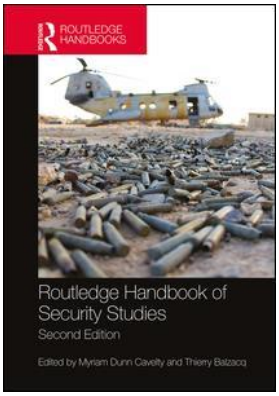

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21
PANDEMICS AND GLOBAL HEALTH

Simon Rushton and Sonja Kittelsen

On 25 April 2009, on the basis of the outbreak and spread of a novel influenza virus with pandemic potential, the World Health Organization (WHO) Director-General, Margaret Chan, announced a Public Health Emergency of International Concern (PHEIC) – the first declaration of its kind following the entry into force of the revised International Health Regulations (IHR) in 2007. Shortly thereafter, on 11 June 2009, the WHO elevated its pandemic alert level to Phase 6, indicating that the circulating influenza A (H1N1) virus had entered a pandemic phase.

The declaration sparked controversy, as, by this point, experts already recognized that the impact of the H1N1 influenza virus was relatively mild compared to what had initially been feared. The WHO's decision to raise the pandemic alert level led to criticisms by some that the threat posed had been overstated, and to speculation regarding the extent to which the WHO's decision-making was politically motivated or unduly influenced by industry interests (Council of Europe Parliamentary Assembly 2010; Fidler 2009: 768). Managing H1N1 thus presented the WHO with not only an epidemiological challenge, but also a political one.

The 2009 H1N1 influenza outbreak and the controversy surrounding it is only one manifestation of the increased government, public, and media attention that has been paid to the threat of pandemics in recent years, especially since the turn of the millennium. The emergence of new viruses such as human immunodeficiency virus (HIV) in the 1980s and the Severe Acute Respiratory Syndrome (SARS) coronavirus in the early 2000s, the resurgence of old viruses in more volatile forms, and the possibility of biological agents being used to cause deliberate harm, have all drawn attention to the threat that the microbial world poses to individuals, states, and the global population.

Yet, this is in no sense new. History is replete with examples of the disruption disease has caused to militaries, societies, and economies. What distinguishes contemporary manifestations of the security–health link is the impact that globalization has had on the spatial and temporal dimensions of insecurity, and the consequences that this has had for how governments respond to the threat of disease emergence and spread. The past two decades have witnessed the rise of new forms of government action aimed at strengthening national and international capacities to rapidly detect and respond to an outbreak, in the full knowledge that in a globalized world an outbreak event is unlikely to be confined to one state alone.

As the controversy surrounding the 2009 H1N1 influenza pandemic demonstrates, determining what constitutes a health security threat and how we should respond to it is not just a

technical matter, but a highly political (and politicized) one. The aim of this chapter is to examine the political nature of this relationship between pandemics, global health, and security in three parts. The first part provides an overview of the concept of health security, addressing both how sources of insecurity are identified, and who or what is recognized as being threatened. The second part examines some of the most common contemporary responses to pandemic threats and discusses some of the controversial issues that they have raised. Following on from this discussion, the third part looks at some of the political issues generated by the increasing tendency of some governments (especially those in industrialized Western countries) to approach pandemics in national security terms – in particular how the type of exceptional emergency responses that often characterize efforts to address immediate security threats can bring public health into conflict with other political, economic, and social values.

Pandemics, global health, and 'health security': security for whom and from what?

Neither 'global health' nor 'health security' are unified concepts. As Andrew Lakoff has noted, what global health entails differs depending on the actors involved in its promotion: 'different projects of global health imply starkly different understandings of the most salient threats facing global populations, of the relevant groups whose health should be protected, and of the appropriate justification for health interventions that transgress national sovereignty' (Lakoff 2010: 59). In a similar vein, William Aldis (2008) has noted the absence of an agreed definition of health security. How that concept of health security is understood invariably determines how sources of insecurity are identified, who or what is recognized as threatened, and how responses are shaped. For example, whether one takes the individual, the state, or the global population as a whole as the referent object of health security inevitably has a bearing on how sources of health insecurity are identified and framed.

The various conceptualizations of the notion of health security that have emerged over the past couple of decades can broadly be categorized according to two lines of thinking – which Sara Davies has labelled 'statist' and 'globalist' approaches to health security (Davies 2009). As Davies has noted, the statist approach primarily focuses on the threat of disease to the economic, political, and military stability of the state and, in much of the academic literature, has often been associated with securitization theory. In contrast, the globalist perspective takes the individual as the referent object of security. Its starting point is the recognition of health as a fundamental human right and, in this regard, it has much in common with the concept of human security and with critical security theory (Davies 2009: 13–14; Davies 2010: 1170–1). Sources of health insecurity in a globalist mode are generally more broadly cast to encompass not only the threat of disease, but also the structural conditions that determine health outcomes.

While these modes of thinking about health security differ in conceptual terms, in practice the distinction between them is often blurred. Independent of whether the referent object of security is seen as the individual or the state, both statist and globalist perspectives share a recognition of an increased vulnerability to a broadening array of health challenges, due to a growing interconnectedness associated with processes of globalization. Both approaches, moreover, acknowledge a role for the state in providing for health security, albeit to varying degrees. Nevertheless, the distinction between these competing modes of thinking about health security is politically significant, as the different rationales for intervention underpinning them have direct bearing on how global health priorities are set. This includes determining what health challenges fall into and out of focus, as well as the appropriate means of responding to identified sources of insecurity.

Whilst the concept of human security has gained support from a variety of actors – within the UN System, global civil society, and academia – it is the more statist approaches to health security that have tended to have a tangible policy impact. Increasing media and political attention on so-called 'Emerging Infectious Diseases' (EIDs) through the 1990s led to infectious diseases rising up the security agendas of key states – not least the United States (King 2002; Weir and Mykhalovskiy 2010).

The HIV/AIDS pandemic, for example, gained particular prominence as a security issue. In addition to having devastating consequences for individuals and communities affected by the disease, the scale and spread of HIV/AIDS, particularly in sub-Saharan Africa, led academics and policy-makers alike to focus on the possible impact of the pandemic on state and regional stability (Altman 2003; National Intelligence Council 2002; Singer 2002). This included the possible impact of the virus on peacekeeping forces and the armed forces of the state. In a seminal move in July 2000, the United Nations Security Council (UNSC) passed Resolution 1308 recognizing HIV/AIDS as a 'risk to stability and security' in Africa on the basis of the vulnerability of peacekeeping forces to HIV/AIDS and the possibility of these forces serving as vectors in spreading the disease further (UNSC 2000). While the causal links between some of these claims have since come under scrutiny (Barnett and Prins 2006; McInnes and Rushton 2010), the HIV/AIDS pandemic continues to hold resonance as a security issue in some quarters. In 2011, the Security Council reiterated the potential security implications of HIV/AIDS in Resolution 1983 (UNSC 2011).

In addition to the HIV/AIDS pandemic, this statist view of health security threats has been bolstered by the experience of SARS in 2002–3, the resurgence of the H5N1 avian influenza virus in 2004–5, the H1N1 influenza pandemic in 2009, and most recently, the Ebola outbreak in West Africa in 2014–15. In these cases the link between infectious disease and national/international security has been argued along three broad lines: (1) that disease can threaten international stability (for example through negatively impacting the global economy, through the instigation of migration flows or impacting on the operational capacity of militaries and peacekeeping forces); (2) that it can disrupt the economic and political stability of states; and (3) that disease can create high rates of morbidity and mortality (McInnes and Lee 2012: 148–54). The scale of the Ebola outbreak, for example, raised international alarm not only on the basis of the clear devastation that it caused for those individuals and communities affected, but also due to the risk that it was thought to pose to state and regional stability. On 18 September 2014, the UNSC passed Resolution 2177, declaring the Ebola outbreak a 'threat to international peace and security' on precisely these grounds (UNSC 2014).

The possibility of a biological agent being released for the purposes of deliberate harm, highlighted by the 2001 anthrax attacks in the United States, marks another prominent manifestation of the security–health link – raising the possibility that future pandemics may not always be naturally occurring. While the threat of biological attack is not a new security concern, the 2001 anthrax attacks underscored the utility of a robust public health capacity in not only detecting and containing naturally emerging diseases, but also in defending against the possibility of a deliberate biological attack (Heymann 2003: 202).

However, while global health in general has received increased political attention since the turn of the millennium, many scholars have argued that the focus on the security implications of infectious diseases (and, overwhelmingly, on the national and international, rather than human security implications) has meant that a select set of diseases have been successfully propelled into the realm of 'high politics' at the expense of a more holistic view of the threats to health that people around the world face on a day-to-day basis. It is thus not surprising that, despite the changes that globalization (and, in many countries, the neoliberal 'rolling back' of the state) has wrought, governments remain at the heart of contemporary efforts to address those health issues

that have most commonly been identified as security threats – not least pandemics. The next section of this chapter will examine how health security is pursued in more detail, by focusing on some of the most notable national and global responses to disease-based security threats.

Common responses to pandemic threats

Governments seek to respond to pandemics in a variety of ways, which can vary according to a range of factors including the nature of the outbreak; the society, economy, and political system of the state; and the extent to which the government in question perceives the outbreak to represent a threat to its national security or other vital interests.

Emergency powers of various kinds are often used to address major disease outbreaks, including measures such as the use of forcible quarantine (in which those who appear to be well but may have been exposed to a disease have their movements restricted); compulsory vaccination or medical treatment; and the conscription of medical professionals to assist in tackling the emergency (Colmers and Fox 2003: 398). Other common emergency responses include 'social distancing' measures (for example closing schools and transport infrastructure), introducing health checks at borders, refusing to allow air travel from particular destinations, or preventing the import of certain types of goods. Emergency healthcare measures, such as the creation of temporary isolation facilities, are also often put in place at hospitals and medical centres in order to allow them to treat a higher than normal number of people and to control the spread of infection. Typically these emergency powers will be exercised for a limited time only, with things returning to normal once the situation has been brought under control.

Alongside these short-term emergency responses, governments concerned by the security implications of disease have also sought to take longer-term approaches to preparing for pandemics. Four examples of such strategies are: preparedness planning; investing in research and development for 'medical countermeasures'; stockpiling pharmaceuticals and other medical supplies; and seeking to enhance international cooperation to improve the coordination of global responses to health security threats. Here we briefly examine each of these forms of response.

Preparedness

The concept of 'preparedness' has increasingly entered the policy discourse in many states in recent years, partly in response to infectious disease threats, but also to other security challenges, including natural disasters and climate change. The aim of public health preparedness is to help prevent, mitigate, and recover from a health emergency (Nelson et al. 2007). The range of specific activities that fall under the rubric of preparedness is wide (e.g. CDC 2011), including developing the laboratory capacity to promptly detect and diagnose outbreaks; improving the ability of the public health infrastructure to deal with a major outbreak; ensuring that different levels and branches of government share information and coordinate their responses; and putting in place plans and systems to enable the different emergency services to work together.

Research and development

Some countries – the United States being by far the most active in this regard – have also sought to increase the range of medical responses available through funding and conducting research and development into 'medical countermeasures' (which includes pharmaceuticals and biologics such as vaccines, antibodies, and antimicrobials, as well as diagnostics and other medical technologies) to prevent and mitigate the effects of disease outbreaks, whether naturally occurring

or manmade. In the US case it is the possibility of biological weapons being used by terrorist groups, 'lone wolf' individual terrorists, or 'rogue states' that has primarily driven this effort. In the decade following the 2001 9/11 attacks and the subsequent 'Amertithrax' anthrax letter attacks, the US government spent approximately US$60 billion on biodefence programmes (Hayden 2011), a large proportion of which was dedicated to scientific research into detecting, diagnosing, and treating pathogens.

These programmes have caused significant controversy. Some have argued that, despite the focus on biological weapons threats, these research efforts have had significant knock-on benefits for public health more broadly (e.g. Burnett et al. 2005) – not least in better equipping us to deal with pandemic disease threats. Others, however, believe that the real effect of this investment has been to promote and enrich a 'biodefence industrial complex' (Fidler and Gostin 2007); that the money which has been spent has been used ineffectively; that the prioritization of programmes focusing on a narrow range of biological agents has diverted attention from naturally occurring disease threats (Scientists Working Group on Biological and Chemical Weapons 2010); and that the massive scale-up of biodefence research could actually increase rather than reduce the security threat.

Stockpiling

The creation of national strategic stockpiles of medicines and other supplies has also been prioritized by some governments seeking to ensure that they have the resources available and ready to be deployed in the case of a major health emergency. Again, these preparedness efforts have not been uncontroversial. In some countries there have been public debates around the resource implications of maintaining large stocks of medicines that may never be needed, coupled with doubts around the efficacy of some of the commonly stockpiled medicines – as seen in debates over the UK's and US' stockpiling of Tamiflu (van Noorden 2014). Some have suggested that commercial interests may have influenced the adoption of these resource-intensive preparedness strategies (Cohen and Carter 2010), whilst some countries in the global South have complained that the West's stockpiling of such drugs (as well as other initiatives such as making advance purchase agreements with pharmaceutical manufacturers) has led to the health security of rich, industrialized countries being protected at the expense of poorer parts of the world, who are as a result unable to acquire the medicines they need – either because they are priced out or because global supplies are limited.

Global coordination

Finally, one of the notable features of the discourse around health security is that, even where that security has been understood in statist terms, there has been a strong emphasis on the need for international cooperation, and for disease-based threats to be addressed at the global level. The IHR (WHO 2005) – the WHO-led global framework through which countries share information about disease outbreaks of potential international significance, as well as coordinate the global response – is the centrepiece of this international cooperative effort. These regulations were significantly updated in 2005 in order to tackle some of the problems with the previous arrangements (in particular that they applied only to a small number of specified diseases, and that – as we discuss in the next section – governments often failed to report outbreaks for fear of the economic and political consequences of doing so).

It is undoubtedly the case that an increasing awareness amongst governments of the global nature of health security was crucial in generating the political momentum that led to this new international agreement. But again it has led to some tensions between the global North and

some states in the global South who have argued that the updated IHR impose significant costs upon them (in particular the requirement that they strengthen their domestic public health surveillance infrastructure) without sufficient support from the developed world (who are primarily the ones who see the strengthening of global disease surveillance as a security imperative) (Davies et al. 2015; Rushton 2011).

Balancing health security with other values

Each type of response to pandemic disease threats, then, has generated controversy – and those controversies are yet to be resolved. But aside from these specific debates there are some other big political questions that are raised by the move towards understanding pandemics in security terms. In particular, the types of exceptional response that often characterize attempts to address perceived security threats can have the consequence of bringing public health into conflict with other social, political, and economic values. This raises deeply political questions about 'how much' health security we want or need (as individuals, or as nations), and what we are prepared to sacrifice in order to get it.

In this section we examine three areas in which trade-offs frequently have to be made between infectious disease control and other values: how to limit the progress of pandemics without causing international travel and trade to grind to a halt; how to balance the human rights and civil liberties of individuals with the need to protect the health of the wider community; and the extent to which a focus upon pandemic disease threats may distort the policy agenda, drawing much-needed attention and resources away from other pressing global issues (including other global health issues). In each of these three cases we see 'what is best for health security' being balanced against other things that we value as societies: free travel and trade; individual rights and freedoms; and opportunity costs.

Disease containment vs. travel and trade

The problem of new diseases being imported through travel and trade has been present throughout history, and many public health innovations (such as the introduction of quarantine practices in fourteenth-century Venice (Gensini et al. 2004)) have developed as a response to disease threats associated with trading with other societies. As mentioned, globalization has exacerbated this problem, increasing both the overall volume of international travel and trade as well as its rapidity.

Closing borders to imports from a country affected by a major disease outbreak has been a common response – and it is equally common that travellers decide (or are advised) not to visit an affected city, region, or country. The SARS outbreak of 2003 was one of the most dramatic recent examples of this, with the virus spreading rapidly across continents and significantly affecting international travel and trade. Indeed the SARS outbreak was thought at the time to pose a catastrophic threat to the global economy (although later analyses found that economies recovered to their pre-outbreak levels relatively soon after SARS was contained (Keogh-Brown and Smith 2008)).

As a result of these consequences, governments have in some cases been unwilling to alert the outside world to the existence of an outbreak. There have been many cases – including SARS, where China initially attempted to cover up the outbreak – where governments have deliberately withheld information from the international community, hampering the international response and increasing the likelihood of a localized outbreak becoming a global pandemic for which the world is unprepared. Some of the innovations in the 2005 IHR were intended to address precisely this problem, including giving authority to the WHO to take action on the

basis of non-government reports of an outbreak and establishing a stronger role for the WHO in recommending travel and trade measures.

The stated purpose of the IHR is 'to prevent, protect against, control, and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade' (WHO 2005: Art.2). Given both the centrality of international travel and trade to the contemporary global economy and the increasing degree to which infectious diseases are seen as security threats, striking this balance is perhaps more politically difficult now than in any previous period. There is a clear trade-off between the two potentially competing values: it is impossible to entirely eliminate the risk of diseases travelling across borders (in other words to be completely 'secure') so long as people and goods do.

Disease containment vs. human rights and civil liberties

Efforts to protect public health have also long involved a trade-off between the rights and freedoms of individuals and the protection of the community as a whole from infectious disease threats. From the practice of 'shutting up' infected houses during the plague in seventeenth-century London (McKinlay 2009) to the enforced quarantine procedures put in place in West Africa to attempt to control the spread of Ebola (Eba 2014), individuals with (or suspected of having been exposed to) a serious infectious disease have often found their freedom of movement restricted in the name of public health.

It is not only in response to rapidly spreading infections like Ebola that we have seen individual rights and liberties compromised. HIV/AIDS has triggered a particularly vigorous debate over the rights of People Living with HIV and AIDS (PLWHA) since HIV was first identified in the early 1980s. This was in part a result of the fact that many of those communities most affected (such as men who have sex with men, sex workers, and intravenous drug users) had long been victims of discrimination and denial of rights even before HIV came on the scene. Yet the responses of many governments to HIV were highly controversial and were frequently justified on the grounds of protecting population health.

This problem has not gone unrecognized. For instance, 'The Siracusa Principles' (UN Commission on Human Rights 1984) set out the conditions under which it is permissible for governments to derogate from the International Convention on Civil and Political Rights – including in cases of public health emergency (see Amon 2014). Whilst non-binding in terms of international law, these principles nevertheless set clear standards for the restriction of individual rights against which national policies during pandemics can be tested.

In addition to being problematic on ethical and human rights grounds, there is evidence to suggest that approaches to disease control which unduly infringe rights and liberties can also undermine the efficacy of the response. During the 2014 Ebola outbreak, for example, there was at least one documented case of a 'break out' from an enforced quarantine facility, and many cases of people, distrustful of the authorities, seeking to conceal cases of infection. Studies of PLWHA affected by travel restrictions also found evidence of potential negative health consequences, for example cases where PLWHA would cease taking medications when they visited the US (which for many years refused entry to PLWHA) due to concerns that the discovery of AIDS drugs in their luggage could lead to them being turned back at the border (Mahto et al. 2006).

Here again we see health security being balanced against other values. In pure public health terms, separating those individuals who have a disease (or who may have a disease but are not yet displaying symptoms) from the rest of the community who are uninfected is the most effective form of containment. But both ethical and practical considerations also weigh upon decision

making, meaning that hard choices often have to be made about how much individual freedom we are prepared to trade for security – choices that are often made even harder by the conditions of emergency and uncertainty that frequently characterize pandemic response.

Addressing security threats vs. distorting the health agenda

Finally, as with all resource allocation decisions, there are trade-offs between investing in preparing for and responding to pandemic disease threats and the opportunity costs of not being able to use those resources in pursuit of other objectives. If, as the Copenhagen School suggests, the result of securitization is to prioritize those issues seen as 'security threats' above others, then it naturally follows that those that are not seen as security issues may be under-prioritized in comparison. These prioritizations play out at both the national and international levels.

Nationally, there have been a number of debates in recent years over the preparedness plans put in place (particularly by governments in the West) in relation to potential future pandemics, with disagreements centring on whether this is an effective use of resources (which could otherwise be used to address other health issues) and the effectiveness of some of the preparedness measures that have been adopted. For example, as we discussed above, there have been debates over the extent to which pharmaceutical stockpiles offer value. In a context in which health system expenditure on pharmaceuticals and other medical technologies continues to increase rapidly, and even in the most wealthy countries political debates over the affordability and rationing of drugs for cancer and myriad other conditions are ongoing, some have been concerned that the perception of pandemics as security threats has allowed drugs intended to treat certain types of conditions to break free of the financial restrictions that would otherwise apply – even though (given that pharmaceuticals have a shelf life, and the likelihood or nature of future pandemics is in any case unknown) there is a real possibility that the drugs stockpiled in the name of pandemic preparedness may never actually be used.

A similar debate plays out at the global level over the impact that the securitization of a select group of diseases has had on the overall global health agenda – not least as it pertains to international aid. Given that pandemics (with the notable exception of HIV/AIDS) are responsible for relatively few deaths globally each year compared with big global killers such as ischaemic heart disease, stroke, lower respiratory infections, and chronic obstructive lung disease – the top four on the WHO's current list of causes of death worldwide (WHO 2014) – there are questions over the extent to which pandemics are prioritized and – more conceptually – over the way in which statist national security-based approaches (some would argue Western national security-based approaches) to disease threats have crowded out globalist human security considerations. If we look at the day-to-day health issues that are most threatening to human well-being around the world, after all, pandemic diseases scarcely register. On the other hand, the potential devastation that a major pandemic could cause, not only in terms of human life and well-being but also economic cost, is incalculable. Again, therefore, we see the trading-off of investment in addressing potential future health risks against investment in other health threats – or in strengthening health systems.

Conclusions

All of these political trade-offs highlight the difficulties of responding to pandemic events in ways that address security concerns over the impact of pandemic diseases whilst at the same time being commensurate with other goals and interests. Achieving these balances is further complicated by the fact that decisions about how to respond to a pandemic are often taken in emergency situations characterized by a lack of clear information about the scale and nature

of the threat; media and public pressure for the authorities to 'do something'; risk aversion (although governments can be criticized not only if they have failed to prepare, but also if they are perceived to have over-hyped a threat); and in some cases an absence of effective 'medical countermeasures' – for example in the case of emerging and re-emerging infectious diseases where it can often be the case that no effective vaccines or treatments exist.

This has led some to question whether the securitization of pandemics is ultimately a good thing. On the one hand, securitization can be beneficial in galvanizing both political attention and resources to address a number of disease challenges. Certainly the investment in preparedness over the course of the past decade (which has not just come from the health sector, but from security budgets) can at least in part be attributed to a perceived security imperative. On the other hand, as the discussion on pandemic response has illustrated, the convergence of the realms of health and security also raises concerns on ethical, practical, and political grounds. These concerns relate not only to what global health issues receive the attention of governments and the international community (raising questions about how those priorities are set, and in whose interests), but also to the extent to which a securitized response to the threat of disease – whether in the short or longer term – disproportionately or unnecessarily interferes with other rights, priorities or values.

The effects of securitizing pandemic diseases have been profound, affecting not only health policy but also how security is practised – what Stefan Elbe has described as the 'medicalization of security' (Elbe 2010). The emphasis placed on medicalized responses to the security threat posed by pandemics, such as epidemiological surveillance or pharmaceutical stockpiling, has clear implications for global health, drawing attention away from 'upstream' efforts to prevent disease outbreaks (for example by grappling with the thorny questions of the social and economic determinants of health) in favour of short-term emergency responses to emerging but transient threats. The securitization of pandemics may even have wider political consequences for the international system. With an increased focus on global health security comes the expectation that governments will monitor and effectively manage disease spread within their populations (Elbe 2010: 173). Those that fail (or are simply unable) to do so could find themselves being seen by their peers as pariah states.

Given this link between disease control and legitimate governance, the rise of health security, particularly in its statist form, may ultimately provide a legitimating argument for more powerful states to breach the sovereignty of others in the event of an outbreak that garners international concern (Elbe 2011: 220–1). The political relationship between pandemics, global health, and security, then, not only has effects on security policy and health service provision, but also speaks to fundamental questions of power and interest in the international system.

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