

Preventing pandemics of panic in a NICE way

PERSONAL VIEW **Luc Bonneux, Wim Van Damme**

The decisions to stockpile antivirals and influenza vaccines to control avian flu (2005-6) and swine flu (2009) cost large amounts of money.

Both epidemic threats were mostly iatrogenic pandemics of panic, which caused little human suffering, but the global plans to control them were largely a waste of money.

Was this the consequence of rational risk management in conditions of uncertainty, of fear accompanying any epidemic threat, or of close working relationships between disease experts and the drugs industry?

Severe acute respiratory syndrome (SARS) in 2003 was an epidemic by an unknown and therefore scary new virus, but we know much more about influenza viruses.

The new A/H1N1 swine flu was a far cry from the lethal A/H1N1 pandemic of 1918. There has never been evidence that the recent A/H1N1 virus was anything but mild, and it was not reasonable to consider it the first wave of a much more serious second wave. The theory that the 1918 influenza pandemic was caused by a second wave of a mutated virus that had caused a benign epidemic in a first wave has never been supported by any evidence.

The nature of the organisms that caused mild respiratory disease in the spring of 1918 is unknown, but many better candidates than a "Spanish influenza virus light" exist. Both recent iatrogenic pandemics of panic were caused, or at least exaggerated, by disease expert committees.

The core of health economics and health policy is that resources are scarce. If resources were infinite, all possible measures could be taken to fight

disease, including prevention of all hypothetical possibilities. Because resources are limited, wise allocation saves lives. Money spent in stockpiling antivirals with hypothetical effectiveness against a hypothetical pandemic is not available for health care, or for education, or for any other important human need thought to be underfunded.

Organisation of public health can be compared with the organisation of individual health care. Resources are best managed if a patient visits a general practitioner first. The general practitioner may ask expert advice from a specialist, but he or she has a global overview of health and disease, knows the patient and the social context, and is best placed to take a balanced decision and contain costs.

Similarly, the modern disease expert knows a lot about the disease in question, but does not necessarily know much about general public health, health economics, health policy, or public policy, which are much more about priority setting and hence resource allocation between competing priorities. As specialists, disease experts are often biased and are increasingly part of industrial networks.

In recent decades, cooperation between industry and academia has become intense. This combination of skills has led to better and faster development of innovative drugs and technology. However, closer working relationships between industry and university may distort priorities.

The priority of the drugs industry is to make a profit. The aims of academic science are less well defined. Department policies are determined independently by senior academics and are often guided by the potential to obtain funding from

public and private sources. Disease experts and the industry share a common strategy: both try to expand demand for research and drugs for their disease of interest. Few checks and balances exist to preserve the needs of society: the need for a wise allocation of scarce resources among competing priorities.

Disease experts are therefore less competent in judging a disease's relative importance. Overall health policy decisions should be the responsibility of general practitioners, informed by disease specialists, but also by the many other stakeholders in a modern and pluralistic health system.

The United Kingdom has a growing tradition in rational decision making in health: the principles of healthy health policy making have been explored by the National Institute for Health and Clinical Excellence (NICE). As an independent organisation, NICE uses independent, general scientists from epidemiology and public health, health economics, and medical ethics. The teams review the best available evidence and involve all stakeholders, including administrators, healthcare professionals, patients, carers, industry officials, and academic disease experts, in a transparent and collaborative process. Costs are explicitly and transparently evaluated and compared against the expected value of a certain policy. NICE introduces checks and balances necessary to safeguard cost effective health care. NICE is held "accountable for reasonableness" by the public in a continuous debate.

The World Health Organization failed to give appropriate guidance in both pandemics of panic. To prevent this from recurring, WHO should "do it the NICE way." Disease experts are necessarily and fatally biased. It is not reasonable that they bear the entire responsibility for decisions related to their disease. This has been convincingly shown over the past years with the two iatrogenic pandemics of influenza panic. Advice of disease experts, of course, is valuable and indeed crucial, but this advice should be tested against the available evidence, balanced by other stakeholder views, and checked by the transparent evaluation of costs and values. At last, the final evidence based policy advice should be drafted by independent scientists trained in evaluation and priority setting.

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The lethal 1918 pandemic: soldiers ill with Spanish influenza, Camp Funston, Fort Riley, Kansas, USA