Data is a decisive instrument against COVID-19

September 19 2022

Credit: Pixabay/CC0 Public Domain

Science depends on the cleanest, most complete and most recent data possible when it comes to analyzing the effectiveness of political and social measures in the fight against the Corona pandemic. In a joint editorial article published in the journal *Scientific Data*, leading research institutes have called on the nations of the world to improve data collection on infectious diseases.

Together, the research groups, including the Technical University of Munich (TUM), Johns Hopkins University, University of Oxford, the Complexity Science Hub and the University of Veterinary Medicine Vienna (Vetmeduni) as well as the humanitarian non-profit organization ACAPS, have collected hundreds of thousands of pieces of data on the reactions of governments to the pandemic. The data is used in responding to fundamental questions such as: How effective are school closures in containing the spread of the virus? What [travel restrictions](#) make good sense? How should contact tracing be organized?

Co-author Luca Messerschmidt from TUM says, "In addition to vaccines, non-pharmaceutical interventions like school closures and restrictions on movement are the most important instruments in fighting COVID-19. The availability of data on such measures lets us test the effectiveness of countermeasures. This makes it possible for countries to learn from one another and helps them take successful steps in the fight against the pandemic."

In spite of the importance of this data, there is a lack of appropriate financial resources for [data collection](#), especially in states with a scarcity of resources. The data are not only necessary in order to understand causes and effects, but also make it possible for the [scientific community](#) to better advise states and governments in case of future health crises.

Information on CoronaNet

Researchers at the TUM Chair for International Relations coordinate the world's largest database on pandemic-policy decision-making. The CoronaNet research project contains information on more than 130,000 measures taken by governments in response to the pandemic in almost 200 countries. At present the database is continuously kept up to date by more than 200 volunteers.

The CoronaNet core group consists of researchers at the TUM Bavarian School of Public Policy (HfP) as well as New York University Abu Dhabi (NYU), der Nazarbayev University, the University of Iceland, Universidade de Brasília and the University of Southern California. CoronaNet is also part of the pan-European project PERISCOPE (Pan-European Response to the Impact of COVID-19 and Future Pandemics and Epidemics), which consists of 32 partner institutions from 15 European countries. Over the next three years PERISCOPE will investigate the socio-political and economic impacts of the pandemic.

More information: Cindy Cheng et al, Capturing the COVID-19 Crisis through Public Health and Social Measures Data Science, *Scientific Data* (2022). DOI: 10.1038/s41597-022-01616-8

Cindy Cheng et al, COVID-19 Government Response Event Dataset (CoronaNet v.1.0), *Nature Human Behaviour* (2020). DOI: 10.1038/s41562-020-0909-7

Provided by Technical University Munich