

Review Article

Ethical Issues Around Implementation of COVID-19 Vaccine Certificates

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Abstract: The use of vaccines and vaccination programs for Covid-19 became a widely prevalent practice all over the globe to curb the spread of the virus and put a check on the ongoing pandemic. Implementation of Covid-19 certificates or 'vaccine passports' (also known as 'immunization passports' or 'digital health passes') is another step in the same direction to control the spread of the virus by ensuring a method to slowly ease back into the regular ways of living and traveling. These certificates are also believed to promote vaccination amongst the public and ensure a higher vaccination rate and achievement of herd immunity. While it may seem like an excellent initiative to control the virus, various legal and ethical issues arise. We are familiar with the direct conflict and controversy around anti-vaxxers (people who refuse to get vaccinated), and the agenda furthered by the government to achieve public health and contain the spread of the virus. In addition, the usage of vaccine certificates is also an attention-worthy area that gives rise to several ethical concerns that might be overlooked as a second-order consequence of vaccination programs. This paper aims to expose ethical issues arising from using vaccine certificates and suggestions to deal with such issues mindfully and responsibly.

Keywords: COVID-19, vaccine passport, Covid-19 certificates, bioethics, ethics of vaccination, public health, herd immunity, human rights

Introduction: The emergence and widespread of the Covid-19 virus disrupted everyone's lives and created disorder on a global level. The pandemic has not been easy on anyone on both personal and professional fronts. Given the novelty and severity of the virus, the government and higher authorities had to make difficult decisions like imposing lockdowns, levying fines on not wearing masks, and so on. In the same series of

attempts to contain the spread of the virus, vaccination programs were highly promoted so that everyone gains immunity by taking doses of vaccines against Covid-19. Those vaccinated got a vaccination certificate, which is now being used to allow individuals to enter various public spaces and travel. Vaccination programs and certificates have been promoted to develop better immunization individually and as a community, consequently having

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better control over the spread of the virus. However, their use comes with its own set of complications and ethical issues.

Vaccine certificates or passports act as proof that a particular individual has been vaccinated against Covid-19 and is relatively safe herself. Moreover, vaccinated individuals also pose a lesser threat to people around in terms of spreading the virus. In many countries, vaccination certificates are being used as a mandatory requirement for traveling and as an eligibility criterion to enter institutions, offices, and public areas like restaurants, theatres, etc. As the name suggests, the vaccine 'passport' serves as a pass and adds a layer of added safety to the more significant cause of preventing the spread of Covid-19. Hall and Studdert write that the reasoning behind vaccination programs and certifications is to ensure the public health restrictions that limit public movement and social activities are "tailored to verifiable risk."¹ From this perspective, there appears to be no issue with promoting and encouraging one to have a vaccine certificate. In fact, it seems to be a commendable approach. However, by reading between the lines and looking beyond the obvious, one can understand the problems with the unconditional and hastened implementation of the policy of vaccination certificates.

From an ethical perspective, the issue that arises here is the ramifications of using vaccine certificates. While their usage in itself might seem noble and harmless, it adversely affects those who choose not to get vaccinated. It becomes a moral question of how fair is it to limit their movement when Covid-19 restrictions are being relaxed based on the vaccination status. With the use of vaccination certificates, people can travel and access public places ranging from restaurants and

movie theatres to educational institutes and offices. Now, the question arises isn't it unfair for only vaccinated people to have such an advantage over those who did not get a dose? This is a major dilemma that we will be exploring from an ethical angle. How should the divide between vaccinated and unvaccinated people be dealt with? What is the best way to work towards the goal of attaining the best public health while there are people who make a personal choice of remaining to be unvaccinated? These are major concerns that crop up around the use of vaccination certificates.

Osama and others speak of the use of vaccine passports as a 'minefield' that the governments should be careful walking through.² As scholars of philosophy and bioethics, it becomes one's responsibility to dig deeper and bring out the ethical issues related to mandatory usage of vaccine certificates.

A document by the UNESCO World Commission for the Ethics of Science and Technology (COMEST) and the UNESCO International Bioethics Committee (IBC) highlights the ethical issues associated of Covid-19 certificates and vaccination passports.³ It is a good starting point for developing a basic, relatively unbiased understanding of the issues at hand as it covers a wide variety of major ethical concerns followed by guidelines to deal with them in the best possible manner. Thus, this statement by UNESCO is used as the basic framework of this paper, and its content is central to the discussion of this paper.

In order to introduce vaccine passports, nations first need to have the privilege of having a sufficient vaccine supply. If there is a vaccine shortage, such countries face a

more fundamental issue of making vaccines available to all their citizens. UNESCO advises broadening the scope of Covid-19 certificates by not keeping it limited to only vaccination certificates but also including documents that serve as proof of past infections or recent negative tests for Covid-19 and indicate immunity against the virus. They are referred to as 'vaccine certificates,' 'recovery certificates,' and 'test certificates,' respectively. Including recovery and test certificates in the discussion of Covid-19 passports is relevant and crucial because the underlying principle behind these passports should be to ensure that the person concerned is less likely to spread the virus. If this condition is being fulfilled by immunity gained after a recent infection or a negative test, they must be equally accepted. It is unfair to keep vaccination certificates on a pedestal and give them a superior position while their efficacy has not been clearly established. Secondly, vaccination might not be viable for many and making it a mandatory requirement would create a divide in society. However, Sharun and others contest that vaccination passports or certificates are better and more reliable than immunity passports (recovery certificates) as vaccination correlates better with protection.⁴

The primary reason behind the support of Covid-19 certificates is that they would facilitate the return to normalcy by reopening public spaces more safely and ensuring the establishment of public freedom once again. However, it needs to be pointed out that not everyone is in the same boat, and making vaccination certificates a mandatory requirement for enjoying *civil freedom* would conflict with the *freedom of choice* for those who do not wish to undergo vaccination for several reasons which will be discussed later on in

the paper. Not having access to vaccines, Covid-19 test kits, modern technologies, etc., is a major reason why many people cannot get vaccinated even if they want to. Suppose Covid-19 certificates fulfill the desired role of reducing covid restrictions at the cost of infringement of public rights of some people. Then the moral responsibility arises to deal with the consequences with full responsibility, avoiding conflict of human rights as much as possible. The goal of using certificates should be to create “an epidemiologically safer environment for everyone.” The feasibility of this goal having a utilitarian undertone needs to be discussed.

As previously discussed, UNESCO COMEST and IBC have shared an essential list of ethical considerations that must be kept in mind while formulating and implementing policies around Covid-19 certificates. They are elaborated upon in the following section, with the subheadings borrowed from the original document to a great extent.

1. Civil Rights and Freedoms: Those in support of Covid-19 certificates state the reason that these certificates would facilitate the restoration of civil rights and freedoms of the majority population by the eventual withdrawal of restrictions on people's movement and accessibility to public spaces that were imposed as a consequence of the pandemic. However, if the use of vaccine certificates honoring the civil rights of one section of the population infringes upon the civil rights and freedoms of others, it is morally problematic. Some people refuse vaccination due to religious or moral beliefs. Some could also refuse vaccination due to fear of medical complications due to other diseases and health comorbidities or simply because they cannot afford to live, fearing vaccination's complications.

One of the basic tenets of ethics, fairness, promotes that while one may disagree with someone's choice of not getting vaccinated, every choice must be respected on moral grounds. Compulsory implementation of covid-19 certificates would restrict these people from exercising their right to refusal freely and would place civil rights and freedom of some over others, which is unfair. While these certificates may incentivize getting vaccinated, they should not prioritize individuals in every sphere simply by virtue of being vaccinated. However, it is also noteworthy that since the choice of not getting vaccinated also extends the risk of infection to those vaccinated, some intervention and infringement to ensure public health is not entirely unwarranted. Childress and others clearly state that it is ethically inevitable that collective needs sometimes take precedence over individual interests.⁵ Despite the clash with specific human rights, it remains true that vaccination is of pivotal importance in combating coronavirus and working collectively toward ending the pandemic. Its role in achieving herd immunity and providing protection on an individual level cannot be denied. The moral dilemma is to what extent vaccination certificates can be made mandatory while there are people who have chosen not to get vaccinated?

2. Discrimination and Societal Divides:

UNICEF states that the authorities implementing Covid-19 vaccination certificates should ensure that they do not lead to societal discrimination. These certificates should not establish a hierarchy in society in a manner that vaccinated individuals are superior to unvaccinated individuals. Giving better opportunities and access rights to people with certificates would cause a divide in society

and stigmatize those who do not hold any such certificate.

Sometimes people cannot get vaccinated because of certain medical conditions, pregnancy, etc., or due to the unavailability of vaccines in the first place. Those who belong to racial minorities or low-income populations have significantly lower vaccination rates even if sufficient vaccines are available in their region (See 1). This speaks volumes of the systemic discrimination prevalent in society for those belonging to marginalized sections based on their color, caste, and class, leading to a lack of accessibility to equal healthcare opportunities. With such factors in play in society, imposing a regulation that makes vaccination mandatory would be unethical and deepen the already existing disparity between marginalized and privileged strata, promoting inequality. While not getting equal opportunities for vaccination is unarguably a valid ground for contesting the unconditional implementation of vaccine certificates, the moral status of people remaining unvaccinated and being at risk of exposure based on their religious, moral, or philosophical beliefs still remains to be questionable. Is it justified to consider only those who could not get vaccinated due to societal reasons but not those who make a personal choice of not getting vaccinated? Will it not take away their autonomy over the choice of not getting vaccinated? Is it not unfair to subject them to condemnation based on their personal choice? Also, how do we build this hierarchy of whose civil rights are more valuable than the rest?

Suppose we try to see the implementation of vaccination certificates from the perspective of the universalizability principle of Kant's categorical imperative. From our discussion, it is evident that everybody will not be able to abide by it.

Simply put, it is not universalizable. Moreover, encouraging people to get vaccine doses to achieve the goal of maximum herd immunity would be treating people as means; this contradicts another principle of Kant's categorical imperative that states people should never be treated as a means to an end but rather as ends in themselves. A utilitarian approach can also be taken to understand the vaccination certification policy. Its implementation would favor the maximum population by ensuring herd immunity, better public health, and an easier transition to post-pandemic normalcy, which is utilitarianism's basic tenet: the greatest good for the greatest number. While either of these two perspectives or any third approach can be taken, it remains debatable how far a moral theory can justify the use of vaccination certificates.

3. Scientific Uncertainty: Several scientific uncertainties surround the data of Covid-19 vaccination certificates, which puts a question mark on their credibility and makes it evident that vaccines should not and cannot be considered the ultimate solution.

- *Vaccination certificates.* The efficacy of various vaccines in providing immunity and consequently in checking the spread of the virus is not very precise. Also, the duration for which the vaccines remain effective or need another dose differs from vaccine to vaccine. On the one hand, there have also been cases where people got severely sick after getting a vaccine. On the other hand, many vaccinated people developed strong immunity after taking a dose of the same vaccine. The emergence of new,

mutated variants also renders vaccines that were formerly believed to be highly effective in need of improvement. The nature of vaccines and their effect on people is quite unpredictable and constantly evolving.

- *Recovery certificates.* Those recently infected by a coronavirus and having developed natural antibodies cannot be considered entirely safe and immune to reinfection. There is no substantial evidence for how long the natural immunity stays and how long it will be effective against future infections. The emergence of newer variants is also a problem for those who gained natural immunity from prior variants. (Natural immunity should not be seen or promoted as an alternative to vaccination. Otherwise, people might be motivated to get exposed to the virus purposefully, considering it more “natural” than getting a vaccine shot.)
- *Test certificates.* Negative test reports are valid for a short duration, and their reliability and specificity vary depending on the test type and coronavirus strain. Due to their shortest validity, they are the least reliable.

4. Digital Technology: Covid-19 certificates majorly use digital technologies for accuracy and better accessibility through apps and PDFs. There is a use of technology for generating and accessing vaccination certificates through apps or PDFs. However, many people, like older people or those from rural backgrounds or lesser privileged sections, maybe not be familiar with using

digital devices or the internet. Moreover, some places do not have internet facilities, proper access to electricity, or electronic devices. These occurrences give rise to challenges based on using digital technology in the process of vaccine certification.

Assuming everyone has access to digital technology and basing something as fundamental as free movement and access to resources based on digital certificates is problematic and discriminatory. While digitalization has its perks regarding privacy and accessibility, its applicability needs to be considered carefully, factoring in digitally less privileged or technically illiterate people.

5. International Solidarity: The problem of vaccine inequity across the globe precedes the issues arising due to the introduction of Covid-19 certificates. Developing policies around Covid-19 certificates in any nation need to take into account the differences in vaccine availability in different places. Some nations have a surplus of vaccines and are in a position to extend help to those having shortages. However, since the situations in a pandemic are unpredictable, the possibility that they might need the vaccines for a round of the second dose for their own people cannot be dismissed. Many countries witnessed such a situation during the second wave of Covid-19. So, the dilemma arises about how wise it is to export vaccines and not keep them as a backup for one's own nation in case of an emergency.

Another issue that crops up at the international level is when countries insist on people traveling from other countries to get their domestic vaccines only and do not accept any other vaccination certificates. Such an approach staying focused on only one's own country and

welfare does not conform with the need for solidarity during a global crisis.

6. Safety, Security, and Reliability: All the data collected from people regarding Covid-19 certificates for entry in public spaces in order to keep virus transmission at a minimum is at risk of being misused if not properly stored with maximum security and confidentiality. The data might be leaked and used for unintended purposes, compromising the safety of the individuals.

Another concern is of reliability of the data of vaccine certificates. There is a wide variety of vaccines available with many differences in the duration and extent of immunization these vaccines provide, making the generalized understanding of Covid-19 certificates a quite far-fetched and complicated notion. Moreover, newer variants undergo mutations. Therefore, antibodies for the previous strains of coronavirus, either by administration of vaccines or by natural immunization gained due to recent infection, will not prove effective against the new variants that emerge. This again puts the reliability of vaccination certificates in question.

7. Privacy: Due to a common practice of forgery and misuse of Covid-19 certificates, the personal details shared for the Covid certificates might get into the public domain risking the user's breach of privacy. The fear of such misuse of data may also present itself as a resisting factor for people to get vaccinated, and they cannot be questioned for that unless assurance about safety is given.

Covid-19 certificates also started getting misused by morphed certificates generated by some miscreants. People also get lured by them to get a way around the system and enjoy certificate benefits without getting vaccinated or testing themselves.

Such behavior hinders vaccination programs' smooth process and leads to increased cybercrime.

8. Sustainable Development: During lockdown in the pandemic, all nations got a peek at better environmental conditions like lesser pollution and a drop in carbon emissions. This happened because of the restrictions on travel and limited movement. With the uplifting of restrictions and increased movement, we will go to square one concerning environmental degradation. It makes us think about how restrictions ended up positively affecting the environment.

While Covid-19 certificates might be beneficial for economic growth for the nation to get back on its feet and prosper, low-income and developing countries not having access to vaccines do not enjoy this benefit. Instead, due to the restricted movement, the development in these countries would be compromised.

9. Risk assessment, transparency, and accountability: The coronavirus disease or any new virus, due to its novelty, limits the knowledge of healthcare professionals and researchers. New information emerges every day with ongoing progress, leading to uncertainty about the efficiency of vaccines and limiting the scope of vaccination certificates. There is not much clarity around the risks involved when one gets vaccinated. The data available is also not easily accessible to the public, limiting transparency. Furthermore, when the public is not involved in the decision-making process, it leads to a lack of accountability.

Analysis: Following are suggestions by UNESCO in accordance with the ethical issues highlighted above, occasionally supplemented with my comments and

thoughts in bracketed lines towards the end.

1. As a solution to infringement of civil rights and freedom of unvaccinated people, UNESCO suggests finding some middle ground between promoting covid-certificates and respecting the individual rights of individuals not vaccinated for whichever reason. They recommend that government organizations treat recovery and test certificates at par with vaccine certificates. This broader criterion of all three kinds of certificates falling under the umbrella term "Covid-19 certificates" would ensure that the status of lower transmission by individuals is being established irrespective of the reason- vaccination, recent recovery, or test report.

(While this is a good starting point for more inclusivity, it seems to be diluting the infringement and conflict by broadening the criteria. The uncertainty around the reliability of the data of these certificates and the scope of making them mandatory remains questionable.)

2. Discrimination and creating a societal divide based on vaccination certificates should be avoided. Everyone's integrity and human rights need to be held upright, and for this, regulation is required. Access to vaccines and tests at affordable prices and awareness regarding the vaccination programs should be an indispensable part of Covid-19 certificates policymaking.

(It is impossible to do away with vaccination programs since immunization needs to be developed and promoted. Unavailability of vaccines and personal choice to not get vaccinated- both these reasons cannot be evaluated to be at par with each other when one has to think of public health, which is the goal of government authorities. To some extent, the infringement of human rights and paternalism is inevitable to combat the global crisis of pandemics like Covid-19.)

3. The statement by IBC and COMEST clearly states that since there are so many scientific uncertainties surrounding Covid-19 certificates, they should be taken with a grain of salt. They should be understood as only reducing the risk of the spread of the virus (See 3). It is crucial to remember that the Covid-19 certificates of any form are also not the absolute proof and elixir against the virus. The limitations and uncertainty around the data make strict policymaking on their basis questionable.
4. Special provisions should be made for digitally less privileged people to assist them or provide them with alternative means to access places requiring a Covid-19 certificate. (There can be people who simply avoid using technology because of their personal choice, not because of a lack of resources and opportunities. In that case, compulsory imposition of digital certificates is meddling with their autonomous decision of not using technology and digital devices.)
5. The imposition to have a vaccine certificate of a particular vaccine accepted by a specific country should not be placed for being able to travel there. In such cases, there should be a provision of easily accessible tests for free or at affordable rates. Sharun and others state that prioritizing domestic vaccines for Covid-19 over those approved by WHO has resulted in “geopolitical vaccine silos” (See 4). An attempt to have a global consensus on accepting specific standards of vaccines and vaccine certificates should be made. A global consensus on specific standards and guidelines for vaccines and their usage, like the one by WHO, should be non-negotiable. There should be a collective effort to work towards the global production and distribution of vaccines. The acceptance of any vaccine and its certificate should be based on scientific facts, not the origin of the vaccine in terms of association with a particular nation or company. At times of such global crisis as a pandemic, there should be a serious discussion on how patents can be waived temporarily to expedite vaccine production and increase accessibility to one and all.
6. All the details collected for Covid-19 certificates should be stored securely and safely. The certificate should clearly state the degree of protection the administered vaccine provides. Moreover, immunization status should be regularly revised based on new scientific

developments and research and the emergence of newer variants to give reliable information about whether or not the certificate holder continues to be of lesser risk in terms of spreading the virus.

7. The digital Covid-19 certificates should be generated so that only minimum data is collected and used for these certificates and apps. People should not be at risk of their data being misused for other purposes in the future and their privacy being compromised. Strict measures should be taken against those morphing Covid-19 certificates to prevent misuse. Along with taking strict action against perpetrators' morphing of Covid-19 certificates, governmental organizations and authorities should discourage people from sharing these certificates on social media platforms or sharing information with unreliable sources.
8. Issuing Covid-19 passports enables people to return to the old ways of travel and interactions with humans and non-human components of nature. While doing so, it is also essential to look at the bigger picture and make an effort to maintain reduced carbon emissions and decreased pollution levels. The focus also needs to develop sustainable ecosystems to prevent future viruses from being born and causing such a deadly pandemic. The endeavor of sustainable development should not just be limited to immediate environmental concerns. However, it should also consider how some

countries lacking vaccines will be affected. The development of such countries will be hampered, and special provisions should be made that are considerate towards their upliftment and supports them.

(The goal of sustainable development must go hand in hand with every step taken towards recovering from the pandemic. The goal needs to be not just combatting the current virus but also ensuring how one can learn and improve lifestyle to have better chances of surviving virus attacks in the future. Working towards sustainability of future lives is a critical bioethical goal that cannot be neglected.)

9. There is a need for a research program that could assess the impact of Covid-19 certificates on society, its risks, and their efficiency in achieving the goal of public health. It is impossible to keep everyone happy with public policies as there are bound to be conflicts due to differences in opinions and the inevitable infringement of human rights. The way around this is to maintain a maximum level of public accountability and transparency, giving satisfactory justifications to people about unavoidable infringement of their rights and making them a part of the decision-making process to come to the best policies around certificates. Such a research program would also give way for improvements in policies based on various developments in the scientific community working on the virus strain and its impact.

(The idea of implementing a research program is theoretically ideal, but its implementation in practical life is a bit tricky. There are limited resources, and large sums of money and resources cannot be kept aside for such research programs when there is a real-time crisis to save lives in hospitals and arrange medicines, ventilators, etc.

Public accountability and transparency are pillars of any efficient public health policy and should be kept in mind while framing and implementing vaccine certification policies.)

Hall and Suddert state that a wide array of opinions and arguments suggest that implementing a government policy of vaccine passports would be pretty dangerous and complex. They side with the implementation of Covid-19 certificates believing it to be a sensible policy facilitating the return to pre-pandemic life while also being considerate towards the cause of public health. They take a unique stand stating that “requiring people who decline vaccination to bear some consequence for their refusal seems only fair, especially if, collectively, such hesitancy puts herd immunity out of reach” (See 1).

On the other hand, the Committee on Bioethics (DH-BIO), Council of Europe, in its “Statement on Human Rights Considerations Relevant to ‘Vaccine Pass’ and Similar Documents” take an opposite stand prioritizing individuals and their rights above the public if it comes to choosing one over the other. They say, “Public health and the collective approach taken in understanding and managing health risks could be overridden by an individualized approach to risk that could

increase the inequalities already exacerbated by the pandemic.”⁶

Contrary to popular belief, the decision to be unvaccinated does not always come from a position of privilege. While many people from this section have a social status that allows them to make a conscious decision not to get a jab, there are many belonging to the lesser privileged section who refuse to get vaccinated, fearing the side effects and compromising their ability to work and earn as they are often the sole breadwinners of their families. They also might not be educated, which affects their understanding of vaccines and their awareness of them. So, they do not feel they have the privilege to risk getting a vaccination shot. Then some do not have access to vaccines due to unavailability or discrimination and hoarding by those having more power and resources.

On the contrary, some choose not to get vaccinated because they claim to be choosing between not putting anything in their body that they do not want to—one famous example of this is the case of the world's no.1 tennis player Novak Djokovic.⁷ He made the conscious decision to remain unvaccinated, even if that cost him opportunities to participate in tournaments with vaccination mandates. The point worth noting here is that his status and position in the world of sports allow him to afford to give up crucial opportunities. While what is happening to him is also probably unfair in its own right, the point is that many people cannot afford such consequences of “missed opportunities” because of being unvaccinated. Furthermore, due to anti-vaxxers, anyone who is unvaccinated for an inevitable reason gets stigmatized for not showing solidarity and compromising society's herd immunity.

Conclusion: Much caution must be paid to introducing and implementing Covid-19 certificates. Infringement of human rights of unvaccinated individuals should also be taken into account, and the sole focus should not be the betterment of the majority population. The best alternatives and solutions must be provided to unvaccinated individuals in lieu of needed Covid-19 certificates, honoring their rights and freedom. Discrimination, stigmatization, creation of societal divides should be avoided at all costs.

Opting for the digitalization of certificates is a tricky decision as it is not all rosy. It comes with several downsides like taking care of digitally unequipped in terms of knowledge or resources, maintaining the privacy of certificate holders, and preventing forgery or morphing of certificates, to name a few. Being updated with the scientific advancements and uncertainties is also crucial for the better implementation of certification policies which are being implemented for the ultimate goal of prevention and containment of further transmission of the virus and return to movement and economic growth in the pre-pandemic era. International solidarity and sustainable development also need to be a part of the policymaking of Covid-19 certificates. Lessons need to be learned and accommodated in the policies of governmental organizations in all countries and also on a global level to work in the direction of preventing a future pandemic and being better prepared if it were to strike again.

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