Swine flu in 1976 and today

In 1976, a similar virus provoked a massive public health response in the USA, including plans to vaccinate the entire US population, but also failed to develop as expected.
A subsequent 1978 report ('The Swine Flu Affair: Decision-Making on a Slippery Disease' by Richard Neustadt and Harvey Fineberg) identified two key issues. First, how should politicians and non-expert officials address matters that depend on complex and technical, but speculative and incomplete, expert knowledge? Second, how should the public be involved in such matters, and how can they be debated given the type of complicated and technical issues at play? Now, perhaps even more than in the late 1970s, these issues remain relevant, amplified by increasingly critical and reflexive publics, and intensive mass media.

More reading

To Pandemic or Not? Reconfiguring Global Responses to Influenza, STEPS Working Paper 51 by Paul Forster (2012)
ISBN: 978 1 78118 085 3

Scoones, I. (ed.) (2010) Avian Influenza: Science, Policy and Politics, London: Earthscan Routledge

Dry, S. and Leach, M. (eds.) (2010) Epidemics: Science, Governance and Social Justice, London: Earthscan: Routledge

These and others titles in this series are available from:
www.steps-centre.org/publications

An extensive list of resources on pandemics is available at:
www.steps-centre.org/2012/uncategorized/pandemic-influenza-resources

Credits

This briefing was written by Paul Forster and edited by Nathan Oxley.

About the STEPS Centre

The STEPS Centre (Social, Technological and Environmental Pathways to Sustainability) is an interdisciplinary global research and policy engagement hub uniting development studies with science and technology studies. We aim to develop a new approach to understanding, action and communication on sustainability and development in an era of unprecedented dynamic change. The STEPS Centre is based at the Institute of Development Studies and SPRU Science and Technology Policy Research at the University of Sussex with a network of partners in Asia, Africa and Latin America and is funded by the Economic and Social Research Council.

Find out more: www.steps-centre.org

Contact us

STEPS Centre, Institute of Development Studies, University of Sussex, Brighton
BN1 9RE, UK
Tel: +44 (0)1273 915673
Email: steps-centre@ids.ac.uk
Web: www.steps-centre.org
Twitter: @stepscentre

Institute of Development Studies

University of Sussex
SPRU – Science & Technology Policy Research

STEPS centre

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

Swine flu: what went wrong?

From STEPS Working Paper 51: To Pandemic or Not? Reconfiguring Global Responses to Influenza

STEPS briefing 51

Although the H1N1 'swine flu' pandemic of 2009-10 was less severe than anticipated, the event revealed weaknesses in the world's current configuration of planning for and responding to pandemic influenza.

Science, public health policy makers and people worldwide were confounded by the uncertainty, complexity and politics inherent in influenza – as well as the high emotions that come with pandemics.

Amid this confusion, the global and national institutions responsible for protecting public health were shown to be over-reliant on a reductive, science-led approach that prioritised a one-size-fits-all response, and failed to address the needs and priorities of the world's poorest and most vulnerable people.

Soldiers hand out masks near a shopping mall in Mexico City after the emergence of H1N1 in April 2009.
Photo: Militares y Cubrebocas by eneas on Flickr (cc-by)

WHO in the front line

Emerging in Mexico rather than in east and south-east Asia (where cases of H5N1 avian flu spread to humans had been reported in 1997), the 2009-10 H1N1 event was generally milder than anticipated. Fewer deaths were confirmed worldwide than would be expected from annual, seasonal flu. Consequently, the World Health Organization (WHO), the agency leading the international response, was charged with over-reaction and inappropriate collusion with the pharmaceutical industry, and many national governments were accused of squandering large sums of money. The Council of Europe suggested that US$18 billion had been wasted, and that WHO's actions were "one of the greatest medical scandals of the century".

"Even the simple matter of the naming of the 2009-10 H1N1 event caused confusion"

By definition, an influenza pandemic is the type of event that falls at the heart of WHO's mandate, and theoretically at least, the governance of global public health has never been more tightly integrated, with WHO at its core. Yet even the simple matter of the naming of the 2009-10 event caused confusion. Whilst science and biomedicine required a technically accurate and politically neutral term ('H1N1'), the public and the mass media quickly settled on a name that was tangible and memorable ('swine flu'). Disputes over naming also illuminated efforts by agrobusiness enterprises to conceal the involvement of animals and farming practices in generating and transporting novel flu viruses. Viral surveillance efforts were therefore inhibited, and the world's preparedness reduced.

Is science enough?

At the centre of an elite network driving and drawing on science and biomedicine, WHO is in a weak position to provoke or manage change. The overlapping attractiveness of the current biomedical approach to the normative institutions charged with governing public health - globally and nationally - and the commercial pharmaceutical industry, creates one set of challenges: inappropriate collusions are easily perceived. Such an approach is also easily construed as misapplication of attention and effort by WHO on behalf of the countries that most significantly fund it.

A more serious set of challenges, central to a more effective response to flu, concern the suppression of alternative and complementary responses by the dominance of scientific and biomedical approaches.

"The current approach generates and maintains a dangerously narrow set of response pathways"

Effectively responding to flu involves addressing issues of complexity and diversity as well as uncertainty, which an approach configured around science and biomedicine is ill-equipped for. Such an approach is confounded by the uncertainty inherent in the influenza virus, confused by the complexities of the disease in individuals, and compromised by continuing ignorance regarding both, and the mix of them.

Pig production in China / ILRI / Flickr (cc)

Preparing for pandemics

- Preparing for an influenza pandemic means preparing for surprises and being ready to respond rapidly and flexibly under conditions of uncertainty.
- Tightly defined biomedical approaches may limit response options, and failing to correspond with public concerns, damage credibility and authority.
- WHO may benefit from a fresh understanding of equity – recognising the needs and priorities of poor people and the role of agricultural practices.

Key questions:

- How can the world be better prepared to respond to influenza?
- How should national and supranational institutions respond to threats such as influenza, where the science is so uncertain, and the population so nervous?

Unresponsive to popular concerns, and lacking correspondence with them, and so losing credibility and authority, the current approach both generates and maintains a dangerously narrow set of response pathways, which are insufficient in the face of uncertainty, and inhibits the development of alternative and complementary approaches.

Pandemics and the poor

One possible route into the complex politics associated with provoking and managing change is a re-ordering of efforts around a reconfigured approach to global equity. Given the current arrangement of interests, equity - in the shape of both access to pharmaceuticals and the effectiveness of non-pharmaceutical interventions - is impossible. Even in rich countries, the 2009-10 event saw health systems stretched, and pharmaceuticals, which are central to the current response, failing. Vaccine arrived late, uptake was low, and scientific and public doubts quickly emerged regarding the efficacy and safety of anti-viral drugs.

"A reconfigured approach to equity might refresh and refocus WHO"

Narrow, technocratic approaches are not only at odds with the varied understandings, needs and priorities of different people in different parts of the world, but also fail the world's poorest and most vulnerable people.

A reconfigured approach to equity would also allow an important focus to be drawn on present agricultural practices, which are increasingly exposing the world's poorest people first to novel influenza viruses (and other pathogens, some as yet unknown); it would also draw attention to disease surveillance in animals, a vital part of understanding and responding to the threat. Such an approach might also refresh and refocus WHO, which supports current working practices by default rather than conspiracy, and broaden research efforts. Biomedical investigations rarely go beyond biomedical matters; and responding to flu, which can affect so many different people in many different ways, is doubtless more than a biomedical issue.

Recognising this is imperative if more plural responses are not to be suppressed. In a world of fast-changing global agendas and mandates, this will involve different, possibly surprising, forms of engagement, with more emphasis placed on sustainable responses which consider diverse local settings and concerns. If the people of the world are to be engaged in preparing for and responding to influenza pandemics, responses need to be appropriate to location, driven by local needs, and more flexible than those currently proposed by science and biomedicine.