

LETTER

The dangerous defeat of science and its implications for health behaviors: The case of vaccination

Dear Editor,

Coronavirus disease 2019 (COVID-19) pandemic exerted pressure on governments to adopt collaborative, supranational policies. Media and governments were quick to bow to scientific expertise and allow scientists to shoulder the burden of guiding in the dark, elevating them to the status of “rock stars” and linking them to the content and the outcomes of any policies implemented. However, as policy decisions based on scientific evidence often clashed with core social values, such as individual freedom and economic well-being, public scrutiny and questioning of scientists intensified. As a result, population behaviors have been diverging from the recommendations of scientific bodies. People’s exposition amplified such attitudes to the uncontrolled and invalid information and the rhetoric of some parties, which centered on conspiracy theories and invested in their attractiveness to a part of the population.

Case in point: vaccination. In a recent survey in Greece, 29.2 % of participants stated that their confidence in vaccines decreased due to their pandemic experience. They mainly cited safety reasons, with almost one in five claiming that vaccines serve “other” purposes¹. These findings contrast with people’s pre-pandemic beliefs when the population endorsed mandatory vaccination². Regulatory authorities have been trying to address this situation by stating that “COVID-19 vaccines are safe and side effects are still being monitored. The vast majority of known side effects are mild and short-lived. Serious side effects may occur, but they are very rare”³. However, the withdrawal of the AstraZeneca vaccine further intensified public distrust of scientists and vaccination in general.

As therapeutic approaches are increasingly based on innovative technologies, concerns abound regarding how people will react to these emerging scientific breakthroughs. Citizens’ faith in science is built on their representations of how science is produced and the social uses of its outputs. These performances are the composite of opinions shaped by the way the world of science operates, the politics that manage its results, and the journalists that disseminate its products. Many citizens are aware that a dangerous regression threatens the world of science. The autonomy that science has gradually acquired vis-à-vis the various authorities has significantly weakened. The social mechanisms created as the scientific world developed, such as the logic of competition between scientists, are in danger of being put in the service of externally imposed ends; subservience to economic interests and the profits offered by the mass media, combined with external criticisms and infighting undermine trust in science.

To save the day, the scientific community must counter opinion with evidence-based knowledge. Balancing the right to a “free opinion” with the control of the spread of fake news is a largely political responsibility that all states worldwide need to address to provide a lifeline for science and its achievements and enable people around the world to benefit from its unprecedented advances.

Keywords: Coronavirus disease 2019, COVID-19, pandemic, vaccines

Conflict of interest

Authors declare no conflicts of interest.

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