

# Emerging norms for the control of emerging epidemics

Christopher W McDougall,<sup>a</sup> Ross EG Upshur,<sup>a</sup> Kumanan Wilson<sup>b</sup>

## Introduction

Recent WHO initiatives, including the revised International Health Regulations (IHR),<sup>1</sup> the final report on *Ethical considerations in developing a public health response to pandemic influenza*<sup>2</sup> and the interim protocol on *Rapid operations to contain the initial emergence of pandemic influenza*,<sup>3,4</sup> are representative of a new strategy for multilateral cooperation on emerging and epidemic-prone infectious disease (EID). These initiatives together define emerging legal, ethical and operational norms for the global prevention and management of outbreaks and other public health emergencies. Each one also reflects a revolutionary willingness of the international community to accept new forms of supranational authority and to abide by the principle that national sovereignty can in some circumstances be subordinate to public health protection.<sup>5</sup> As such, they are integral parts of the evolution of international health governance towards a global public health security regime.<sup>6</sup>

A significant but underexamined normative shift lays behind this dramatic change in strategy. Following the 2002–2003 severe acute respiratory syndrome (SARS) epidemic, before the approval of the revised IHR, we explored the concordance between the values and norms that guided global health authorities during the former and those subsequently elaborated as the core principles of the latter (Table 1). We identified four substantive themes that characterize the normative shift: (i) the effectiveness of global solidarity in providing the public good of EID surveillance and response; (ii) the responsibility of WHO to act as a supranational public health authority; (iii) the justifiability of necessary and

proportionate coercive global public health measures to control outbreaks; and (iv) the imperative to reduce inequalities in capacities and access to resources across countries in the service of security, equity and reciprocity. We discuss these observations and their implications for future development of efforts to establish global public health security.

## International solidarity

SARS solidified the case for considering collective responses to outbreaks as a “public good”, the provision of which requires heightened international collaboration and resource pooling. The determinants of individual and population health status increasingly circumvent the territorial boundaries of countries and thus lie beyond the capacity of countries to address effectively through national action alone. Efforts to protect the health of the population of any single nation can no longer be effectively pursued in isolation from genuine efforts to promote the health of populations elsewhere. Given WHO’s mandate to protect global health, combined with evidence that containment of outbreaks where they emerge can be achieved through timely detection and response, a strategy to manage, if not prevent, pandemics has become a possibility for the first time in history. This elevates international cooperation for EID control to the level of a public good with a global scope akin to previous efforts to eradicate smallpox and current ones to eradicate polio.

## WHO as a supranational authority

Recognizing the increasingly global scope of EIDs, and the inherent global necessity and responsibility to respond to them, WHO assumed an expanded mandate

and exercised new powers during the SARS epidemic. The enhanced role and authority of WHO, although not uncontroversial, were not publicly challenged by the international community and were, in fact, formally recognized and entrenched in the revised IHR. This affirms the authority of WHO as global leader and direct coordinator of responses to epidemics and pandemics. Impediments to the solidarity required to mount effective global responses to outbreaks, however, include concerns for local or national economic interests, a lack of assurance for equity and reciprocity, and the institutional and budgetary constraints of WHO.

## Global interventionism

The imperative to prevent or minimize harm to health from emerging epidemic-prone diseases supports the imposition of measures that constrain national sovereignty when necessary. SARS demonstrated that countries are prepared to accept such interventionism even when there exists uncertainty about the effectiveness of recommendations, such as travel advisories, to reduce transmission of disease. For the international community, moreover, the expected effectiveness in public health terms of such interventions may be less important than their potential political utility in compelling transparency, timely reporting and cooperation. SARS also showed that countries are prepared to accept such interventionism even when it results in considerable economic damage. However, such measures must be the result of inclusive and transparent procedures by a legitimate authority responding, based on the best available scientific evidence, to a demonstrable threat. They must also be accompanied by the ability to

<sup>a</sup> Joint Centre for Bioethics, University of Toronto, Toronto, ON, Canada.

<sup>b</sup> Ottawa Health Research Institute, University of Ottawa, ON, Canada.

Correspondence to Christopher W McDougall (e-mail: christopher.mcdougall@utoronto.ca).

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Table 1. The normative continuum from principle through actions during SARS to new international law

Normative themes/principles	Representative interview extracts with regard to responses to SARS	Representative IHR (2005) articles <sup>1</sup>
International solidarity to control EIDs is a public good	"We've essentially created a commons... wealthy countries need to understand that they're at risk for everything in the poor countries... And so it is in their own self interests, beyond the obvious humanitarian concerns, to get very involved and very concerned about allowing all countries to defend their own populations, and the global population, against the emergence of new infections."	The purpose of the IHR is to "prevent, protect against, control and provide a public health response to the international spread of disease" (Article 2 p.9) and the goal of the universal application of the agreement is the "protection of all people of the world from the international spread of disease" (A3.3 p.10)
Responsibility of the WHO as a supranational public health authority	"Every new emerging infectious disease that has the potential for rapid global spread is not only an opportunity, it is a mandate for effective and aggressive WHO action... it would have been a failure of leadership had they [WHO] not acted; SARS was crying for that kind of leadership."	The WHO Director-General retains ultimate authority on the determination of a public health emergency of international concern (A12.3 p.14), the issuance of temporary recommendations (A49.5 p.33) and their modification, termination or extension at any time (A15 pp.15-16).
Coercion global interventionism, proportionate to the threat, is justifiable	"What makes [epidemics] dangerous... is when information is not flowing freely... travel advisories [should be used] as more of a stick that will be applied when there's good evidence that information is not coming out."	If an affected State Party "does not accept the offer of collaboration" from WHO in assessing the urgency of the event, the WHO Director-General is authorized to share information with other States Parties, "when justified by the magnitude of the public health risk" (A10.4 p.13), as appropriate and necessary to enable them to respond to a public health risk or prevent the occurrence of similar incidents (A11.1 p.13).
Security, equity and reciprocity support enhancing access and assistance	"...it's the responsibility of the international community to make sure [developing] countries develop the ability to comply with the new laws, but... I think there is a real sense of complacency in the wealthier countries about the state of health in the world..."	Improved international "collaboration and assistance" (A44 p.31) is urged. States Parties are to "undertake to collaborate" with each other, particularly for "the mobilization of financial resources to facilitate implementation" (A44.1.c). They are also engaged by the obligation to provide "technical cooperation and logistical support, particularly in the development, strengthening and maintenance of the public health capacities required" (A44.1.b).

EID, epidemic-prone infectious disease; IHR, International Health regulations; SARS, severe acute respiratory syndrome.

provide assistance such as the international mobilization of expertise and resources for disease containment and harm mitigation.

### The interdependence of security, equity and reciprocity

Following SARS, an improved international commitment to public health capacity building through increased development assistance began to take shape, but questions remain about the adequacy and sustainability of these efforts. Significantly greater overall levels of development assistance for public health systems, as well as targeted aid to improve public health surveillance and response capacities, without diverting resources from existing local and national public health priorities in developing countries, are crucial for timely and effective outbreak detection and control. This assistance could take multiple forms:

- *Investment*: long term development assistance for national and regional health systems capacity improvement, including a more equitable distribution of scarce treatment and prophylactic supplies;
- *Rescue*: immediate para-crisis technical expertise and material assistance for identifying and controlling outbreaks, including sharing of national and international stockpiles;
- *Compensation*: post-crisis social and economic renewal assistance to defray the costs associated with timely reporting and cooperation to prevent the international spread of disease.

The justifiability of a supranational authority being invested with the power to impose coercive measures on countries therefore depends greatly on the ability of that same authority to actually protect public health, locally and globally, by offering and providing sub-

stantial and effective outbreak response assistance.

### Connecting principles to policies

The logical extension of our observations on the normative underpinnings of the recent shift in global public health security strategy reveals a need for further policy innovation in this area. First, to support heightened international solidarity to combat EIDs, the case for the shared public good achieved by such solidarity must be made continually to countries, whose short-term national interests may conflict with global health protection efforts.<sup>7</sup> WHO and other health authorities therefore will have to continue to convey the potential health and social gains, and the magnitude of avoidable economic costs, resulting from further investment in global public health surveillance and response.

Second, the legitimacy of WHO as a supranational public health authority depends on its capacity to serve as a trusted broker of information, expertise and coordination. A significant increase in the WHO budget is thus a priority. This includes ongoing support for existing information and assistance mechanisms like the Global Public Health Information Network (a collaboration between WHO and the Public Health Agency of Canada) and the Global Outbreak Alert and Response Network. Such support will have to be combined with the creation of dedicated and protected funding streams, nationally and internationally, for public-health systems capacity building.

Third, the justifiability of coercive global interventionism in response to rapidly spreading outbreaks will have to be guided by precaution and constrained by necessity and proportionality. To accomplish this, further research is needed to better establish the efficacy, efficiency and equity of global public-health response measures such as the use of travel recommendations. To decrease the disincentive to report emerging threats, WHO must deliver on commitments to provide timely assis-

tance, assessment and recommendations and it must continue to publicly criticize any disproportionate or scientifically unsubstantiated use of restrictive measures. The creation of a permanent dispute resolution mechanism to adjudicate conflicts over trade and travel restrictions would enhance compliance and provide recourse and redress for countries subjected to overly restrictive measures.

Finally, the duty to address inequalities in health system capacities and access to pharmaceuticals across countries will have to be recognized as a compelling product of security, equity and reciprocity. A vivid and troubling indication of current levels of mistrust in the international commitment to improve the public-health capacity of all countries is evident in Indonesia's decision to suspend the sharing of avian influenza isolates unless it is provided with guaranteed access to vaccines developed from the samples. Indonesia's decision threatens to derail global efforts to prepare and respond to an influenza pandemic, but responding to it requires a comprehensive redistribution of the resources necessary for EID and pandemic containment. The principle of

reciprocity also supports the development of an international compensation fund to offset the damages that accompany the timely disclosure of threats to global public health.

## Conclusion

The international response to SARS, and subsequent multilateral initiatives, illustrate a significant normative shift at the core of emerging strategies to ensure global public-health security. The direction of this shift, provided that it continues to frame responses to global EID control, should also lead to continued innovation in policies and mechanisms to protect the world from public-health emergencies. ■

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