This, of course, comes with the risk of social isolation and loneliness. To the extent that COVID passports can reduce the risk of infection in venues such as cafés, shops or public transport, they can allow vulnerable populations to engage more safely in social interactions and thus reduce the burden on these groups.

How Vaccination Passports Could Undermine Equality

This section identifies and assesses five equality-based concerns that speak *against* vaccination passports. Several of the (broadly) egalitarian concerns discussed in this section are taken from the public debate, where they are often levelled against COVID passports without much explanation or argument. One aim of the discussion in this section, therefore, is to develop possible arguments that could support these claims so that we can begin to assess them.

Unfairness

An equality-related consideration that is raised in the context of the current pandemic is that of fairness. Typically, COVID passports are seen as conducive to fairness: if fairness requires that people should bear the costs of their decisions, then—the argument goes—those who choose not to be vaccinated are contributing to the prolonged duration of the pandemic, including the illness and deaths caused by the virus but also the social and wellbeing costs associated with a prolonged pandemic. It would be unfair, this argument contends, for the vaccinated be required to shoulder those costs: '[t]here is no justification for the state—that is, the rest of the population, which chose morally and rationally to get vaccinated—to bear the costs of the decisions of the unvaccinated' (Barak-Corren *et al.*, 2021: 5; see also Hall and Studdert, 2021).[6] From this perspective, vaccination passports ensure that at least some of the costs associated with high COVID rates are borne only by those who decide not to be vaccinated.

Such arguments assume that *not* getting vaccinated is something that individuals can be said to have, in the relevant sense, chosen so that it is permissible, or perhaps even required, to ensure that they bear the costs of those choices. A problem for this line of reasoning, however, is that choices about vaccination are shaped by a range of factors beyond individuals' control. While it may be tempting to suggest that, once vaccination is open to the entire population, differences in uptake reflect differences in preferences for which individuals should bear the costs, we also know that vaccine rollouts were typically accompanied by significant inequalities in vaccination rates across different population groups. Members of disadvantaged and marginalized groups face a range of barriers to vaccination that do not exist for those from more privileged groups. This includes unequal access to information about the vaccine (for example, is it provided in minority languages? By individuals whom members of the community trust? Is it provided in terms accessible to lay people?)[7] and practical obstacles (e.g. can individuals take time off work to get vaccinated or if they have side effects from the vaccine?). Such barriers persist even when access is formally equal and universal. Equal access is further undermined when historic injustice and the experience of discrimination and racism, especially within the health care system, contribute to distrust and vaccine hesitancy among marginalized groups, such as racialized, indigenous or low-income groups (Royal Society for Public Health, 2020; Mosby and Swidrovich, 2021; Nephew, 2021; Newman and Campbell, 2021; Savoia *et al.*, 2021). While strategies have been developed to facilitate vaccination for disadvantaged and marginalized communities (Bibbins-Domingo *et al.*, 2021; Silberner, 2021; Taylor, 2021), they may not be sufficient to ensure equal vaccination rates across the population.[8]

While proponents of the fairness argument might be prepared to argue that these considerations do not detract from individuals' responsibility for their decision not to be vaccinated, this makes individuals pay for the influence of social inequalities, such as unequal access to vaccination or experiences of discrimination, on their choices (to the extent that those factors contribute to vaccine hesitancy). This argument focuses on the presumptive unfairness of making others pay for one's choices but obscures from view how those choices are shaped by existing inequalities.

Luck egalitarian theory, which is often associated with the idea that individuals should be held responsible for inequalities that result from their own choices but not for those that are the result of luck, might be helpful in supporting this line of argument. While luck egalitarians are sometimes taken to claim that *any* choice someone makes is the kind of choice they should be held responsible for, luck egalitarians themselves have defended a much more nuanced position. In particular, many luck egalitarians are sensitive to the effects of background

inequalities on individuals' choices—such background inequalities are, after all, a matter of luck from the agent's perspective (e.g. Arneson, 1989; Cohen, 1989). From this perspective, vaccination passport schemes make outcomes *more* unfair, rather than less: people who are disadvantaged or marginalized are less likely to get vaccinated (thus foregoing an opportunity to reduce the risk of illness for themselves and those close to them), now face the *additional* disadvantage that comes with not having a vaccine passport.

Of course, determining to what extent mechanisms such as unequal access or distrust due to a history and/or personal experiences of discriminatory treatment shape vaccination rates is not an easy task. Differences in vaccination rates across social groups suggest that such mechanisms are in play.[9] However, such differences may vary across geographical areas as well as over time. Moreover, determining the degree of inequality in vaccination rates is not straightforward. For example, vaccination rates may be *below* average in some historically marginalized groups but *above* average in others. Recent data from the USA, for example, suggest that vaccination rates are lowest among Black Americans (31.9 per cent fully vaccinated) but highest among Native Americans/Alaska Natives (49 per cent fully vaccinated); this compares to 39.4 per cent among non-Hispanic whites.[10] Second, aggregate data may obscure differences *within* social groups. For example, data from British Columbia, Canada, suggest that while, overall, vaccination rates among indigenous groups are 10 per cent lower than in the non-indigenous population, there are significant differences *among* indigenous communities, with some having achieved a 100 per cent vaccination rate among the eligible population (Cordasco, 2021), which implies that other communities have vaccination rates far *below* the average for indigenous Canadians.

Even if the interpretation of the data may not be straightforward, what I suggest here is that fairness, properly conceived, requires that we take account of any social inequalities shaping individuals' choices regarding vaccination. Differences in vaccination rates across social groups can help us identify where governments haven't done enough to ensure fair access to COVID vaccination.[11] Where vaccination rates are unequal, vaccination passport schemes threaten to exacerbate, rather than reduce, unfair inequality.

Discrimination

A frequent concern about COVID passports is that they would be discriminatory (Fisher, 2021; Osama *et al.*, 2021; Richarz, 2021). In response, advocates of vaccination passports emphasize that as long as everyone has access to the vaccine, distinguishing between the vaccinated and the unvaccinated is based on a relevant distinction rather than a 'suspect classification' (Barak-Corren *et al.*, 2021) such as race, gender or religion. COVID passports, this argument goes, therefore do not involve impermissible discrimination.[12]

However, this response seems too quick. Even if not *directly* discriminatory, at least two worries about discrimination and COVID passports remain. First, vaccine passports could *facilitate* discrimination because—as we know from other policies, including measures to curb COVID-19—enforcement and policing disproportionately focus on members of marginalized groups (Devakumar *et al.*, 2020; Fisher, 2021). Second, a passport scheme could also be seen as an *indirect* form of discrimination when implemented in contexts where vaccination rates are lower among marginalized or disadvantaged groups[13]: to the extent that such inequalities exist, vaccine passport schemes will disproportionately affect members of such groups and, for example, exclude them from certain spaces, such as restaurants or aeroplanes. As one commentator notes: '[t]his evokes an uncomfortable image: professional-class white people disproportionately allowed into shops, baseball games and restaurants, with people of color and members of the working classes disproportionately kept out' (Fisher, 2021).

Again, we need more information to assess to what extent specific COVID passport schemes will lead to discrimination of either kind. The answer will likely depend on a range of factors, such as the design of the scheme and the degree of inequalities in vaccination rates. The worry about enforcement also needs to be assessed in the broader context of already existing regulations: would the introduction of COVID passports provide *additional* opportunities for discriminatory enforcement (e.g. because individuals must show ID)? When it comes to the concern about indirect discrimination, it is important to keep in mind that the people protected by COVID passports—the people who *work* in shops and restaurants—may *also* be drawn disproportionately from racialized and working-class groups, so these groups also stand to benefit, perhaps even to an above-average degree, from COVID passports (as discussed in the previous section).

Solidarity

Appeals to solidarity have been voiced frequently since the start of the pandemic (Ellerich-Groppe *et al.*, 2021; West-Oram, 2021). One concern about vaccination

passports is that they would undermine 'communal spirit' (Mohapatra, 2021), social cohesion and solidarity, widen social gaps (Fisher, 2021), divide populations into two classes (Mohapatra, 2021), or even lead to 'apartheid' (BBC, 2021; Nuki *et al.*, 2021).[14] While the concept of solidarity is not always clearly defined and has different interpretations (Miller, 2017), one particularly salient aspect of solidarity is that it requires individuals to be willing to accept burdens in order to benefit the community (Davies and Savulescu, 2019; Ellerich-Groppe *et al.*, 2021; Dawson and Verweij, 2012). This is particularly important in situations of unequal vulnerability to a particular risk, where solidarity can lead individuals to accept burdens because this is beneficial for the community, even when their *personal* risk-benefit calculation speaks against incurring this cost. For example, during the pandemic many individuals whose personal risk of serious complications from COVID-19 was very low reduced their social contacts, not out of concern for their own health but so as to reduce the risk for more vulnerable groups.

Two sources of unequal risk are especially important for the present discussion: first, the higher risk of serious complications or mortality from COVID-19 for older age groups and those with pre-existing conditions; second, the unequal exposure of individuals to the virus, particularly for different occupational groups. Against this background, appeals to solidarity are essentially appeals for everyone to comply with measures to reduce the transmission of SARS-CoV-2, such as physical distancing or reducing contacts, even if their *personal* risk is relatively low. The concern, then, seems to be that vaccination passports, by distinguishing between 'the vaccinated' and 'the unvaccinated' and making benefits available to the former that the latter cannot access, could undermine solidarity by creating two separate groups, one of whom (the unvaccinated) will be subject to restrictions that are lifted for the other (the vaccinated).

Advocates of COVID passports can respond to this concern in two ways. First, they can argue that what solidarity, so understood, requires is in fact that everyone get vaccinated, so as to protect those most at risk, even if their personal risk calculation speaks against vaccination—an argument often made in the context of vaccination against other infectious diseases (Boas *et al.*, 2016; Bayefsky, 2018).[15] High vaccination rates are, of course, particularly beneficial for those whose vulnerability to complications from COVID-19 is increased by, for example, age or pre-existing conditions. While I agree that these arguments speak in favour of vaccination, I suggest in the next section that *invoking* this line of reasoning in a context of highly unequal vaccination rates could have stigmatizing effects.

Second, proponents argue that, by introducing passports only once everyone has access to vaccines, 'there is no bar preventing the non-vaccinated from transitioning to the vaccinated group' (Barak-Corren *et al.*, 2021). Moreover, to the extent that vaccination passports create spaces where the risk of contracting SARS-CoV-2 is substantially lower than in spaces that are open to anyone irrespective of vaccination status, they can, as discussed earlier, facilitate participation in social life for those most at risk from COVID-19 complications.

At the same time, however, the possibility remains that, if vaccination rates are unequal, marginalized groups will be overrepresented among the unvaccinated. When this is the case, COVID passports establish a division between vaccinated and unvaccinated individuals that will, to some extent, reflect existing patterns of inequality, marginalization and exclusion.[16] In addition to entrenching such divisions, this could also lead to material inequalities if the vaccinated advocate for their own interests, such as further exemptions for the vaccinated or extensions to the venues and contexts only they can access, rather than policies that would benefit the vaccinated and the unvaccinated alike.

Stigma

Worries about stigmatization are frequently voiced in the debate about the pandemic (Fisher, 2021). Stigmatization involves viewing individuals with particular traits or engaging in certain behaviours as inferior, abnormal or even less than human (Goffman, 1963; Nussbaum, 2004). Stigma is particularly salient in the context of COVID-19 because stigma often arises in contexts of contagious disease (Des Jarlais *et al.*, 2006) and because the geographical origins of COVID-19 have contributed to stigma against racialized groups (Viladrich, 2021). Particularly relevant for our purposes here is that where vaccination rates are lower in groups that are already subject to stigmatization, this could contribute to the stigmatization of the unvaccinated. This mechanism is familiar from other public health contexts, such as smoking (Graham, 2012), where health conditions or health-relevant behaviours become stigmatized when they decrease among higher status groups and become disproportionately common among, and therefore associated with, lower status groups.

How would COVID passports affect the situation? They could heighten stigmatization by explicitly identifying and labelling a characteristic ('unvaccinated') and tying it to concerns about dangerousness, contagion and

(state-enforced) exclusion from certain spaces. Also relevant for our purposes here is that such stigma can be heightened when behaviours are framed in a moralized discourse. The discourse around COVID passports is often couched in precisely such terms. For example, arguments for COVID passports have emphasized that vaccination is a 'social duty' (Barak-Corren *et al.*, 2021, 8) that the unvaccinated are refusing to fulfil, making it legitimate that they should bear a greater burden than the vaccinated.

It is difficult to gauge whether, or to what extent, the unvaccinated are stigmatized. However, one set of data is worth mentioning here because it suggests that they are viewed in negative terms. In a recent Canadian survey, 77 per cent of respondents, when asked whether they had very positive, somewhat positive, somewhat negative or very negative views of the unvaccinated, indicated that they had somewhat (44 per cent) or very negative (33 per cent) views (among vaccinated respondents, 85 per cent indicated that they had negative views; Jedwab, 2021).

Given the public health implications, it is, of course, frustrating that significant proportions of the population remain unvaccinated, and it is tempting to think that it is entirely appropriate to view and portray the unvaccinated in negative terms. However, this conclusion is too quick. Any such negative views must be attenuated by the fact that, as noted above, decisions about vaccination are not made in a vacuum but rather shaped by various background factors. In particular, it is important to remember that trust in governments and medical experts comes much more easily to some than to others: the reasons behind vaccine hesitancy include, particularly for marginalized groups, distrust following experiences of discrimination with government agencies and services as well as the health care system. In relation to the US context, Mohapatra reminds readers of Tuskegee, the medical experiments performed by Marion J. Sims, the history of forced sterilization of Black women as well as the ongoing inequalities in access to health care for Black populations and notes that:

> [w]ith this backdrop, it would be surprising if Black people actually did trust public health or government health efforts. Any kind of [COVID] passport scheme... needs to take account of this historical truth and make efforts at properly addressing earned distrust of the health care system by members of the Black community. (Mohapatra, 2021: 1758)

In addition, false information about COVID-19 and vaccination is spread via social media and untrustworthy news outlets in ways that recipients cannot always easily discern. Other actors, such as the state and corporations, arguably have responsibilities to ensure that the 'epistemic infrastructure' is one that is conducive to citizens' developing correct beliefs about important issues.[17] Against this background, frustration about vaccine hesitancy and its impact on the pandemic should translate primarily into concern about the social factors that contribute to it (and, perhaps, humility among those for whom such factors did not affect their decisions about vaccination), rather than into negative attitudes towards the unvaccinated.

While arguments for COVID passports that are couched in moralizing terms may contribute to negative views of the unvaccinated, it is not necessary to rely on such framings. Other justifications for COVID passports are available. For example, arguments that foreground that COVID passports can help reduce the burdens of the pandemic and thus benefit those most affected by it might be less prone to heightening stigmatization than a moralized framing that portrays COVID passports as giving justified advantages to those who have 'done their duty' by getting vaccinated.

The timing of COVID passports could also be important here: if introduced when large parts of the population do not yet have access to vaccination, being unvaccinated does not reflect any particular beliefs or attitudes, so when introduced during that time period, policies that distinguish between the vaccinated and the unvaccinated are less likely to have a stigmatizing effect. However, once everyone can access the vaccine, being unvaccinated is seen (not necessarily correctly, as argued earlier) to reflect an individual's decision, making it easier to stigmatize this group. The stigmatization of the unvaccinated will be less of a worry if vaccination rates are equal across different population groups or lower among better-off groups. If, however, vaccination rates are significantly lower among marginalized groups, vaccine passports could strengthen existing patterns of stigmatization. As with the other considerations discussed in this article, we need empirical research to assess the likely effects of COVID passports and of different ways of presenting and defending these schemes, on stigmatization in different contexts.

Expressing Equal Concern

Assessing policy proposals requires attention not only to outcomes but also to the attitudes towards different social groups that policy can express. Philosophers have argued that equality requires that policy convey to citizens that they are full and equal members of the community (Anderson and Pildes, 2000). How does this

requirement play out in the context of COVID passports?

In contexts where we know that disadvantaged groups do not have equal access to the vaccine and/or where vaccine hesitancy is due to concerns about discrimination, governments can signal that they lack sufficient concern for these groups and their interests when they fail to acknowledge the possibility of unequal effects or, implicitly or explicitly, see such unequal effects as an acceptable price to pay for less restrictive public health measures (Voigt, 2018). This concern is not necessarily attenuated when the services that the passport grants access to are non-essential, e.g. when it is bars that require a COVID passport rather than employment. Even when the benefits in question are trivial, adopting the policy can signal indifference to the interests of affected groups, and a failure to understand how injustice shapes individuals' choices.

Again, however, how policies are framed is crucial for what they express. Some of the arguments sketched earlier could be developed in ways that are consistent with expressive requirements. For example, framing COVID passports as a way to safely ease public health restrictions, while also implementing strategies that channel the economic benefits associated with this towards the disadvantaged, could help alleviate such concerns. Similarly, they could be framed as an attempt to protect workers in public-facing jobs from infection, especially given that the overrepresentation of low-income and marginalized groups in such occupations has contributed to the disproportionate impact of the pandemic on these groups.

Conclusions

COVID vaccination certificates are often described as inimical to equality. However, the precise reasoning for this view and the particular aspect(s) of equality that would be negatively affected by COVID passports are not always clear. This article developed a more detailed analysis of a range of broadly egalitarian concerns that might be affected by the introduction of COVID passport schemes.

In conclusion, a number of upshots of the analysis are worth re-emphasizing. First, COVID passports could undermine certain aspects of equality but also *promote* others. Second, some of the negative effects could be affected by how exactly these schemes are framed and presented to the public. Finally, it is crucial to take into account the context in which a scheme is implemented. Particularly important in this respect are, on the one hand, how unequal the impact of the pandemic and public health measures has been when it comes to different social groups and, on the other, inequalities in vaccination rates.

By identifying and exploring various complexities involved in assessing COVID passport schemes from an egalitarian perspective, this article tried to nuance what has become a polarized and often polemical debate. Importantly, while identifying these different concerns, as I do here, is a crucial step towards a balanced assessment of these policies, we also need empirical studies to assess the extent to which these different concerns materialize in different contexts and to what extent they are sensitive to changes in the design and framing of these schemes.

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Conflict of Interest

None declared.

Notes

1. In this article, I use the terms 'COVID passport' and 'vaccination certificate' because they are succinct and capture the idea that the schemes under consideration grant access to certain venues or activities that remain closed to those who are not vaccinated (and, depending on how exactly the scheme is implemented, cannot show proof of natural immunity or a recent negative COVID test). Specific schemes proposed in different countries often use slightly different terms, such as vaccination

passports, exemptions for the vaccinated, or COVID status certificates.

2. https://www.aljazeera.com/news/2021/4/2/rival-uk-legislators-rally-together-to-oppose-vaccine-passports.
3. To what extent vaccine certificates do in fact increase vaccination rates is an empirical question; for some evidence on the effects of vaccine certificates on vaccine uptake, see de Figueiredo *et al.* (2021); Mills and Rüttenauer 2022). For discussion on the issue of incentivizing COVID-19 vaccination more broadly, for example, by offering cash to vaccine recipients or entering them into a lottery,see, e.g. Largent and Miller (2021); Pennings and Symons (2021), Persad and Emanuel (2021); Savulescu (2021).
4. Studies suggest two main mechanisms through which vaccination can reduce the probability of transmission: first, vaccinated individuals have a lower probability of being infected with the virus and, second, if infected, they are less likely to transmit the virus than unvaccinated individuals because they have a lower viral load and are infectious for a shorter time period (Emary *et al.*, 2021).
5. The possibility of such certificates was particularly relevant before the arrival and rollout of vaccines. For contributions to the debate around immunity passports (see, e.g. Brown *et al.*, 2020; Hassoun and Herlitz, 2021; Persad and Emanuel, 2020; Voo *et al.*, 2020, 2021).
6. The argument that it is unfair if individuals bear the costs of choices that others are responsible for is often associated with luck egalitarian approaches to distributive equality. However, it is not clear how central this idea is to luck egalitarianism: arguably, luck egalitarians also have to deny compensation to those who are responsible for being worse off in cases where such compensation does not in fact impose costs on third parties (Voigt, 2007). However, luck egalitarian approaches can be helpful in spelling out when, precisely, individuals are in fact responsible for the choices they make; I return to this debate later on in this section.
7. For discussion on the epistemic opportunities that societies must put in place as a matter of justice, see Kurtulmus (2020).
8. One question here is at what point governments can be said to have done 'enough' to address the sources of vaccine hesitancy and mistrust among citizens, including concerns that are the result of a history of oppression and/or ongoing discrimination, so that it becomes appropriate for those who choose not to be vaccinated to be held responsible for that choice. For some discussion of this general problem, see Scanlon (1998: ch. 3).
9. And such inequalities may in itself be a matter of brute luck for individuals since attitudes and decisions regarding vaccination in one's social circle also affect individuals' choices.
10. See https://covid.cdc.gov/covid-data-tracker/#vaccination-demographics-trends; accessed 1 October 2021.
11. On this, see also Attwell *et al.* (2022).
12. Persad and Emanuel (2020) make a similar argument in relation to immunity passports.
13. For discussion of the distinction between direct and indirect discrimination, see Thomsen (2015). In some legal contexts, the idea of indirect discrimination is also referred to as 'disparate impact'.
14. The link between solidarity and equality, and thus the reason for discussing solidarity in this article, is not obvious. Some relational egalitarians emphasize that equality requires the absence of social divisions (Anderson, 2007), that individuals have a sense that they are 'in the same boat' (Fourie, 2016), or, most explicitly, that solidarity is a dimension of social equality (Baker, 2015). Other philosophers identify solidarity as a value that is conceptually distinct from equality (Zhao, 2019), though they might be causally related in that equality can help societies achieve solidarity (Scheffler, 2005). For the purposes of this discussion, I will not try to settle to these questions but rather assume that solidarity is sufficiently closely related to equality to be discussed here.
15. Yeh (2022) argues that mandatory vaccination can be seen as a way of institutionalizing this solidaristic commitment to mutual assistance in the context of the COVID-19 pandemic.
16. More broadly, Kapadia (2022) suggests in response to Yeh (2022) that arguments based on solidarity implicitly assume egalitarian contexts and therefore cannot be straightforwardly applied to societies characterized by marginalization and racial inequality.
17. See Kurtulmus (2020, 819) on the idea of an epistemic infrastructure that must 'provide [citizens] with the opportunity to gain knowledge on issues they need to be informed about'. See also Levy's (2021) analysis of echo chambers and the difficulties of avoiding or correcting false beliefs once individuals are in echo chambers. Levy concludes that 'improv[ing] the quality of the epistemic environment. . . is a collective enterprise'.

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