

Principalism in public health decision making in the context of the COVID-19 pandemic

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Summary

Background: The COVID-19 pandemic lead scientists and governmental authorities to issue clinical and public health recommendations based on progressively emerging evidence and expert opinions and many of these fast-tracked to peer-reviewed publications. Concerns were raised on scientific quality and generalizability of this emerging evidence.

Main argument: However, this way acting is not entirely new and often public health decisions are based on flawed and ambiguous evidence.

Thus, to better guide decisions in these circumstances, in this article we argue that there is a need to follow fundamental principles in order to guide best public health practices. We purpose the usefulness of the framework of principalism in public which has been proved useful in real life conditions as a guide in the absence of reliable evidence.

Conclusions: It is recommended the implementation of these principles in an integrated manner adopting an holistic system approach to health policies adapted to specificities of local contexts.

KEYWORDS

COVID-19, principalism, public health decision making

1 | BACKGROUND

Existing guidelines to address the COVID-19 pandemic have been based on progressively emerging evidence and expert opinion. Without a vaccine, knowledge about the effectiveness of existing antivirals, the range of interventions possible against COVID-19, is limited. Epidemiological data and mathematical models have been open to variable interpretations. Considerable amount of these emerging evidence and experts' opinions were often fast-tracked to peer-reviewed publications and taken into the development of public health policies, strategies and practice briefs. Nevertheless, many of these papers and opinion briefs were of poor scientific quality and with questionable generalizability.¹⁻³

In the current context of scientific uncertainty, expert opinion will, inevitably, vary considerably. Furthermore, "(un)intended misinterpretation of uncertainty is large", which makes risk communication in case of uncertain risks challenging and often used as a strategy toward influencing public health policies, either to reject or to demand policy action.⁴

Indeed, despite this lack of research and scientific consensus around COVID-19, political and institutional speech has reflected a relative certainty about the disease, its evolution and the measures taken.⁵ This contrasts with the acknowledgment that "no previous training, no prior strategic planning knowledge, no prior operational experience, and no former decision-making skillset has prepared anyone for the uncertainty surrounding what this complex new reality presents us with."⁶

2 | MAIN ARGUMENT

This is not entirely new. Public health decision-making constantly involves acting on evidence beneath the level of "proof" or "certainty," requiring choices between interventions based on flawed and ambiguous evidence, challenging us to find the level of evidence that offers a suitable equilibrium between what we know and our wish to act to assist others. Despite this uncertainty, public health decision making must consider the available resources and ensure a sustainable and timely response.^{7,8}

In the absence of robust scientific evidence, the policy makers are required to follow fundamental principles that should support decision making, in order to guide public health best practices (Table 1).

This framework of principlism in public health has repeatedly proven to be robust and useful, helping to recognize and "to reason through issues relating to social, political and cultural contexts; the existence of competing values and perspectives and perhaps, incommensurable world views". Upshur acknowledges that "the strength of a principle-based approach is its heuristic nature and applicability to practice".⁹

A set of principles required in the practice of public health has been adopted overtime and tested repeatedly in real life conditions. It is not intended that these principles replace the requirement for scientific evidence, but rather be a guide in the absence of reliable evidence.

The acknowledgment of the need and use of "robust scientific evidence" is in itself a principle of public health best-practice.

TABLE 1 Seven principles to guide public health best-practices

The harm principle;
The principle of the least restrictive or coercive means;
The reciprocity principle;
The transparency principle;
The precautionary principle;
The equity principle;
The principle of robust scientific evidence

Other principles include: the harm principle; the principle of the least restrictive or coercive means; the reciprocity principle; the transparency principle; and the precautionary principle.⁶⁻⁸ In a recent publication, Chiriboga et al¹⁰ add to these, the principle of ensuring the fair allocation of resources to mitigate the unfair additional health and socioeconomic burden imposed by the pandemic on disadvantaged populations and Singh et al¹¹ appeal that “no one should be left behind”: we will call this the principle of “equity.”

The “harm principle,” the foundational principle for public health ethics, sets out the initial justification for a government or its agencies, to act toward restricting the liberty of an individual or group to prevent harm to others.⁹

The “least restrictive or coercive means principle,” enshrined in the “Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights,”¹² acknowledges “that a variety of means exist to achieve public health ends, but that the full force of state authority and power should be reserved for exceptional circumstances and that more coercive methods should be employed only when less coercive methods have failed. Education, facilitation, and discussion should precede interdiction, regulation or incarceration (...) the principle does legitimate coercive means where justified and where less restrictive means have failed to achieve appropriate ends (...) restrictions of liberty must be legal (and) legitimate and (...) there should be no discrimination in their application.”⁹

When a public health action is necessary, the “reciprocity principle” holds that Society has the obligation of assisting individuals and communities to discharge their duties with the relief of the burdens (eg, on income) imposed by compliance with public health measures outlined by health authorities.⁹ The current situation calls for “experts on solidarity.”³

The “transparency principle” refers that the decision-making should be as clear and accountable as possible, include all legitimate stakeholders with equal input into deliberations and “free of political interference and coercion or the domination by specific (or unrelated) interests.”⁹ As recognized by Alwan et al,¹ “transparency is key to retaining the understanding, cooperation and trust of the scientific and health-care communities as well as the general public, ultimately leading to a reduction of morbidity and mortality.”

The “precautionary principle” contains the core idea of anticipatory preventive action in the face of uncertain scientific evidence. It states that, in the presence of threats to human health, protective measures should be taken even in the absence of scientifically established cause-and-effect relationships.^{13,14} Paradigmatically, when facing scientific uncertainty, overzealous measures have been, occasionally, applied claiming this principle to justify the call for policy action.

In the absence of robust scientific evidence, the recognition of these principles has been the basis of many of the decisions taken to prevent and control the COVID-19 pandemic. Nevertheless, considering the diverse range of interventions adopted by governments all over the world, and reports of some countries having controlled the epidemic more effectively than others, with a variable toll on mortality, on the economy and on civil rights, it is important to draw lessons not only from the emerging biomedical and epidemiological evidence, but also from the extent to which these available principles guided practice, benefited the health of the public and respected civil rights.

3 | CONCLUSIONS

It is therefore important to consider the application of these principles as cumulative and integrated, in which each reinforces the ethical basis of the decision-making and risk communication process and justifies it, particularly in the absence of evidence. This is more effectively done by the adoption of a holistic system approach to health policies, “adapted to local contexts and implemented through (resilient) local health systems.”¹⁵

CONFLICT OF INTEREST

The authors have no competing interests.

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