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Ethics of the COVID-19 “Vaccine Passport”

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1. Summary

The COVID-19 pandemic has not only posed unprecedented challenges to global health but has also raised profound ethical questions concerning public health measures, healthcare delivery, research, and governance. Some governments introduced a COVID-19 passport in order to contain the further spread of the Virus creating another ethical challenge. This thesis seeks to explore these ethical dimensions to better understand the complexities of pandemic response and identify lessons learned for future public health emergencies.

The aim of this research is to examine the ethical dilemmas and challenges encountered during the COVID-19 pandemic and to reflect on the lessons learned from these experiences. The objectives include exploring ethical considerations in public health measures, healthcare delivery, research, and governance during the pandemic, analysing the impact of the pandemic on vulnerable populations and the ethical responsibilities of governments and institutions and reflecting on the ethical implications of the pandemic and propose recommendations for strengthening ethical preparedness and response in future public health emergencies. The exploration of these different areas of the pandemic response will then offer the foundation for the ethical dilemmas of the COVID-19 vaccination passport, allowing the possibility to analyse its ethicality.

This thesis employs a multidisciplinary approach, drawing on bioethics, public health ethics, and political philosophy. It utilizes a combination of qualitative and quantitative methods, including literature review, case studies, and analysis of policy documents and ethical guidelines. Additionally, qualitative interviews from news articles with key stakeholders, such as healthcare professionals and policymakers, are conducted to gather insights into their ethical decision-making processes.

The research findings reveal the multifaceted nature of ethical dilemmas encountered during the COVID-19 pandemic, spanning all areas of pandemic response. These include challenges in balancing public health measures like the COVID-19 vaccination passport and its restrictions with individual rights, addressing disparities in access to healthcare, navigating ethical issues in research and development, and upholding ethical responsibilities in governance and leadership.

In conclusion, this research highlights the importance of ethics in guiding responses to public health emergencies like the COVID-19 pandemic. It underscores the need for transparency, accountability, and solidarity in pandemic governance, as well as the importance of proactive ethical preparedness. It shows that the introduction of the COVID-19 passport compromised the autonomy and individual rights of people in an unproportional way. By reflecting on the lessons learned from the pandemic, this research aims to contribute to the broader understanding of pandemic ethics and inform strategies for promoting ethical decision-making and resilience in future public health emergencies.

Keywords for this thesis are COVID-19, ethics and vaccine passport.

2. Introduction

Pandemics are not new to human populations, but the most recent COVID-19 pandemic has presented the global population with challenges to global health, economies and social systems and thereby revealed an urgent need to critically evaluate national and international responses. Especially in the early 2020s, much of the world had been affected, with the disease having tested the resilience of health care systems and societies. (1)

This thesis seeks to explore the ethical aspects of the COVID-19 pandemic especially regarding the COVID-19 vaccination passport. It will examine key dilemmas faced by individuals, healthcare systems and governments. By looking into different ethical challenges presented in various areas of life, such as healthcare delivery, research or governance, this thesis aims to provide insight into the complex ethics of the COVID-19 pandemic and identify lessons learned from it. The importance of ethics during a pandemic is undisputed. Ethical principles like justice, autonomy, beneficence and nonmaleficence can help navigating through difficult decision making during such a crisis.

By diving into specific challenges encountered during the COVID-19 pandemic, this will examine the ethicality of public health measures like lockdowns and contact tracing. It will explore ethical dilemmas in healthcare delivery, including resource allocation and mental health support for healthcare workers. After analysing the previously mentioned aspects of the COVID-19 pandemic, the ethicality of the COVID-19 vaccine passport will be dissected further.

This thesis seeks to identify the ethical issues and dilemmas encountered during the COVID-19 pandemic, not to resolve them comprehensively, though it may point to possible solutions and lines of future ethical inquiry.

2.1. Background of the COVID-19 Pandemic

The Covid-19 pandemic is a once-in-a-century event in the modern world, an epochal massive challenge human society was facing. The whole world was fighting against the virus, from political leaders, healthcare workers to the general public, with each part of the society responding differently according to their own situation and perspectives. Epidemiologists, having live data of disease transmission and its control, are unitedly facing the challenge with common professional interests. But it is not just a matter of epidemiology, Covid-19 affects diverse aspects. From economic sectors, psychology, moral values, traditional cultures, and even international stability and security. This complex situation requires a revelation through the eyes of ethics, where it involves value judgement for determining right or wrong, that applies the principles of what is good, and bad. (2)

Covid-19 emerged in December 2019 in Wuhan, China, and after that has been reported in countries all around the world. It is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). An infection can lead to fever, fatigue, cough, difficulties breathing and even death. After an infection the diseases´ toll on one´s body can still be noticeable in the form of long COVID, where patient may experience a prolonged loss of smell or taste, as well as continued fatigue or dyspnoea. The determination of disease of this new coronavirus is referred to situation where Director General of WHO declared that the Covid-19 outbreak can be characterized as pandemic at press conference on March 11, 2020. The wide definition of pandemic is when an epidemic of infectious disease occurs on a global scale, involving several countries or continents, and the situation of the Covid-19 obviously qualifies for this definition. (3, 4)

2.2. Importance of Ethics in Pandemic Response

The outbreak has triggered an urgent appraisal of the measures needed to implement in preparedness and response to the threat of an influenza pandemic. This has seen the publication of several ethics guidance documents by national and international bodies. For example, the World Health Organization has produced guidance on pandemic preparedness, and the UK Department of Health has produced a set of values-based decision-making principles to inform pandemic influenza planning and response. An ethics guidance document specific to the COVID-19 pandemic has been produced by the European region of the World Health Organization. The aim of such documents is to provide an overarching ethical framework to guide decision-making in practice and to identify ethical considerations relevant to the different stakeholders in the response. This is crucial in ensuring that the response is ethically sound and that public trust and confidence are maintained. (5)

The nature of the COVID-19 pandemic is posing challenges for public healthcare and political responses. Outbreaks are placing pressure on healthcare resources, and the best possible care must be delivered in the most efficient manner. This generates tension between maximizing benefits for the population and allocating the best possible care to individual patients. Moreover, the variable nature of the disease, which affects individuals differently and has unknown prevalence in communities, undermines the ability to deliver the best care and to protect healthcare workers from infection. This may result in a change in the basic duty of care and cause health inequalities among population groups.

3. Methods

The data sources include academic literature, policy documents, ethical guidelines, and reports from governmental and non-governmental organizations. These sources provide additional context and insights into the ethical dimensions of the pandemic and inform the analysis of primary data. Online

databases for scientific research such as pub med provided most of the used research, other information regarding public opinion was found in online news portals. A comprehensive review of academic literature was conducted to identify key themes, concepts, and debates in pandemic ethics. This review served to create an outline and show a general direction the thesis would take. Data was then collected through an extensive search of academic databases, including PubMed and official websites such as the WHO as well as online news portals. Search terms include variations of "COVID-19", "pandemic", "vaccination passport" and "ethics" to capture relevant studies. Findings from the literature review were then synthesized and interpreted, identifying recurring themes, ethical dilemmas, and emerging trends in pandemic ethics. They were then integrated into the thesis to provide an understanding of the ethical dimensions of the COVID-19 pandemic and the COVID-19 vaccination passport. Finally, conclusions were drawn from the work.

4. Ethical Considerations in Public Health Measures

Public health measures have various ethical problems associated with them, mostly due to the fact that they put into play a utilitarian approach, which aims at the greatest good for the greatest number. Measures such as quarantine, prophylaxis, and social distancing all require that some individuals or groups bear a disproportionate burden of the disease. After the approval of COVID-19 vaccines, many countries introduced so called vaccination passports, allowing holders with a full immunization to take part in events, travel and services, prohibited to others. This measure was introduced to reduce the risk of infection for participants while reallowing the opening of venues, and travel routes. Thereby lessening the economic impact on businesses and allowing the resumption of social life. These vaccine passports, lifted restrictions for vaccinated people, while keeping them in place for those who were not vaccinated.

In the case of quarantine and social distancing, those who are not currently infected are asked to take preventive measures and change their behaviour, sometimes at great cost, to avoid becoming ill. It also disproportionately affects those more, that live a more social life, whether it be in their free time playing team sports or in their professional time as workers in gastronomy. A utilitarian would assert that these people are serving the greater good, but it is still an issue of fairness to ask this of them. The extent of the fairness is especially in question in the case of healthcare workers, as it is their job to care for those who are ill, and it is possible that they could be asked to take additional preventative measures. They would be required to both isolate themselves in a private environment so they will not spread the disease at social gatherings, while still being required to work in a high-risk environment for infection of the disease.

In addition to this, there remains an issue of fair implementation of public health measures. It is plausible that given different social groups and geographical areas, some measures might be targeted at some populations and not others. Consider again the case of Australia's fortified border on South Australia, where travellers into Melbourne were still able to enter the state from New South Wales. This resulted in Melbourne declaring a state of disaster, but the measures were aimed at restricting the freedom of movement for people living in Melbourne rather than preventing entry by other Australians. The government declared that the location of these people's employment was the reason for this, but it still appears that the burden was shifted to those in Melbourne. (6)

A further issue is that of informed consent. Measures such as taking a vaccine, or chemoprophylaxis, both of which have been discussed in relation to COVID-19, are invasive and have the potential to cause harm. It must be explained to individuals in detail what is the nature of their risk and why the measure is being implemented. People must understand the implications of their being compliant or non-compliant with the measure, and they must be given a free choice. This is all very difficult to achieve, especially in emergency situations, and the risk still exists that people will be misled or coerced into consenting.

4.1. Balancing Individual Rights and Public Health

As it will be evident throughout this essay, finding the right balance between individual rights and public health is no easy task, yet remains an essential part of an effective public health response to infectious disease.

As a society, it is generally agreed upon that individual freedoms may be limited during a public health crisis, as one's personal freedom ends where another person may be impacted by your behaviour. However, the rationale for the limitation, its extent and its justification may vary considerably. The World Health Organisation proposes that limitations to individual freedoms be the least intrusive and restrictive possible.

Yet, in liberal democracies such as Australia, Germany or Lithuania, the passing of emergency legislation may still significantly limit civil liberties. The examples outlined above, particularly the blanket travel bans, demonstrate a removal of individual freedoms in the interests of public health.

An important ethical question to ask with regards to disease containment is whether the methods utilised by the state are in the interests of minimising panic or whether they are a violation of human rights?

A further question is whether, upon implementing these policies, the state is duty-bound to provide financial compensation for loss of earnings to the individuals and groups that are affected. Especially

workers and businesses in the gastronomy and event sector were severely impacted by restrictions imposed by governments for the greater good. As they had no choice but to close or restrict their business to avoid fines, a financial compensation by the state can be discussed. (7)

This issue of whether limitations to individual freedoms are justified is magnified in the case of quarantining both individuals and communities. In an interview with the New York Times, Michael Osterholm, the director of the Centre for Infectious Disease Research and Policy at the University of Minnesota, stated that we simply do not know the social and economic impact of any potential quarantine measures for new diseases such as SARS. Osterholm proposed that before such measures are taken, randomised controlled trials would need to be conducted on the short- and long-term impacts of quarantine and the best methods to implement it. (8)

4.2. Equity in Vaccine Distribution

The Covid-19 pandemic has caused a worldwide health crisis, with cases on the rise in the early 2020s, our normal lives seemed far out of reach. However, the development of vaccines has been a main contributor to restoring normalcy, having provided a hopeful end to the pandemic. As vaccines began to be distributed, a complex ethical issue comes to play - how should they be distributed, and who should be the first to receive them? This issue was addressed by the World Health Organisation in the document "WHO SAGE values framework for the allocation and prioritization of COVID-19 vaccination", their aim was to provide suggestions on vaccine distribution which align with public health, ethics and law.

It is provided by the WHO that a main goal for vaccination programs is to reduce the overall risk of severe disease by preventing transmission and protecting those at increased risk for severe disease, however they recognize the need for a short-term goal which is to reduce strain on the healthcare system. The WHO has many proposals for vaccine distribution and prioritisation, however, for the purpose of this essay we will focus on high income countries and their vaccination of high risk and frontline workers and often overlooking the needs of lower income countries. An imperialistic and nationalistic perspective on vaccine distribution, prevails the needs of one’s own country over that of less privileged countries. With an us-first approach fully vaccinating only high-risk groups while the disease and death rates are higher in low-risk groups can still achieve herd immunity to protect low risk groups and prevent strain of the health care system. Vaccinating low risk groups when still at very high rates of disease and death rates in other countries can be seen as a complete ignore of the marginal utility and the wrongful global harm of wasted vaccines, particularly when the disease is still high in other countries. Step two is seen as a more reasonable proposal as it will start to see the vaccine needs in other countries access the COVAX vaccine, which sponsors global access to vaccines. Step 3 is likely to cause contention as we see a trade off global harm with an attempt to

achieve herd immunity in high income countries. However, there is no opposition toward the WHO proposal that say high income countries donating surplus vaccines to low-income countries is the morally right action. Overall, the WHO proposal does recognize some needs and has some positive global utility, however it does still enable a few high-income countries to prioritise their self needs and fail to provide and altruistic approach to vaccine programme which might support a moving the distribution toward a more ethic model. (9)

The unequal access to vaccines on a global level makes the introduction of vaccine passports for travel quite problematic. Restricting the possibility to travel for certain global populations disproportionally impacts citizens of poorer countries, unable to acquire sufficient amounts of vaccine doses for their population.

4.3. Privacy and Contact Tracing

Throughout the COVID-19 pandemic, one strategy that has been used to track and mitigate the spread of the virus is contact tracing. Contact tracing has long been used as a public health measure and is a method of finding and informing persons who have been in contact with an infected person, and subsequently collecting information on these contacts. One of the most controversial issues associated with contact tracing during the COVID-19 pandemic, however, revolves around the invasion of privacy through the use of technology. In more traditional forms of contact tracing, interviews and phone calls are used to find and notify individuals. However, in April 2020, the Australian government released the COVIDSafe app, a mobile phone application which uses Bluetooth connections to identify other phones with the COVIDSafe app installed, and contacts of COVID-19 cases for 21 days. (10)

There are both benefits and limitations to using this form of technology in contact tracing. A major advantage to using the COVIDSafe app is the significant decrease in time and resources needed to locate and inform contacts of COVID-19 cases. It also makes it possible to contact people who are unknown to the case; however, this may also give rise to false notifications. Despite evidence showing the effectiveness of the app in identifying close contacts when compared to information gathering by COVID liaison officers, overall utilization of the app has been low, with many Australians having concerns about the privacy implications of the technology. (11)

After long debates, Germany implemented a contact tracing app called LUCA, which was used to “check in” at restaurants or events for the period of your stay. If a person that was at the same venue at the same time, tested positive for COVID your contact could be traced via the app to inform you of your risk of infection. Privacy issues were often voiced and dismissed by ensuring that measures were taken to avoid abuse of personal data gathered via the app. However, when a person fell and

died after visiting a restaurant in Mainz, Germany, the police used the app to find potential witnesses. And while the intention of the police was arguably noble, this misappropriation of the contact tracing app highlights the issues of sacrificing privacy for the greater good. While in this case did not result in any additional harm for people involved, it can still showcase the potential for the abuse of data collected for the purpose of contact tracing. (12, 13)

5. Ethical Dilemmas in Healthcare Delivery

Some countries response to the COVID-19 pandemic was to close and contain. This doctrine, with its restrictive overtones, is underpinned by an obligation of justice to reduce risks to non-infected citizens. Although Carrese and Sugarman conclude that the change to protect the healthy by avoiding contact with infected individuals may threaten the professional value base of medicine. By focusing on the needs of people who are not infected, healthcare resources may be diverted in ways that compromise the chances of survival for those who are infected. (14)

In Germany appointments at health care institutions were set further apart, so patients would not necessarily have an increased risk for infection. In doing so, the total amount of appointments was decreased, making it harder for patients to receive consultations and regular check-ups. Prioritizing the need to decrease the rate of infection over other potential medical issues can lead to diseases not being diagnosed and treated in time. A lot of hospitals cancelled elective surgeries like joint replacements, undoubtedly affecting patients' quality of life, while using the surgical wards for patients infected with COVID. In the extreme, building hospitals and infectious disease units for quarantine and treatment of infected persons creates separate but unequal standards of care. Medicine has a duty to treat infected individuals and an ethic of care that demands fair and equal treatment of all sick persons. A new infectious disease control initiative must balance these duties and values against the needs of the uninfected and general public consensus. Reassessment and clarification of these duties within modern pluralistic societies would be timely and beneficial. Measures to prevent resource diversion and maintain trust in the medical profession will be vital to the acceptance of new public health initiatives. High quality and safe healthcare should always be the cornerstone of epidemic-related initiatives that seek to protect the health of the general public. This consensus is aligned with an enduring professional ethic and a growing understanding of the public's expectations of healthcare quality and safety. An evolving international consensus statement on the quality and safety of healthcare in the new era of patient safety is worthy of consideration in the development of new public health policy that impacts upon healthcare delivery. (15)

5.1. Resource Allocation and Triage

Triage, the sorting of patients based on need and the chance of success, is a particularly acute problem with the potential overwhelm of the health system, as was happening in Italy. The British Medical Association has issued a statement saying that it was inevitable that some extremely difficult decisions will have to be made in the days ahead, and the General Medical Council has issued guidelines to help doctors. Generally, intensive care offers the best outcome for patients in critical condition, so there are strong utilitarian arguments for giving finite ICU beds and ventilators to those most likely to benefit. However, there are competing distributive justice arguments that resources should be distributed equally among communities, or that those who are worst off should be given priority. It seems likely that if these decisions are left to doctors or families, there will be unequal access dependent on ability to understand the system and argue the case. In a state of emergency, it is therefore arguable that protocols should be put in place to guide decision making, to ensure fairness and to limit emotional burden on those making the decisions. These would ideally be developed through public consultation and be legally endorsed. An editorial in the Lancet proposed a system of triage and allocation that in the acute phase of the pandemic would focus on maximizing benefits but would transition to an approach based on maximizing equality of access if and when the pandemic becomes a sustained healthcare issue over many months. (16)

5.2. Mental Health Support for Healthcare Workers

Mental health burdens of healthcare providers are unique and quite severe. Studies on the mental health of healthcare workers during pandemics have reported high rates of adverse psychological outcomes including depression, anxiety, distress, and sleeping problems. During SARS, significant predictors of these outcomes included quarantine, risk of infecting others, and perceived stigmatization. In the context of COVID-19, the effects on the mental well-being of healthcare workers have also been quite severe. With more than half of healthcare workers experiencing psychological stress or depression during the pandemic in some countries, supporting those at the front lines of the pandemic has to be another priority. (17, 18)

It is important for hospitals and public health organizations to implement structures for monitoring mental health outcomes of both staff who have been redeployed and those continuing to work in their usual capacities. It is recommended that monitoring occurs in a systematic manner with clear points of follow-up for individuals identified as high risk. This may involve the use of easily accessible online platforms for answering standardized questionnaires to screen for psychological symptoms. Special consideration should be made for staff who fear they have risked transmission of infection to family members. Steps should be taken to ensure they are not stigmatized or discriminated against. (19)

Multiple sources state the need for early identification of psychological symptoms followed by timely interventions. Several articles provide potential psychological responses to COVID-19 with suggested interventions. These include psychoeducational interventions aimed at the prevention of chronicity of psychological symptoms for those in high-risk situations and ensuring the provision of appropriate psychiatric treatment for more serious, complex mental health disorders. High-risk populations are likely to include frontline workers directly involved in the management of COVID-19 patients and those at meetings important clinical decisions related to the fates of patients. These groups would benefit from the provision of extra psychological support in the workplace. (20, 21)

6. The Vaccination Passport

The use of COVID-19 vaccination passports has stirred up a lot of debate and ethical questions at the junction of public health, individual rights, and social norms. These documents, which can be in digital or paper form, are meant to confirm a person's vaccination status against COVID-19 and could be used to enable safe participation in different activities, such as travel, dining, and entertainment. As seen in previous parts of this thesis, a variety of restrictive measures were used to lessen the spread of infection, bringing with them several ethical dilemmas. The introduction of COVID-19 passports lifted some of these restrictions. However, the idea of vaccination passports has also caused discussions about their ethical implications, especially in terms of autonomy, equity, privacy, and the balance between public health and individual freedoms. This controversy shows broader conflicts between collective well-being and individual rights. It highlights the difficulties of implementing public health measures in a democratic society. It is crucial to critically examine their potential benefits and risks, consider various perspectives, and create ethical policies that uphold both public health and individual rights and dignity. (22, 23)

6.1. Beneficence and Public Health

Beneficence refers to the responsibility to act in a way that is in the best interests of the patient. From a utilitarian standpoint, beneficence can be interpreted as the best action to promote the well-being of the most people of a society. Supporters argue that COVID-19 vaccination passports serve a beneficent purpose by advancing public health and safety in various ways. Passports can help prevent the transmission of COVID-19 by allowing only vaccinated individuals to engage in certain activities or travel freely. They can also protect vulnerable populations who may be at higher risk of severe illness from COVID-19 at certain events as few or no unvaccinated people are present. Moreover, vaccination passports can incentivize vaccination of people that are uncertain about getting vaccinated. (24)

However, while being vaccinated does decrease the chance of infection, it does not completely eliminate it. Events where a COVID-19 vaccination passport is necessary, the false security can lead to ignorance of other safety measures such as distancing or wearing masks. (25)

6.2. Autonomy and individual rights

The issue of COVID-19 vaccination passports has sparked a debate on the principle of autonomy, particularly with regards to individual rights. The concept of autonomy highlights the importance of allowing individuals to make decisions about their own bodies and healthcare without anyone elses interference. However, mandating vaccination for certain activities or travel may infringe on this principle, as some argue that individuals should have the freedom of choice to accept or decline vaccination based on their own values, beliefs, and assessment of personal risk. (26)

Central to autonomy is informed consent, which requires individuals to be provided with accurate and comprehensive information about the risks, benefits, and alternatives to vaccination so that they can make autonomous decisions. Critics of vaccination passports are concerned that individuals may not be fully informed if their access to certain activities or travel is dependent on their vaccination status, potentially incentivizing them into getting vaccinated. (26)

To address ethical concerns about coercion and infringement on autonomy, supporters of vaccination passports suggest providing alternative options for individuals who are unable or unwilling to get vaccinated. This may include accommodating exemptions for medical reasons, as well as offering alternative means of participation or access for those who cannot or choose not to be vaccinated. Alternative ways may be a recent negative COVID-19 test or a high antibody count after a previous infection. (27, 28)

6.3. Equity and Access

Unequal distribution of COVID-19 vaccines both globally and within countries has led to disparities in vaccination rates between wealthy and poorer nations. This has particularly affected racial and ethnic minorities, socioeconomically disadvantaged populations, and rural residents. These marginalized communities face barriers to vaccine access due to limited healthcare infrastructure, vaccine hesitancy, and systemic inequities. The introduction of vaccination passports raises concerns about worsening existing inequities by restricting the activities and mobility of unvaccinated individuals and therefore disproportionately impacting marginalized populations. Vaccine mandates for certain activities or travel may also worsen inequities by further marginalizing those who are already disadvantaged. (29)

Especially during the first months of the COVID-19 vaccine roll-outs, the order of vaccination for the public was handled in different ways around the world. Most countries prioritized people that

were at risk for a complicated infection as well as those that had a high risk of infection, such as healthcare workers. In the general public however, it was often first come, first serve. Young people, usually being without any comorbidities were often the last to get vaccinated, simply because they were young and healthy. This could lead to those people missing out on events, travelling or even job opportunities just because of a lack of vaccines. (30)

Unless a sufficient amount of vaccinations can be provided to the public, restrictions of personal opportunities because of being unvaccinated will impact certain populations in an unjust manner.

6.4. privacy and data security

COVID-19 vaccination passports raise ethical concerns regarding the confidentiality and privacy of personal health data. To guarantee ethical implementation of vaccination passports, it is important to minimize the collection of personal health information to only what is necessary for verifying vaccination status and limit its use to specific purposes. Individuals have to be fully informed and consent to the collection, use, and sharing of their personal health information. Vaccination passport systems must incorporate robust security safeguards and encryption measures to protect personal health information from unauthorized access and tampering. Finally, vaccination passports should not be used to discriminate or stigmatize individuals who are unvaccinated or have medical reasons for not being vaccinated. (31)

7. Ethical Implications for Vulnerable Populations

Vulnerable populations have been disproportionately affected by the current pandemic due to their limited access to resources, unstable living conditions, and the nature of their jobs. This includes the homeless, elderly, minority groups, and healthcare workers on the front lines of the pandemic. It has been noted that homeless persons are especially at risk for COVID-19 due to their inability to self-isolate and their living conditions in overcrowded shelters or encampments. They are also more likely to have preexisting health conditions making them more susceptible to the virus. They are at increased risk of contracting the virus from other shelter residents or staff, and if anyone from the homeless community does become infected, there is concern for widespread transmission due to the transient nature of the homeless population.

It has been noted that resources are not allocated equitably in pandemics and has also been seen with the COVID-19 pandemic. An example from the SARS epidemic in Toronto showed how an Asian immigrant community was widely stigmatized; a stigma has now been seen globally towards those of Asian descent due to the origin of the virus in Wuhan, China. Advocates of the elderly community have brought attention to the fact that age alone should not be the determining factor for allocation of resources and medical treatment. (32, 33)

7.1. Disparities in Access to Healthcare

Social determinants of health are the conditions in which people are born, grow, live, work, and age, as well as the systems in place to deal with illness. These conditions are also affected by a wider set of forces: economics, social policies, and politics. In the United States and the United Kingdom, the ethics of COVID-19 have been fraught with the revelation that the pandemic has disproportionately affected certain demographics of the population. Evidence abounds that the virus has had a higher mortality impact on men, the elderly, people with certain underlying conditions, and people from black, Asian, and minority ethnic (BAME) groups. These could all be considered different population segments, insofar as they are grouped by age, sex, class, or markers of biological difference, which may all have been unequally affected and have experienced different marginalization and/or stigmatization, increasing their risk of harm. (34)

The handling of such disparities differs between the US and the UK. In the UK, an NHS report concluded that a greater proportion of those people of BAME status were critically ill in in more categories when compared to the expected proportion of critically ill patients. A disparity was also noted with regard to people of Asian ethnicity. This is clearly an issue that the NHS is taking very seriously, and it is likely that the issue of ethics in the disproportionate effect on different segments of the population will be examined further in the future in the UK. This can be compared to the situation in the US, where an article from Time magazine reports that the Centres for Medicaid and Medicare Services have delayed data collection to prove disparities in infection rate and deaths amongst ethnic minorities. This was a voiding of policy that could be detrimental to the future handling of such issues, as the article notes that the information might end up being used for future redistribution of funds to address ethnic inequalities. (35)

7.2. Ethical Considerations for the Elderly

In many cultures, the elderly are respected members of society, and it is expected that they will be cared for and treated with dignity. Considering this, it is important to plan for how different preventive, promotive, and curative measures for COVID-19 will impact this population, including how strategies to protect them will affect their well-being and quality of life. To disproportionately focus resources to keep the elderly alive without also considering the effect of such measures on their well-being is ageism. This is particularly relevant in the context of COVID-19 as the majority of deaths are clustered in the elderly and persons with comorbidities. Although ageism is often subtly embedded in different policies and practices, it is important to acknowledge the trade-off between saving lives and the quality of life that remains. Tough decisions will need to be made about how to weigh the relative value of different measures, and it will be important to include the elderly in these discussions as autonomous individuals.

There are two extreme positions that need to be avoided. One is assuming that because a person is old and has comorbidities that they have less intrinsic value and/or quality of life. This assumption often leads to devaluation of the lives of the elderly in comparison to younger people and could result in decisions to not allocate resources to the elderly that would be allocated to younger patients in similar circumstances. On the other hand, the relative health and human rights of the elderly should not be used as a reason to implement measures that are likely to protect them at the expense of other groups, for example by removing grandchildren from public school to decrease the risk of infection. Such decisions may protect the elderly, but in the long run, will likely do more harm than good. (36, 37)

7.3. Impact on Marginalized Communities

Pandemics affect all individuals in society, but disproportionately so. They tend to worsen pre-existing social inequalities, often for those who are already the worst-off. Analysis of the social determinants of health and how these have affected differential health outcomes during the pandemic. There is always the potential for side effects in applying public health measures.

Marginalized people not only are more likely to be negatively affected by the pandemic, but sometimes they are also more likely to be the cause of the spread of the disease. When talking about marginalized populations in the context of public health, we mean people who are confined to the peripheral social strata due to various factors such as socioeconomic status, race, ethnicity, citizenship, and disability. These are more often the people who do the jobs that keep society functioning but are underpaid and have very poor job security. An example from recent news is the disproportionate number of deaths of Black and Asian healthcare workers from COVID-19 in the UK. This is the ultimate sacrifice from people who are essential to the functioning of the healthcare system. They put themselves into the highest risk situations working on the front lines and are the ultimate altruistic example, but they have done so at a high cost. (38)

8. Ethical Responsibilities of Governments and Institutions

What ethical responsibilities do governments and institutions have? By definition, ethics must guide decision-making based on concepts of right and wrong. Public trust and compliance with health guidelines are an important aspect of the pandemic response. This requires clear communication and transparency regarding the scientific basis of decisions, even when the science is uncertain or evolving. The public also needs to understand how policies balance competing interests, such as economic well-being versus health, or protection of individual liberties versus protection of the public's health. If governments and institutions are to be held accountable for their decisions, both

now and in the future, they must be able to defend them with reasons that are morally acceptable to the public. This is an ethical standard that goes beyond purely legal accountability. When governments fail to meet these standards, whether through incompetence or self-serving use of crisis for political gain, they fail in their duty to the public and violate the trust given to them.

In the global context, wealthier nations and international institutions have duties to provide aid to nations or groups that lack the resources to protect themselves. High-income countries have been described as having special responsibilities in mitigating the threat of global infectious disease, not only because of their greater ability to do harm or good, but also because infectious diseases are a global public threat and the global poor are most vulnerable to them. This situation creates ethical obligations to assist those in other countries while not exploiting the situation for national gain.

8.1. Transparency and Communication

The importance of messages being clear and consistent was made particularly evident during the pandemic. Changing messages on mask wearing, travel restrictions, and border controls did not only cause confusion but were used by opposition parties to accuse governments of inconsistent decision making and ad hoc policy formation. Using the public health crisis for political agendas led to society being polarized. Such an understanding alerted some people to the dangers of the virus and led them to take steps to protect themselves, but for others, it propagated the idea that the danger was not significant. This example demonstrates that clear communication of the science behind decisions must be aligned with the reasons behind a certain piece of health advice or policy. The changing narrative behind the resumption of the AstraZeneca vaccine in Europe after a rare side effect was discovered was clear and evidence-based, but the narrative was not matched with clear advice on who should and shouldn't take the vaccine and how the vaccine's overall risk/benefit balance compared with other available vaccines. (39)

8.2. Balancing Public Health and Economic Concerns

While the issues regarding balancing public health versus individual rights are one category of ethics issue, perhaps the most tangible distance between developed nations has been the marked disparity in amount and speed of economic response to the COVID-19 crisis. At one end of the spectrum, the USA and Australia have both pledged amounts in excess of 10% of their GDP. Japan and European countries are typically passing second or third supplementary budgets for amounts around 1% of GDP. Other East Asian countries have spent very little compared to their wealth, with Taiwan notably investing a minuscule amount. On the other hand, several developing countries have announced they will divert funds from education and development projects in order to mitigate coronavirus effects

without adding extra deficit. The evidence that good health is a necessary condition for economic growth is overwhelmingly supported in history and economic theory, and so it is not unreasonable for public health experts to argue for using a significant amount of resources in order to eradicate the disease quickly. This strategy did however depend on the assumption that the injected money will definitely cause a fast recovery to the previous state, or that using resources now will not merely lead to inflation. (40, 41)

8.3. Ethical Leadership during Crisis

The crisis brought by the global COVID-19 pandemic has shown the utmost importance of leadership. The most widely cited leadership theory in the social psychology literature is the theory of charismatic and transformational leadership. Charismatic leaders have been described as having a vision, the ability to articulate the vision, behaviour which is out of the ordinary, willingness to take personal risks, sensitivity to followers' needs, and a need to demonstrate their moral conviction. While transformational leadership is defined as leadership that creates positive change in the followers, they are taken on the shared vision of the leader, they are able to also act for the greater good of society, not just themselves. It is clear that this type of leadership is the ideal to take society forward in times of crisis. The pandemic has brought out leaders who have illustrated both the good and bad points of leadership.

In the UK Amid the COVID-19 crisis, Sturgeon and Johnson responded differently, particularly in their containment strategies. Sturgeon advocated for strict measures and cautious easing, whereas Johnson's approach was riskier with delayed restrictions and swift reopenings. This divergence led to losing public trust, as highlighted by reports. Sturgeon showed flexibility and accountability, while Johnson was less willing to admit mistakes and remained loyal to rule-breaking team members. Their press interactions further illustrated contrasting styles: Sturgeon maintained transparency and accountability, holding numerous press meetings and admitting errors, while Johnson became less visible and evasive, deflecting attention from government missteps. Their approaches to compliance and communication also differed, with Sturgeon emphasizing solidarity and personal adherence to rules, while Johnson downplayed the severity of the crisis and showed reluctance to follow restrictions himself. (42, 43)

9. Lessons Learned and Future Directions

The Covid-19 pandemic has demonstrated that there is an urgent need for developing global and national system-wide ethics-in-action (i.e., developing ethical competence) at all levels of public health and healthcare delivery. This is essential for informing difficult choices in how to best uphold sound ethical values, principles, and frameworks. An objective measure of an ethical health service

is the degree to which it can maintain/trade off competing values and navigate complex moral problems in a way that promotes the health, rights, and dignity of those affected. The power of a well-functioning healthcare system grounded in ethics will only be quantifiable as the degree to which it prevents violations of human rights, reduction in populations' trust in healthcare systems, and setting back population health.

Ethics-in-action within healthcare and public health can be advanced by the development of guidance documents, policies, ethical toolkits, and dedicated human and material resources. This requires a continuum of activity including advocacy, advisory roles at all levels of decision-making, ethics education for all health practitioners, and research into the effectiveness of different strategies. It is important to learn from the Covid-19 pandemic about which of these strategies are effective in building and maintaining ethical competence during routine as well as emergency conditions. (44)

9.1. Reflections on Ethical Decision-Making

Real-world context with the COVID-19 pandemic has challenged public health to an ethical test that it was partially prepared for, but also presented in a form and on a scale that was unprecedented. Pandemics are a huge challenge and it is only by honestly confronting the dilemmas that are encountered that we can best be prepared for what will come. High quality decisions are ethical decisions and an understanding of their ethical dimensions can assist in both the doing and the documenting of the right thing. By following ethical principles high quality decisions can be made. These include but are not limited to:

Minimizing harm: Efforts should be made to minimize physical, social, psychological, and economic harm, considering both individual and societal well-being.

Proportionality: Measures taken should be proportionate to the threat, avoiding overzealous restrictions that may lead to unintended consequences.

Solidarity: Society should unite beyond self-interest, with individuals and institutions working together for the collective good.

Fairness: Scarce resources should be allocated equitably, considering factors like age and comorbidities to maximize benefit.

Duty to provide: Healthcare workers have a duty to provide care, despite personal risks, supported by adequate resources and protection.

Reciprocity: Society must support healthcare providers by meeting their professional and personal needs, recognizing their sacrifices.

Privacy: Balancing individual privacy with public interests, ensuring confidentiality while preventing discrimination and stigma.

Of course, following these principles is often a matter of interpretation and knowledge. There is no such thing as a perfect decision. Keeping these principles in mind, however, can help avoiding unethical decision making. (45)

9.2. Strengthening Ethical Preparedness for Future Pandemics

The world's experience with COVID-19 has unmasked vulnerabilities in global, national, and personal preparedness for pandemics. A population and public health care focus can best identify and respond to the numerous ethical issues at all levels of pandemic prevention, preparedness, and response. We have learned COVID-19 was a foreseeable disaster. We knew, even before SARS and avian influenza, that an influenza pandemic was inevitable, and we had good reason to know that coronaviruses could cause major problems. Knowingly taking a risk without adequate precautions to prevent harm is a fundamental ethical error. In this regard, COVID-19 is a mirror to the world about the consequences of ignoring potentially catastrophic risks. A simple cost-benefit analysis in the years preceding COVID-19, assuming that the probability of a pandemic was low, led many countries to ignore or under-resource pandemic preparedness at the expense of being ill-prepared when it arrived.

Biomedical research and research into experimental therapies and vaccines demonstrated the value of prior planning for ethical issues. The pandemic provided the rationale and opportunity for emergency funding for research, but there were many accounts of poor coordination and wasted resources. Some studies and clinical trials were duplicative, and a chaotic research environment is not optimal for either scientific or ethical reasons. Ethically fraught issues included determining the threshold of evidence for benefit that justified switching from unproven to proven therapies, how to trade off the need for rapid answers against methodological rigor, and recruiting patients to studies of experimental therapies when the prospects for direct benefit to the patients were uncertain. An important initiative was the development of clinical trial guidelines for COVID-19 interventions aimed to provide a harmonized framework for rationalizing and optimizing the available resources and make it easier to carry out trials in the context of a pandemic. This infrastructure will enhance ethical as well as scientific validity, and it is something to be built upon and not discarded when the pandemic ends. (46, 47)

9.3. Building Resilient Healthcare Systems

The Covid-19 pandemic has shown the vulnerability and limits of national and global healthcare systems that are ill-prepared to cope with large-scale health crises. This has resulted in a heavy burden on healthcare workers and wider society, profound economic implications, and a tragic loss of life. In

the coming years and decades, it will be crucial to learn from these failures and to begin rebuilding healthcare systems that have a greater capacity to absorb and adapt to acute shocks, maintain core services, and provide care for all, especially the most vulnerable members of society.

At a global level, this will mean a reassessment of the share of resources that are dedicated to preparedness compared to response. The majority of high-income countries have healthcare systems that are designed for the treatment of disease, with only a minority of resources dedicated to prevention and preparedness. At the same time, there needs to be a more equitable distribution of resources between different countries. The Covid-19 pandemic has seen an unprecedented struggle for national governments to acquire medical equipment, including PPE and life-saving medical devices such as ventilators. This has been amplified by a reliance on global supply chains, where many of the world's medical goods are produced in low-income countries that are vulnerable to export bans and a contraction of global trade. A more resilient healthcare system will require a move back to greater self-sufficiency but with fail-safes that prevent shortages of key materials. This is especially important for less developed countries that have little bargaining power in the global market. An example of how this can be achieved is the Medicines for Malaria Venture (MMV), which is a not-for-profit product development partnership that uses push and pull funding to create new malaria medications and ensure they are accessible to those who need them. (48, 49, 50, 51)

10. Conclusion

The COVID-19 pandemic has been a perfect example for the ethical complexity of public health emergencies. Throughout this thesis I have examined the versatile ethical dilemmas faced during the pandemic and reflected on lessons learned through these challenges. From balancing public health measures with individual rights to addressing disparities in access to healthcare, the pandemic has shown the difficulties of ethical decision-making in times of crisis.

One of the key lessons one can take away from the COVID-19 pandemic is the importance of ethical preparedness for critical situations. As can be seen in some examples above, ethical considerations have to be part of every aspect of planning, from policy development to resource allocation and communication strategies. By addressing potential ethical dilemmas before they arise, the complexities of new problems can be combatted head-on. The second lesson is that of the need for transparency and clear communication. This helps the public to maintain trust in government officials, scientists and health care providers. Another lesson learned is that of solidarity. In an interconnected world, such as that we have today, no country can combat a global crisis on their own. The sharing of information and resources is the only way to effectively overcome the challenges everyone faces in order to promote the well-being of all.

In regards to the COVID-19 vaccine passports another key lesson can be learned. Finding a balance between individual rights and public health is crucial when developing ethically sound policies regarding vaccination passports. While respecting individuals' freedom to make healthcare decisions according to their own values and beliefs is important, it is equally important to consider the potential harm to vulnerable populations and the greater good of society. Under the right circumstances, enough resources, sufficient information and equal access, a COVID-19 vaccine passport can be beneficial to the public. The introduction of the vaccination passports also lessened the impact of the restrictions on a substantial part of the global population. However, as can be seen in the situations discussed in this thesis, during the COVID-19 pandemic, there have always been social inequalities regarding basically any aspect of pandemic response. The vaccine passport did not eliminate this inequality within societies and even increased it on a global level. Overall the introduction of vaccination passports allowed governments to reduce the infringements on autonomy while still keeping the spread of COVID-19 low, therefore making it an ethical pandemic response.

When reflecting on the ethical dilemmas created during the COVID-19 pandemic, we should also look to the future in order to apply the lessons learned to coming public health emergencies or crises in general. By strengthening ethical preparedness, increasing collaboration, and upholding ethical principles, future challenges can be better navigated by the world.

In conclusion, the COVID-19 pandemic has been a wake-up call for global health ethics. It has challenged us to reexamine our ethical commitments and responsibilities in the face of a global threat. Looking to the future, let us strive to create a world, where ethical decision-making guides responses to public health emergencies, ensuring the safety and well-being of all.

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