

Credibility of scientific expertise and decision-making

New challenges for health risk governance in a changing world

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ABSTRACT COVID-19 SESSION - THURSDAY 21TH JANUARY 2021

The Magic of Models, the Celebrity of 'Modellers'. Drivers of Epidemiological Modeling in the Age of Covid-19

Catherine Bourgain (Inserm - Cermes3) and Luc Berlivet (CNRS - Cermes3)

Models of the evolution and impact of the Covid-19 epidemic have played a leading role in certain unequivocal decisions taken by the government, such as the first lockdown decision which took place in France in March 2020. Models and modellers have found themselves in the media spotlight, without the underlying issues and the specificities of the modelling work having been clearly exposed or examined.

While it is not surprising to see numbers take up a large part in discussions on health risks, it is important to remember that models are not just ordinary numbers. They are anticipations, based on a necessary simplification of a complex reality, but also informed by past experiences and available data on the current phenomenon.

As Neil Ferguson, star modeller at Imperial College in London, pointed out in an interview with Nature magazine in April 2020: «We're building simplified representations of reality - models are not crystal balls» (Neil Ferguson, April 2020). The reductionism inherent in the modelling approach organises choices between phenomena deemed essential, and incorporated, and others deemed secondary, which are neglected and invisible. Models also maintain a complex relationship with the data, past and present, which are used both to construct them and to validate them.

First, this presentation takes a look at the presence of models and modellers in the Covid-19 epidemic. Then, it will take a closer look at some elements drawn from an analysis of the multiplication of models and the controversies associated with them, in terms of the competing frameworks of the epidemic phenomenon embedded in the models and the place held by the public health strategies envisaged and recommended. The aim will thus be to contribute to an analysis of the ramping up of prediction models and their effects on contemporary societies.



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