

WHAT OPPORTUNITIES DOES THIS PANDEMIC OFFER?

IN BRIEF

- The Austrian Academy of Sciences conducted an expert survey on the current pandemic with a focus on critical side-effects, opportunities and potential for preparedness.
- Feedback came from all scientific disciplines and from four continents.
- Participating experts stress the broader implications of the pandemic and its management. For many, it is a call for a value-based paradigm shift in production and consumption, international cooperation, policy, health, and science.

WHAT IS IT ABOUT?

The pandemic triggered by the SARS-CoV-2 virus at the end of 2019 has kept societies around the world on edge for two years now. The initial shock at the unstoppable spread and the associated effects on health was followed by both local attempts to limit the damage as much as possible as well as a rapid search for therapies and vaccines. National pandemic management in the form of recurrent “lockdowns” resulted in wave-like incidence patterns. The successful development of vaccines enabled a slight decoupling of infections and associated deaths.

However, an end to the pandemic is not yet in sight; the level of immunisation in the populations is too low because of a lack of acceptance of vaccination, ever new virus variants, limited vaccination effectiveness, and a persistent shortage of vaccines in countries of the global South. Even additional measures such as physical distancing and wearing face masks seemingly do not suffice to bring the spread of the virus under control in the long run.

Consequently, the focus remains on managing the pandemic as well-informed as possible. Science has played a central role in understanding and dealing with the pandemic in many respects: from rapid sequencing of the pathogen to predicting further developments and developing suitable vaccines. Virology and epidemiology in particular have been and still are at the centre of political and media interest. Other disciplines – from social sciences or the humanities, health research or ecology – are less visible, even though these fields also provide essential information for dealing with the crisis situation. With some disciplines at the forefront of pandemic management and public awareness and others taking a back seat, the academic community appeared as fragmented as other parts of society.



Photo: iStock

Opportunities as “flotsam and jetsam” of the pandemic

Moreover, interdisciplinary and cross-regional cooperation suffered during the imminent crisis: research institutes had to switch to a digital mode at short notice, international conferences were cancelled, research trips were impossible, academics were busy with instant troubleshooting and lacked the extra time required to reach out to colleagues from other disciplines and continents. All this fragmentation happened precisely during a situation where transnational and interdisciplinary cooperation was urgently needed to help deal with an acute societal challenge of global proportions, giving rise to the idea to actively approach renowned scientists from as many countries and disciplines as possible in order to get assessments on three burning issues. The Austrian Academy of Sciences thus launched a dedicated expert survey, embarking on a multidisciplinary experiment of global scope.

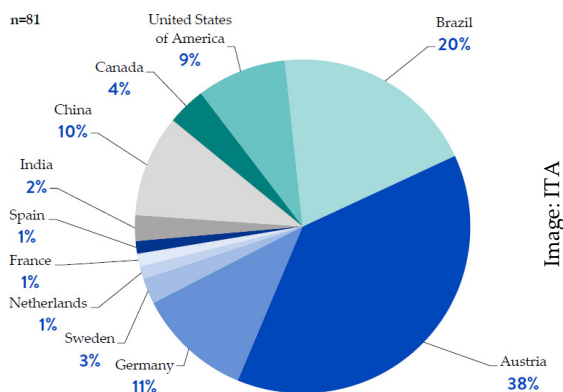
KEY DATA

Project title:	Covid-19 – Voices from Academia (COVAC)
Project team:	K. Kastenhofer, H. R. Friesacher, A. Reich, L. Capari
Duration:	05/2021 – 08/2021
Funded by:	ÖAW

KEY RESULTS

The anonymous online survey addressed three central topics: (1) Which critical side effects of the pandemic and its management have received too little attention? (2) Do opportunities arise from this situation that we could use in a positive way? (3) How can future pandemics be avoided or at least better handled?

The 81 participating scientists from four continents belong to engineering, natural sciences, life sciences & biomedicine, social sciences and humanities.



Participating experts by country in %

Evaluating the answers to topic (1) shows how essential the multidisciplinary overview is: only with the help of an overall view of the answers will it become clear where individual effects add up and lead to extremely critical situations – for example what it means to still be in education in the middle of the pandemic, to live in a low-income family with poor social services and in a region with insufficient pandemic management. Answers to topic (2) show that some aspects play an ambivalent role in the pandemic. For example, internationalisation, digitalisation, and working from home were seen both as problematic and as an opportunity, with the specific design and implementation making the difference.

Topic (3) was answered with a clear vote for a value-based paradigm shift in a wide range of social spheres – from politics (evidence-based, internationally coordinated), to the economy (local production chains, circular economy), from science (interdisciplinarity and transdisciplinarity) to the health system (“One Health” approach). The set of recommended values included humanism, empathy, honesty, respect, responsibility, willingness to cooperate, inclusion, justice/fairness, solidarity, and equality.

WHAT TO DO?

Especially in the current crisis situation, it is crucial for our future not only to focus on day-to-day crisis management, but also to draw lessons for further coping strategies and precautionary measures. According to the respondents, this requires:

- **Multidisciplinary, transnational expertise:** Mutually reinforcing negative effects can only be recognised, avoided, and treated with a broad perspective.
- **A focus on details:** Whether innovations such as digitalisation, internationalisation or economic restructuring present a risk or an opportunity during the crisis in the medium and long term depends largely on the details of their design and implementation.
- **A paradigm shift:** In order to avert further crises or at least to better prepare for similar future challenges, the experts advise adopting new, value-based approaches for the economy, healthcare system, national politics, and international cooperation.
- **Exploitation of synergies:** Good crisis management along these criteria opens up important synergy effects with regard to other challenges, such as the climate crisis or raw material shortages.
- **Building bridges:** In times of crisis, science cannot only provide evidence and innovations: as a supranational community, it can also promote global understanding and, as an interdisciplinary endeavour, strengthen cooperation across political departments and social sectors.

FURTHER READING

Kastenhofer, K., Friesacher, H. R., Reich, A., Capari, L. (2021): Covid-19 – Voices from Academia. Results of an international survey conducted in July 2021. ITA manu:script ITA-21-02
epub.oeaw.ac.at/italita-manuscript/ITA_21_02.pdf

CONTACT

Karen Kastenhofer
Email: tamail@oeaw.ac.at
Phone: +43 1 51581-6582

