



Contribution ID: 149

Type: **not specified**

Changes and Trends in Mortalities in Relation to COVID-19

Wednesday, 13 September 2023 10:20 (20 minutes)

The COVID-19 pandemic showed that our mortality models need to be reviewed to adequately model the variability between years.

Our presentation has the following objectives: (1) We determine the time series of mortality changes in the European Union, United States, United Kingdom, Australia and Japan. Based on these time series, we estimate proximity measures between each pair of countries in terms of the excess mortality changes. (2) We examine the quality of some well-known stochastic mortality models (e.g. Lee-Carter) from the perspective of forecasting expected mortality and its variance over time. In addition, we set up a ranking between the countries based on the excess mortality they suffered in 2020-2021. (3) We analyse the impact of COVID-19 along the dimensions gender, age group and country. Effects are modelled in different ways.

We have used population mortality data from mortality.org and from Eurostat for our calculations.

Keywords

mortality, COVID, time series

Classification

Both methodology and application

Primary authors: ARATÓ, Miklós (Eötvös Loránd University); Dr MARTINEK, László (Eötvös Loránd University)

Presenter: ARATÓ, Miklós (Eötvös Loránd University)

Session Classification: CONTRIBUTED Healthcare

Track Classification: Biostatistics