

The pandemic of coronavirus: tackling the latest plague

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The world first became aware of the outbreak of coronavirus infection in China early in January, although it probably took root there much earlier. In Europe, where we have become accustomed to good cooperation and data sharing, it is frustrating that we can't be certain of the timelines and the likely shape of what has become a true pandemic. In addition, we look on from a distance with incredulity at the brave postings on social media by those who are prepared to put themselves at risk by chronicling the daily evolution of this modern-day plague. We take comfort from our belief in the robustness of our medical and public health institutions and the health of our democracy with its commitment to free speech and openness. But are we deluding ourselves?

Over the past 30 years, there has been a succession of new threats to public health from a variety of infectious disease agents. Beginning with Bovine Spongiform Encephalitis in 1986, followed by Avian flu (1997), Severe Acute Respiratory Syndrome in 2002, Swine flu (2009), Ebola (2014) and now Corona (COVID-19), nature reminds us regularly that humans exist on the planet on sufferance. We live in habitats where respect for the relationships between animal, social life and environment is necessary for a species to thrive. Rapid urbanisation with incursion into jungle and wilderness bring exposure to unfamiliar organisms often involving consumption of exotic wildlife species. Mass migration and poor attention to hygienic considerations are familiar factors in the emergence of novel and virulent infections and underlying this is poverty, inequality and subsistence living. With each incident the spectre is raised of the so-called Spanish flu of 1919, which swept the world in the aftermath of World War I. With a European population weakened by years of conflict, environmental degradation and poor nutrition, a new virus introduced from North America by troops arriving to join the battle was able to take root and sweep through the continent and beyond with over 100 million victims worldwide.¹

Each of these novel epidemics and Public Health Emergencies of International Concern has a trajectory which is dependent on intrinsic factors of virulence and the resistance of those infected; the problem each time is to predict and model with any reliability the shape and timelines of the epidemic. As a result, policy choices for outbreak management and control are fraught with uncertainty and wrapped up in political risk and the potential for recrimination. In the case of the Avian flu outbreak in Hong Kong, Director of Public Health, Margaret Chan, made the decision to slaughter Hong Kong's entire poultry flock of 1.25 million birds; a decision that was vindicated by the outcome. Twelve years later, by now World Health Organization Director General, Dr Chan declared the World Health Organization's first ever Global Public Health emergency in the face of pandemic swine flu that had originated in Mexico. Eighteen months later, when the epidemic tailed off leaving 17,000 deaths worldwide she was widely criticised with allegations that the World Health Organization had exaggerated the danger and that it had been unduly influenced by the pharmaceutical companies with an interest in anti-viral agents. By now caught between a rock and a hard place, when Ebola occurred in West Africa in 2014, the World Health Organization was again criticised for its slowness in taking action. With coronavirus, after some hesitation, the current Director General, Dr Tedros Adhanom, declared a Global Public Health Emergency and spelled out the major threat that this poses to the world community, putting it on a par with that of international terrorism. Within weeks of the world becoming alerted to the situation, and with the death toll rising daily, major waves were beginning to impact on the world economy as well as the world of public health. So how are we in the UK doing?

At the time of writing, and with over 50,000 cases and over 1300 deaths in China, dozens of other countries now reporting cases, including the UK (but no deaths so far), we can describe this as

being widespread outbreaks within an epidemic that is now global. In this situation, the emphasis domestically is still very much on containment by identifying and isolating those infected in an attempt to prevent it taking root in the population at large. By the time this piece appears, it should be clear whether or not this is happening, although the international threat is likely to persist at least throughout 2020 because of the number of countries involved, including many with poor public health infrastructure and services.

Since the reorganisation of the National Health Service in England in 2013, and the creation of Public Health England, with a parallel set of arrangements for wider public health action based in local government, there is an assumption that an agency modelled on the Centers for Disease Control in the USA, with strong co-ordinated laboratory and clinical services run from London, would be resilient in the face of any challenge. COVID-19 is beginning to test that assumption in a way that Ebola only scratched the surface of.

Any system of response is only as resilient as its weakest link. With a pandemic such as coronavirus, there are many links to be tested including the reliability of the data used to inform decisions, collaboration at an international, national and local level, clarity of lines of responsibility, capacity and capability of laboratory, clinical and social care systems and, most importantly, the full engagement of the general public as citizens should the outbreak become an epidemic when the community response would be dominant. You can't hospitalise yourself out of an epidemic involving tens of thousands of seriously ill patients.

For us to manage such a troubling event, the public must be kept fully informed by credible and trusted voices at national and local levels; and here is the rub. Since the outbreak became widespread

public knowledge at the end of January 2020, the mass media has struggled to locate spokespeople from Public Health England and the government, generally credible experts who will accept the need for complete transparency and availability. The transportation at minimal notice of travellers to Arrowe Park Hospital, Wirral, to be quarantined, followed by the introduction on the hoof with no public preparation of legal orders to enforce such quarantine, proved to be very unsettling to the public. In these circumstances, rumour goes round the block before the facts can get their shoes on.

It is now clear from the early weeks of this epidemic in China, with frightening images and stories emerging online and in social media, that even in a highly organised authoritarian country, a traditional, paternalistic approach to public health will not work in the new age. Without openness and transparency there is a recipe for rumour and social unrest, bringing with it the antithesis of what is required to deal with the threat. This must be accompanied by clear and trusted voices at the national and local levels in the form of professional advisers working closely with but not to the politicians. Let us hope that this penny drops in time in the UK.

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Reference

1. Ashton J. *Practising Public Health – An Eyewitness Account*. Oxford: Oxford University Press, 2019.