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# COVID-19: opportunities for public health ethics?

Els Maeckelberghe<sup>1,2</sup>

## Abstract

Public health ethics is the discipline that ensures that public health professionals and policy makers explain what they do, and why. During the COVID-19 pandemic, ethical deliberations often did not feature explicitly in public health decisions, thus reducing transparency and consistency in decision-making processes, and resulting in loss of trust by the general public. A public health ethics framework based on principles would add to transparency and consistency in public health decision-making. A framework of seven principles is presented and illustrated by applying them to vital COVID-19 ethical questions. Next the question of COVID-19 vaccination shows how the principles work in conjunction. In conclusion, embedding explicit ethical analysis in public health work is necessary to be trustworthy and regain trust. Preparedness for future challenges implies making the public health community more 'ethically literate'.

**Keywords:** COVID-19, pandemics, public health, ethics, population health, social justice, personal autonomy, vaccine

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## Introduction

Public health is no stranger to ethical deliberation, as it is intrinsically a moral venture of finding a balance between the social good (the public's health), the rights and goods of individuals, and protection of the most vulnerable.<sup>1-3</sup> If ever there was a clear need to take public health ethics seriously, then it is now during the Sars-CoV-2 pandemic. Worldwide, the agenda comprises an overwhelming number of issues that call for deep moral reflection: allocation of intensive care (IC) beds; digital tracing apps; distribution of vaccines; human challenge studies; quarantine; lockdown; vaccination passports; and so on and so forth. Governments have to make difficult choices and in doing so rely heavily on input from scientists, advisory bodies, and a variety of experts, even though their expertise is often discredited as they are seen as neither impartial nor independent.<sup>4</sup> In these times 'science without politics is impotent, and politics without science is subject to whim and caprice.'<sup>5</sup> However, it is necessary to disentangle the different discourses of science and politics, and to analyse the moral choices necessarily being made. During the COVID-19 pandemic, ethical deliberations often did not feature explicitly in public health decisions, thus not offering transparency in decision-making processes over time and not making clear whether there was any consistency, resulting in loss of trust by the general public.

Clarifying the public health choices made in finding a balance (or sometimes disturbing it) when trying to protect vulnerable people, promote health, and safeguard individuals' rights,

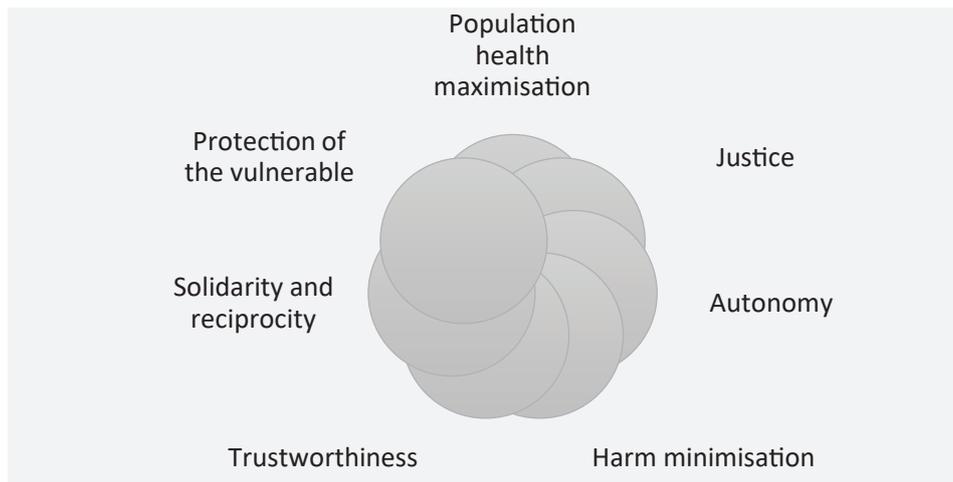
asks for a sophisticated framework of concepts, theories, and principles. And this framework also needs to be applicable to practice.

Public health ethics (PH ethics) is the discipline that can contribute to providing such a framework as it has a readily accessible vocabulary and grammar for addressing these complex situations. One can expect PH ethics to contribute to making sure that people can explain what they do, and that they do that for the right reasons. PH ethics provides specification of moral values, articulation of relevant ethical principles, and translation of ethical principles into practice. There might be disagreement about the choices made, but at least it will be clear what the disagreement is about: what values, norms, and principles are foundational for the decisions taken.

Discontent about the current COVID-19 strategies, even amongst the most law-abiding citizens, can be partially explained by this lack of (explicit) clarity about what central values play a role in public health decisions.

The Dutch government, for example, closed schools in December 2020 to 'prevent parents going to their workplace'. It is an understatement to say this raised a few eyebrows. In many other countries comparable inexplicable or not sufficiently explained measures are taken – like the choice of who to admit to ICUs, or what groups to prioritise in vaccination, to give two examples.

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**Figure 1** Principles for COVID-19 ethics deliberation

This paper shows how a public health ethics framework operates. First, it presents a framework of seven principles and illustrates these principles by applying them to some vital COVID-19 ethical questions. Next, it shows how the principles work in conjunction to address the question of vaccination. In conclusion, it contends that it is necessary to embed explicit ethical analysis in public health work, be it scientific work or policy making, in order to be trustworthy, or even, in light of the pervasive and growing scepticism regarding governmental measures, regain trust. Preparedness for future challenges implies making the public health community more ‘ethically literate’. This is a challenge that national public health, medical and academic training organisations, and public health specialists should be committed to bring into practice.

### Principles for PH ethics applied to COVID-19

Rather than starting from a particular theoretical viewpoint (liberal, utilitarian, or deontological), principles serve as a common ground to guide normative conversation and reflection.<sup>6,7</sup> They help to inform what claims can be justified and consequently need to be acted upon. Ethical principles help to structure the questions we face and offer a framework of what should be addressed when trying to reach defensible and transparent decisions. In public health ethics, different principles have been discussed but some core principles are generally acknowledged as being essential in giving guidance in discussion.<sup>8,9</sup> A variety of ethical questions regarding COVID-19 have been addressed, using such principles.<sup>10-13</sup>

Some of the main principles that can be identified for analysing the ethics of COVID-19 are: population health maximisation, justice, autonomy, harm minimisation, public trust, solidarity and reciprocity, and protection of the vulnerable.<sup>14-17</sup> They give focus and normative guidance. This list of principles is not comprehensive but offers a coherent and practical frame. These principles are *prima facie* moral obligations<sup>18</sup> that are justified by appealing to the method of reflective equilibrium<sup>19</sup> and common morality,<sup>17</sup> the idea that ‘morally serious humans’<sup>20</sup> have some awareness of moral norm. Figure 1 visualises how the different principles overlap and interlock.

Depending on the question at hand, some principles may take precedence over others. This needs explanation in light of what equilibrium is achieved and how it is informed by the common morality. This paper first clarifies these principles separately, puts them in a theoretical context, and illustrates them with a variety of COVID-19 ethical questions.

#### Population health maximisation

Population health maximisation is a principle very familiar to policymakers and public health professionals. The aim is to keep overall COVID-19 morbidity and mortality as low as possible. Epidemiological guidance on how to minimise morbidity and mortality should inform and influence decision making. Reliability of the data produced is crucial for policymakers and governments to meet their epistemic duties, i.e. collecting good data that inform their decisions. Lockdowns, for example, are a restriction and reduction of basic liberties that needs meticulous inspection for justification.<sup>21</sup> Winsberg et al argue that governments only meet their epistemic duty in the case of a lockdown if they have good information, and they add ‘not the best information available, but good information, period.’ (p. 221)<sup>21</sup> This epistemic duty is not easily met, as can be seen in the reaction of Basshuysen and White when they convincingly show that even Winsberg and colleagues failed in exactly this epistemic duty by not using the right data.<sup>22</sup> Scientific insights and progress need to be scrutinised and incorporated in preparing decisions. However, the epistemic duty also needs awareness of scientific progress as an iterative, non-linear process of diligent research, refutation and revision. Even though COVID-19 has accelerated science and its results,<sup>23</sup> it is still a process of organised disagreement that is not suitable for quick ‘final’ answers.

The principle of population health maximisation not only relies heavily on valid data and its corresponding epistemic duty; it also has shortcomings because it functions at its best in situations of unlimited resources. There is a danger of privileging certain groups and augmenting unjust health disparities.<sup>24</sup> Therefore it needs to be counterbalanced by other principles like the principles of justice and protection of the vulnerable.

## Justice

Justice as fairness in the distribution of resources and opportunities ensures that everyone receives his or her due, according to their health needs. It addresses health inequalities<sup>25</sup> and proclaims that no one should be discriminated against on the basis of personal characteristics such as gender, socio-economic status or age.<sup>26,27</sup> For example, the vaccine nationalism that emerged in the months before the approval of COVID-19 vaccines is witness of a lack of ethical concern for distributive justice. It seemed that ‘my country first’ was the ruling principle. A consortium of philosophers has called for a three-phase fair priority model for vaccine distribution, based on three fundamental values: benefiting people and limiting harm, prioritising the disadvantaged, and equal moral concern.<sup>28</sup> Using those values, they identified three phases (reducing premature deaths, reducing serious economic and social deprivations, and returning to full functioning) with their own specific aims, metrics and values that lead to prioritisation.<sup>29</sup>

## Autonomy

Autonomy is the principle that draws attention to the idea that people have the right to make their own informed decisions and are free to act according to their informed norms, wishes and beliefs.<sup>30</sup> People can choose, without undue external interference, to pursue living the life they deem to be a good life. In a more substantial but still practical and tangible version, autonomy is understood to be about actions governed by a responsible commitment to the norms to which one pledges oneself.<sup>31</sup> In both the medical and the public health context, the notion of autonomy is intrinsically linked to the question of how people can make ‘informed’ decisions. The COVID-19 pandemic has shown how dependent individuals are on receiving adequate, reliable, intelligible and, above all, complete information. An appeal to use one’s own autonomous decision-making capacity implies a duty of the individual to inform oneself, and the duty of the parties involved to provide adequate information. This raises the interesting question whether spreading disinformation<sup>32</sup> is an infringement on enabling people to act autonomously.

## Harm minimisation

For individuals, the ‘principle of harm minimisation’ sets limits on autonomy. Self-determination is acceptable as long as one does not harm others. Sneezing and coughing in someone’s face in times of COVID-19 is endangering others. The harm minimisation principle allows the state to interfere when someone poses a threat to others and that harm can be prevented by the interference.<sup>33</sup> Based on this principle, demonstrations where people cannot keep an adequate social distance can be prohibited. In the medical and public health context, the harm minimisation principle, commonly referred to as non-maleficence, asserts that professionals need to prevent or avoid harm in their health interventions.<sup>34</sup> The COVID-19 pandemic has time and again revealed that ‘harm’ is essentially based on risk assessments. This calls for supplementing the harm minimisation principle with an ethics of risk,<sup>35,36</sup> addressing the risks of harm to patients,<sup>37</sup> staff,<sup>38</sup> and citizens.<sup>39</sup>

## Trustworthiness

Public institutions regulating, disseminating and practising health policies should be trustworthy, i.e. deserving of well directed trust based on evidence,<sup>40</sup> and decide and act according to shared moral and democratic values that are made transparent. This year of COVID-19 has shown how some governments have failed to be perceived as trustworthy. Personal behaviour of people in office breaking lockdown rules (e.g. government adviser Dominic Cummings in the UK, or the Dutch Minister of Justice and Security having a wedding party) guarantees at best cynical comments, at worst a decline in trust in policies at large. More important than individual failure of people in charge is the lack of explication and discussion of shared moral values. The Dutch prime minister, for example, notoriously has been appealing to common sense during the COVID-19 era. However he refrains from explaining what this ‘common sense’ is, thus obstructing an open discussion of his policies. Consequently, parliament has no choice but to concentrate on technicalities. During the pandemic, public health institutions have been implicated in the political process whenever decisions were justified with an appeal to ‘data that epidemiologists provided’. This confuses two different entities, epidemiological data and political decision-making.

## Solidarity and reciprocity

Solidarity and reciprocity appeal to recognition that distribution of benefits and burdens should acknowledge our socioeconomic interdependence at different levels. Solidarity can be understood as ‘enacted commitments of people to accept costs to assist others to whom they are similar.’<sup>41</sup> Priority should be given to those who face a disproportionate burden in protecting the public good (reciprocity). Whereas many people claimed solidarity with the burdensome and risky work of healthcare professionals, reciprocation is only achieved when means are made available to relieve these professionals of structural understaffing. Just giving applause – as seen worldwide – remains an empty gesture.

## Protection of the vulnerable

In daily language, vulnerability is often seen as a characteristic of someone or a group. The philosopher Luna has introduced the notion of layered vulnerability.<sup>42,43</sup> This concept avoids labelling people or groups of people as vulnerable. Instead, it provides insight into different aspects of vulnerability while considering individual differences and contextual aspects. Different levels or ‘layers’ that can cause vulnerability to a greater or lesser extent are identified. Some layers act separately, while others interact or trigger other layers. Children as a group are not equally vulnerable to closing schools. Postal code, socioeconomic status of their family, and underlying illnesses can all cause layers of vulnerability. A child living in a crowded home in a less privileged area, with parents having to take on several jobs to generate sufficient income, experiences more layers of vulnerability than children in more advantageous situations. These layers might be manageable when special regulations give this child the opportunity to visit school or have volunteers offering her remedial teaching at a place away from home. These layers

of vulnerability, however, might cascade when for example a child's otherwise well controlled diabetes mellitus of type 1 gets out of hand: who will bring this child to the doctor or who now takes responsibility for this child? The vulnerability principle, as formulated by Goodin, is ultimately about the protection of the interests of (groups of) people who are especially vulnerable or in some way dependent on the choices and actions of 'others'.<sup>44</sup> These 'others', in this case ministers who take the decision to close schools, also have responsibility to consider the vulnerable position in which they have placed this child, and take action to make her less vulnerable.

## COVID-19 vaccination

In October 2020, the European Centre for Disease Prevention and Control (ECDC) launched a technical report regarding the introduction and prioritisation of COVID-19 vaccination in the EU/EEA and the UK.<sup>45</sup> The document targets a wide audience: 'public health authorities, national policymakers, regulatory authorities, civil society organisations, professional and scientific societies, national immunisation technical advisory groups (NITAGs) and others involved in the decision-making process for the introduction of COVID-19 vaccines at the national level (e.g. epidemiologists, specialists in infectious diseases, paediatricians and primary care physicians) in the EU/EEA and the UK.'<sup>45</sup> Therefore it is useful to investigate what ethical justification is used.

According to the authors, 'the key components for successful national and EU-level COVID-19 vaccine deployment are:

- a robust COVID-19 disease surveillance system
- post-marketing studies on effectiveness and impact
- active and passive monitoring of adverse events following immunisation
- robust and timely vaccination coverage data
- evidence-based decision-making
- legal and regulatory frameworks for vaccines deployment
- vaccine delivery infrastructure and supply chain management
- monitoring of vaccine acceptability and behavioural research
- communication plans
- ethical and equitable access to vaccination'

The technical report is a short document to quickly update a diverse audience. Therefore, the information is concise but sets the scene on how vaccine deployment could be organised. At first sight, the bullet points might give the impression that they are in random order, and only the last bullet introduces ethics. The document assigns ethics the role of guiding and informing ethical and equitable access. Careful and weighed decision-making are undeniably of the utmost importance in the area of equitable access.

It is worth reading this entire document from the perspective of the ethical principles formulated above (see Table 1). This shows what ethical principles motivate the document and reveal what principles are lacking.

Population health maximisation is a seemingly self-evident, crucial ethical principle that guides the deployment policy. The epistemic duty is taken seriously in advocating well organised surveillance systems and generating good data.

The harm minimisation principle affects both monitoring adverse events and identifying groups at risk. Table 1 of the report gives an overview of the evidence needed, particularly groups at risk: who is at risk of severe disease; who is at high risk of infection; who transmits the disease; and the size of risk groups. The data thus generated should be used to inform decisions.

However, we must be cautious not to take too simple a step from the data thus collected to ethically justifiable policies. The data should be interpreted in the wider context of finding a balance between the social good (the health of the population), the rights and goods of individuals, and protection of the most vulnerable.

The report protects the vulnerable by gathering evidence about: (1) which segments of population and settings are vulnerable to outbreaks (2) which population groups are hard to reach and (3) which population groups have special communication needs. The explanation of the layered approach in protecting the vulnerable, not as a specific group but as people who can be vulnerable in different ways (layers), undertook a more sophisticated analysis of who is vulnerable and consequently identified concomitant responsibilities.

Trustworthiness is translated into legal and regulatory frameworks. These are tools to guarantee protection from arbitrariness. The emphasis on equitable access to vaccines, however, relates to the ethical principle of justice.

The ethical principle of autonomy is somewhat harder to detect in the document. It might be connected to communication plans. For people to make autonomous choices, they must be informed well. The report, however, seems to have something else in mind: 'Communication strategies need to explain the objectives of the vaccination campaign to different audiences, including the public, healthcare workers, policymakers and other stakeholders, *in order to aid acceptability of the vaccines and to tackle vaccine hesitancy.*' (p.5 – my emphasis). This is a normative message that states that vaccines ought to be accepted no matter what, and communication should be aimed at achieving that. Even though population health maximisation through vaccination might be the good one is striving for, this cannot be done without examining how it affects the autonomy of individuals. From the perspective of this principle, the quotation should finish 'to help people to make informed decisions'. Tailoring communication in such a way that it will be perceived as an infringement on one's autonomy has a strong negative impact on the trustworthiness of policymakers.

Similarly, the key component of behavioural research and monitoring of vaccine acceptability might suggest that respect for autonomy is of little importance when the aim is 'achieving the required levels of coverage to ensure adequate

**Table 1** ECDC Technical Report from the perspective of ethical principles

Ethical principle	Key component
<b>Population health maximisation</b>	<ul style="list-style-type: none"> <li>• a robust COVID-19 disease surveillance system; post-marketing studies on effectiveness and impact</li> <li>• robust and timely vaccination coverage data</li> <li>• evidence-based decision-making</li> </ul>
<b>Harm minimisation</b>	<ul style="list-style-type: none"> <li>• active and passive monitoring of adverse events following immunisation</li> </ul>
<b>Trustworthiness</b>	<ul style="list-style-type: none"> <li>• legal and regulatory frameworks for vaccine deployment</li> </ul>
<b>Justice</b>	<ul style="list-style-type: none"> <li>• ethical and equitable access to vaccination</li> </ul>
<b>Protection of the vulnerable</b>	<ul style="list-style-type: none"> <li>• evidence-based decision-making</li> </ul>
<b>Autonomy</b>	<ul style="list-style-type: none"> <li>• communication plans</li> </ul>
<b>Solidarity and reciprocity</b>	<ul style="list-style-type: none"> <li>• ethical and equitable access to vaccination</li> </ul>
<b>Combination of population health maximization, protection of the vulnerable, justice, solidarity</b>	<ul style="list-style-type: none"> <li>• behavioural research and monitoring of vaccine acceptability</li> </ul>

levels of protection’ (p.4). Though this is a laudable aim in pursuit of population health maximisation, it deserves better justification in terms of the principles of autonomy, justice, protection of the vulnerable, and solidarity.

The report cites solidarity as part of the ethical and equitable case for vaccination. In light of recent developments in availability of vaccines and the resulting reactions of citizen groups, it is worth addressing this principle separately. Many adults, including elderly adults, in different countries have asked to revise vaccination schedules. With an appeal to intergenerational solidarity, citizens in some countries want to give priority to vaccinating young adults. An example is the widely supported open letter in Flanders: ‘Give young people priority for vaccination! We, forty-something, will gladly give

up our place.’<sup>46</sup> It not only emphasises the felt importance of solidarity, but shows the necessity of including the public in prioritising ethical principles.

My conclusion therefore is that the ECDC technical report is very relevant for the ‘process of laying down the foundations of a common framework for the deployment of safe and effective COVID-19 vaccines in the EU/EEA and the UK’ (p. 12) but it should make the moral choices explicit. Not doing so is a missed opportunity to generate more transparency and trustworthiness. The analysis of the principles of autonomy, solidarity and reciprocity have shown that crucial information for ethical guidance was ignored.

### Conclusion

If ever there was an opportunity for Public Health Ethics, it is now. The examples given in this paper indicate how public health decisions become more transparent, consistent and trustworthy when moral choices are made explicit. During the COVID-19 pandemic, the data needed to inform decision-making changed over time and went in different directions. Because of that, some policies subsequently seemed to be random and arbitrary. Explaining the ethical choices made in policies helps us to be consistent. Data might point us in one direction this week, and the other direction next week, but their interpretation achieves consistency by using ethical principles. Taking these as guidelines gives the public health community and policymakers a language that enables them to improve their communication with the general public.

Preparedness for future challenges on a scale like that of the current pandemic calls for making public health professionals ‘ethically literate’. Both current and future public health professionals should engage in continued education and a more comprehensive discussion stimulated by the perspective of PH ethics. That will enable public health professionals and policymakers to justify their decisions, and create understanding and support.

Ethical literacy of public health professionals should be a top priority on the agenda of national public health, medical and academic training organisations, and public health specialists working at all levels. Public health professionals in Europe and beyond need to be educated in PH ethics, share best practice, and discuss ‘the moral mandate of public health’ in ‘the new normal’. This calls for explicit standards, rigorous training, and required competency applicable across all domains of public health activity.

The final important step on the agenda is to include the general public in the cultivation of a shared PH ethics. The example above of how citizens can become vocal about solidarity shows they are ready to contribute. 

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