Prepared for Anything

From prevention to preparedness: Cultural anthropologists are re-examining pandemics as globalised and globalising diseases. Viral infections such as SARS need to be understood in a wider context, beyond a purely medical dimension.

Swine flu, avian flu, AIDS, SARS, Ebola – viruses circulate all over the world and their deadly effects do not respect national borders. The assumption that infectious diseases are a problem of the past, from the days of industrialisation when cholera and typhus epidemics raged in the cities of Europe, is clearly refuted by the statistical data. Today, no less than five infectious diseases are among the most common causes of death worldwide: respiratory and diarrheal diseases, malaria, tuberculosis and AIDS. The viruses that cause these diseases present healthcare professionals and policymakers with enormous challenges. They have also attracted the attention of cultural anthropologists, who – in simplified terms – are interested in the relationship between human and non-human organisms.

At the present time, particular attention is being paid to new viruses and the associated infections. These include highly contagious pathogens such as the SARS virus as well as new forms of the influenza virus, for example the 2009 “swine flu” – the first flu pandemic...
in over 40 years. When a human or animal first encounters a virus such as this, its immune system has no specific immune response so it is easy for the virus to spread throughout the body and from there infect other individuals. If the virus succeeds in spreading from one region to other countries, or even across the world, it is described as a pandemic.

Pandemics are not a modern phenomenon; they have always existed. What is new, however, is the speed and intensity with which viruses can now spread all over the globe. The spread of infection is also promoted by other factors: the living and working conditions, consumer habits and mobility patterns of our globalised age often provide excellent conditions for viruses to infect a large number of hosts, as US human geographer Bruce Braun emphasises. Mass animal breeding methods, international travel, overcrowded cities, changed bird migration routes and excessive use of antibiotics – all have contributed to environments which provide an ideal home for viruses. From a cultural-anthropological viewpoint, human and viral life-forms have a close relationship of mutual influence.

An example of the rapid spread of a virus is SARS (Severe Acute Respiratory Syndrome), a serious influenza-like infection of the respiratory tract caused by a coronavirus. It was first observed in November 2002 in the southern Chinese province of Guangdong. Just four months later the first cases appeared in Hong Kong, from where the virus spread through air passengers to Vietnam, Taiwan, Toronto and Frankfurt. In the space of a few weeks SARS reached 29 countries and infected over 8000 people.

It highlighted for the first time the globalised aspect and the dangers of a new infectious disease and – from a medical perspective – the need for international cooperation in pandemic control. As far as influenza is concerned, the general assumption in healthcare institutions at national and supranational level is that the next pandemic will be inevitable. The question is not whether the next pandemic virus will spread, but when.

The national pandemic plan drawn up and published by the Robert Koch Institute in 2007 states: “In the event of a future pandemic, model calculations show that 100,000 people could die from influenza within a few weeks in Germany alone. Although the exact timing and extent of a future influenza pandemic cannot be predicted, many experts believe that there are signs indicating that a pandemic may not be far away. […] The 2003 SARS epidemic only gave an idea of what could happen in the event of an influenza pandemic: the spread of a new type of virus throughout the world within a matter of days, extreme pressure on the public healthcare system and medical supplies, and considerable risk to public order and the functioning of the entire economy.” The UK Department of Health makes it even clearer in its 2005 pandemic contingency plan: “There is currently rising
Given this paradigmatic certainty that the next pandemic will happen sooner or later, preparedness recommendations are being formulated at regional level (for example by the Office of Health in Frankfurt and the Resilience Forum in London), national level (the Robert Koch Institute in Germany and the UK Health Protection Agency) and supranational level (WHO and the European Centre for Disease Control). These recommendations are integrated in pandemic contingency plans designed to protect the population against infection and safeguard the necessary technical infrastructure should the need arise. They include the distribution of information about the disease and how it is transmitted, infection control measures such as the closure of childcare facilities, additional hospital beds and vaccination programmes. The control of travel, a ban on large gatherings and the stockpiling of food also part of these “preparedness” measures.

This type of contingency planning follows a proactive logic that appeals to citizens’ responsible and rational action. For example, members of the public are instructed to use disposable handkerchiefs, ventilate rooms frequently, look after sick neighbours and consult medical information. Behavioural standards such as this make pandemic preparedness planning fascinating to cultural anthropologists, who examine the reorganisation of the relationship between state and individual action where public order and safety is at stake.

Preparedness precautions involve close cooperation between very different and spatially distributed actors and institutions which maintain complex forms of contact and information flow. Within these networks circulates a multitude of material and non-material flows: samples of new
viral strains, experts, wild geese, vaccines, mathematical calculations and computer-aided flu activity maps of the latest cases in Europe.

Influenza is a globalised and globalising disease, and this fact is of relevance to both biomedicine and the social sciences. It not only spreads within global networks, it also gives rise to new, cross-border expert and surveillance systems. This makes it an important area of research for cultural anthropologists with respect to globalisation. We can currently observe how new forms of prevention are being developed in pandemic planning, migrating from medicine to other social contexts.

The responses sought and found in reaction to the assumed threat situation (the next pandemic) are no longer limited to the world of medicine or the social state. In what is historically speaking a new phenomenon, they also encompass complete technological systems which are of dual importance: firstly their protection is a key objective of pandemic preparedness, and secondly they are themselves an integral part of the process of monitoring and control.

As part of the research project “From Prevention to Preparedness – A Cultural-Anthropological Study of the Globalisation of Influenza”, researchers are analysing the new, globalised forms of infection prevention and surveillance from a theoretical perspective as well as carrying out empirical fieldwork. The focus is on two European cities which represent hubs in the spread and containment of a possible pandemic virus: London and Frankfurt am Main. By means of participatory observation and expert interviews, the research team is tracking the influenza virus through various institutions: from virological research laboratories to large hospitals, from company vaccination clinics to public health departments, from the WHO to the duck population in the local park and state healthcare institutions.

By talking to the experts who work in these institutions, they are studying the regulating effect of pandemic preparedness on the actions of humans and microorganisms, what assumptions are being made about the human body and our cities, what regional differences or similarities (perhaps European in scope) are in evidence – and above all, how these measures will affect day-to-day life in Frankfurt and London. Because what the experts know for sure is that the next pandemic will not leave these cities unscathed.

Regular handwashing is one of the most important precautions to reduce the risk of infection.

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National Pandemic Plan:
www.rki.de/DE/Content/InfAZ/I/Influenza/Influenzapandemieplan.html

Illustration: Meike Wolf