How to prepare for the next pandemic?

Abstract

The ongoing COVID-19 pandemic has demonstrated that Switzerland and the international community have not sufficiently been prepared to respond to such an event. During the past decades, climate change, increased population density and movement of humans into previously untouched natural habitats have resulted in wider geographic dissemination of diseases and zoonoses. After the emergence of SARS in 2002 and MERS in 2012, it became clear that the family of coronaviruses poses a major risk for future pandemics which has led to various virological surveillance efforts worldwide. The experience from analyzing infectious disease outbreaks and epidemics during the past 20 years allowed researchers to quickly characterize the transmission characteristics of SARS-CoV-2 in Wuhan, China, in January 2020. Despite these early findings and the warnings and recommendations of the World Health Organization (WHO), many countries struggled to translate the scientific knowledge into political decision-making. I will discuss how further developments in early warning systems and analytical and surveillance tools can support policy making and help to reduce the health, economic and societal impact of future pandemics.