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On May 21, 2009, WHO’s Director-General, Margaret Chan decided that influenza A (H1N1) was not going to become a pandemic. Not because of any epidemiological rationale but because the very term “pandemic” was feared to trigger global panic. “Swine flu” would have become a stage six pandemic on that date. But Chan observed that “I know that you have given me a lot of trust and flexibility, and this is not an easy task. I need to balance how science should play a role and not to forget about the people.” Not “science” but public response was the key to the rethinking of what our present outbreak of H1N1 should be labelled. By June 11, 2009, H1N1 was a designated pandemic. This too had its political dimension with medical consequences.

A pandemic or an epidemic is actually not only how widespread a disease actually is, as Chan implied, but rather how it is perceived. Epidemic (and its kissing cousin pandemic) may be a technical term from epidemiology or any “large-scale temporary increase in the occurrence of a disease in a community or region, which is clearly in excess of normal expectancy”, as Colin Blakemore notes in The Oxford Companion to the Body. Yet “epidemic” maintains a powerful metaphorical connection to universal, lethal contagion from its earliest to its most recent use. Epidemic and pandemic have a strong metaphorical use in terms of the unfettered spread of deadly and uncontrolled diseases and have always had social and emotional consequences.

“Epidemic” seems to be a creation of the 17th century, borrowed from the French. Thomas Lodge in his 1603 A Treatise of the Plague needed to define this new notion of "Epidemick" for his readership: “An Epidemick plague, is a common and popular sickness, happening in some region, or country, at a certain time, caused by a certain indisposition of the aire, or waters of the same region, producing in all sorts of people, one and the same sickness.” By 1666, Gideon Harvey added “pandemic” to our vocabulary in his Morbus Anglica noting the fear attendant when “some [diseases] do more generally haunt a Country...whence such diseases are termed Endemick or Pandemick”. Such terms quickly took on metaphorical and catastrophic meaning, as in John Milton’s condemnation of an “epidemic whordom” in his 1643 treatise Doctrine and Discipline of Divorce. That move from scientific description to metaphor continues today.

Chan’s comments are revealing as they echo the effect that public health pronouncements have on the global public. It is easier to generate panic than to disseminate real information. And we have been there before. Richard Neustadt and Ernest May spelled out the dangers of epidemics when they looked at the 1976 swine flu debacle. Swine flu was then seen as an imminent danger to people. The science of the time seemed to bear this out as the virus’s antigenic characteristics linked it to the 1918 influenza epidemic, at least in terms of the science of the day. In 1976, the 1918 Spanish flu seemed, as today, to be a matter of “folk memory”. Its evocation made moral panic about swine flu possible. Yet it was clear that it was the immediate memory of the influenza epidemic of 1968, hardly on the same scale as 1918, that actually motivated the civil servants to act. The public health officials were revealed to have been woefully unprepared for that epidemic, which was seen as a political disaster given their claims of being in charge of the nation’s public health. “Beat ’68” was the mantra in 1976; the 1918 influenza epidemic was the rationale.

In 1976 the then head of the Center (later Centers) for Disease Control (CDC), David Sencer, needed to be seen as being prepared unlike the panic that had attended the outbreak in 1968. As he noted, “the Administration can tolerate unnecessary health expenditures better than unnecessary death and illness, particularly if a flu pandemic should occur.” Money was no object when confronted with the very possibility of 1918 again. The power of Sencer’s argument rested on the inescapable fact that there had been a recent unrelated outbreak of Legionnaires’ disease in the mid-1970s. This “epidemic” reinforced the public’s acceptance that there might be the potential for an epidemic of 1918 proportions.

The public health claim was that all that was known about influenza pointed to quick action through vaccination as the most certain way to head off the epidemic. The CDC then, and recently, used the horrors of 1918 as their “worst
case scenario”. They saw safe, easily manufactured vaccine as the only rescue. The power of the American Presidency was harnessed to this claim and Gerald Ford became a major figure in disseminating the public awareness of influenza. George Bush announced, in 2005, having read John Barry’s history of the 1918 pandemic, that avian influenza was the equivalent of the 1918 influenza epidemic and posited it as the world’s greatest risk—replacing international terrorism, for a time. The reality turned out quite differently in both cases. The swine flu vaccine in 1976 caused more harm in the normal morbidity associated with vaccination than did the disease itself. Avian influenza in the 21st century triggered international responses greatly out of scale to its actual danger. The epidemics never materialised.

Some diseases cause moral panic, much as did syphilis in the 19th century and HIV/AIDS in the 1980s, with real political and social implications. If you were in Hong Kong in December, 2009, as I was, you would have seen the result of the re-emergence of moral panic present in that city reminiscent of the 2003 outbreak of severe acute respiratory syndrome (SARS). It was the result of the moral approbrium levelled at south China as being the source of an illness that threatened the world. In 2009, everyone was hyper-aware of H1N1 influenza from the city health officials who met you at the airport wearing masks and brandishing thermometers to the city’s inhabitants, hidden behind their masks on the trams. When it first arose in southern China in 2003, SARS was called “severe acute nervousness syndrome” because it was accompanied by almost paranoid fear. Here the model of an infection as having a psychological component—a public hysteria about vulnerability—was manifest. The new disease was seen with much the same anxiety and paranoia in the West as a new cholera or Black Death spreading from the East along travel and economic routes.

Real infectious diseases do have a powerful psychological effect. SARS quickly became a “moral panic”, which spread worldwide, being accompanied by a true sense of stigma. In 2009, everyone was hyper-aware of H1N1 influenza from the city health officials who met you at the airport wearing masks and brandishing thermometers to the city’s inhabitants, hidden behind their masks on the trams. When it first arose in southern China in 2003, SARS was called “severe acute nervousness syndrome” because it was accompanied by almost paranoid fear. Here the model of an infection as having a psychological component—a public hysteria about vulnerability—was manifest. The new disease was seen with much the same anxiety and paranoia in the West as a new cholera or Black Death spreading from the East along travel and economic routes.

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Conceiving diseases does not always mean inventing them. Often, real pathological experiences are rethought as part of a new pattern that can be then discerned, diagnosed, and treated. Illness and our sense of our own risk and our response to that risk shape how we experience the illness itself. Thus H1N1 seems not to have had a different presentation from that of seasonal influenza and, sadly, has had about the same morbidity and mortality rates as that annual pandemic. But we were schooled by SARS and subsequently by the fear of avian influenza. Following the model of SARS, avian influenza became a focus of anxiety about epidemics. Although there was no avian influenza epidemic in 2004, 2005, or 2006, WHO continued to map the spread of such a potential epidemic spread by wild birds crossing the wide Siberian distances and encroaching on Europe. Thus in the spring of 2005, the maps revealed that cases of avian influenza caused by the H5N1 virus were present first in southeast Asia and then in China. A second and much worse epidemic than SARS was forecast—a pandemic that would rival the deaths of 1918 and a worldwide panic ensued. Yet, of course, it was not avian influenza and it was not east Asia that was the real “danger”. Its origin was Mexico, far from the origin of SARS or avian influenza, and swine, who rarely fly across national boundaries. The infection turned out to be dangerous but not much more dangerous than the annual influenza that we expect and deal with every year.

Yet people who had H1N1 felt their lives much more at risk, were seen as putting others at risk, and experienced their illness as much more terrifying that if they had had a “normal” influenza. Headlines such as “SPL Star’s swine flu terror as his little girl stops breathing” from Scotland (Daily Record, Nov 28, 2009) were typical. Panic was both reflected and generated in such coverage. A mother stated that after her son was diagnosed “I couldn’t believe it at first. Then I started panicking and reading everything I could find about swine flu” (Irish Mirror, July 10, 2009). And first-hand accounts recorded the panic too. Amy McAlister, 14, of Potomac, MD, USA, wrote that: “I went to the doctor when it hit 103. He did a rapid test. He said he was pretty sure it was swine flu...Oh, my God. At first I thought, ‘Am I gonna die?’” (The Washington Post, Aug 25, 2009). Her reaction, that she was going to die, seemed not unreasonable given the coverage.

Perhaps it was that we undersell the dangers of the annual influenza and dismiss it as merely “like a bad cold”, even though tens of thousands of people die from it each year. Yet it was also the fact that H1N1 was the promised epidemic killer that we had been carefully trained over the past few years to expect. Such a situation stirs many qualities and emotions to create an illness, not in the sense of inventing it, but in the sense of shaping our experience of it. The 2009 H1N1 influenza turned out not to be the equivalent to 1918. Yet the power of the threat and the attendant panic was real; the epidemic in the sense of a global threat to life was not. Chan and WHO recognised the politics of the pandemic and rethought its overall political impact on the global economy and global health. But the effect of relabelling a disease as an epidemic or a pandemic in terms of its impact on the individual who becomes ill is also important. And that we must also do when we label a disease epidemic or pandemic.

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Further reading