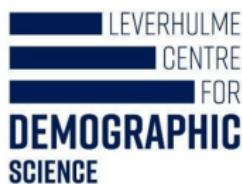


Quantifying impacts of the COVID-19 pandemic through life expectancy losses

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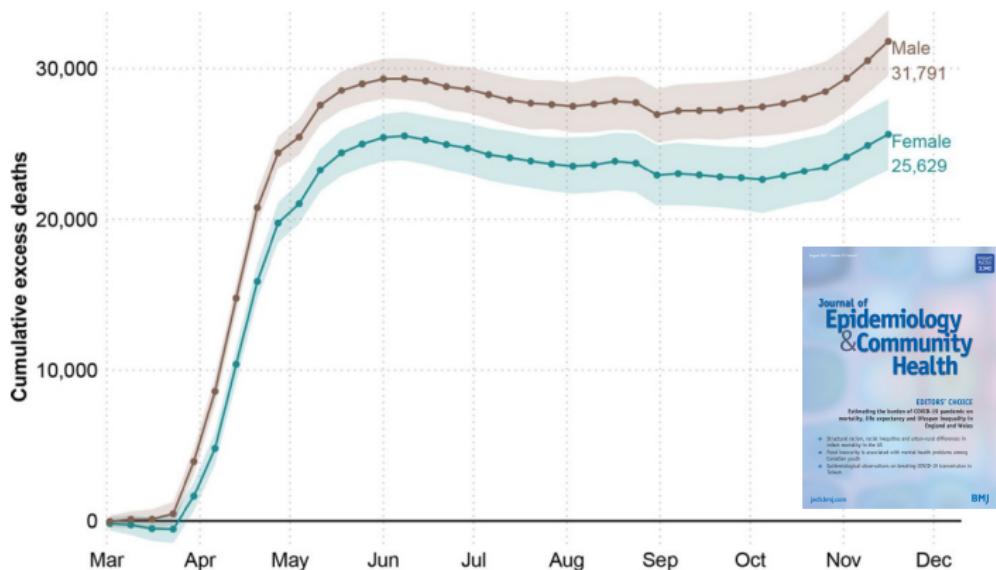


Figure 1 Cumulative excess deaths in England and Wales through the COVID-19 pandemic weeks 10–47 of 2020 by sex. Shaded areas represent 95% prediction intervals. Excess deaths are defined as the total observed deaths subtracting the estimated baseline death count.

What is life expectancy?

What is life expectancy?

Average number of years a **synthetic** cohort of newborns would live if they were to experience the death rates observed in a given period throughout their lifespan

Why life expectancy?

Why life expectancy?

- ▶ Widely used metric of population health.
- ▶ Comparable across countries and over time.
- ▶ Summarized mortality in a given year.
- ▶ Decomposable with demographic methods.

Objective

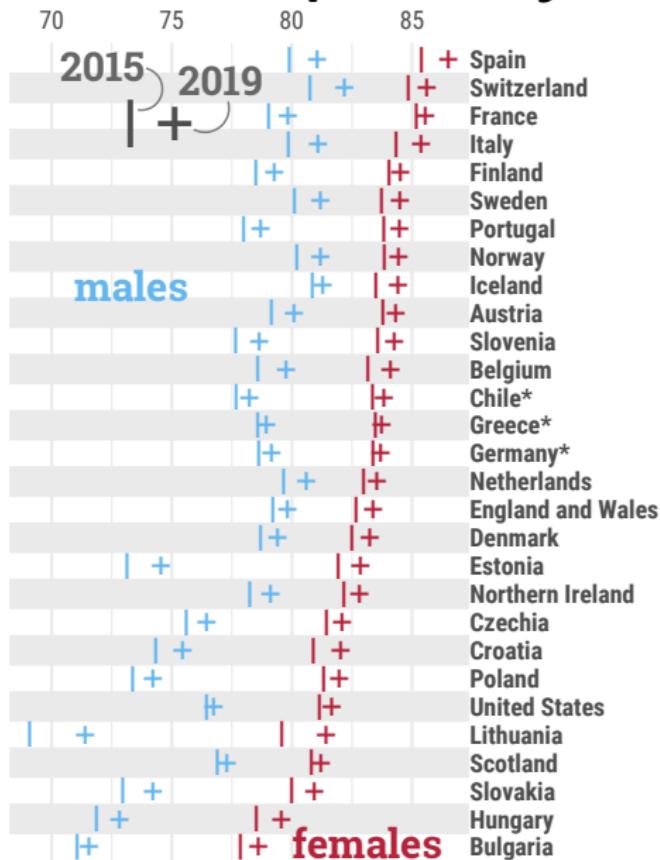
To go beyond excess deaths and country-specific analyses and focus on the pressing issue of revealing the impacts of the pandemic on life expectancy in a cross-national perspective.

Objective

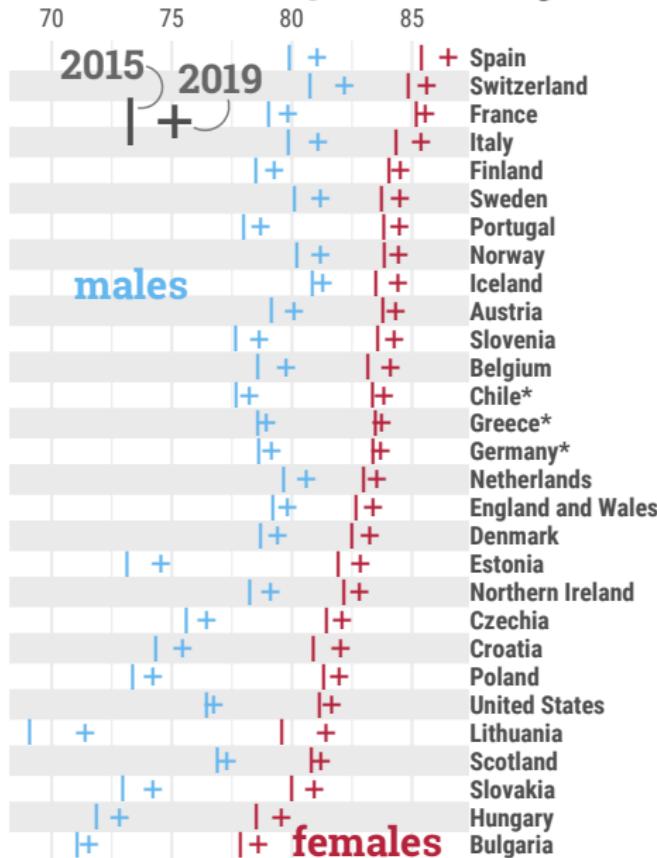
To go beyond excess deaths and country-specific analyses and focus on the pressing issue of revealing the impacts of the pandemic on life expectancy in a cross-national perspective.

Initial challenge: Data, consistency, estimates of mortality by age.

Life expectancy at birth 2015-19



Life expectancy at birth 2015-19



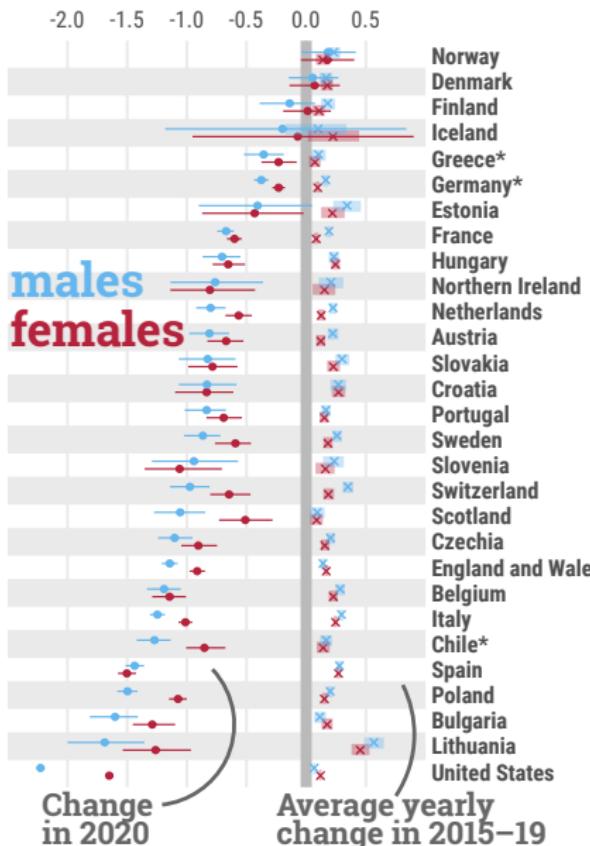
Some observations

Females > Males

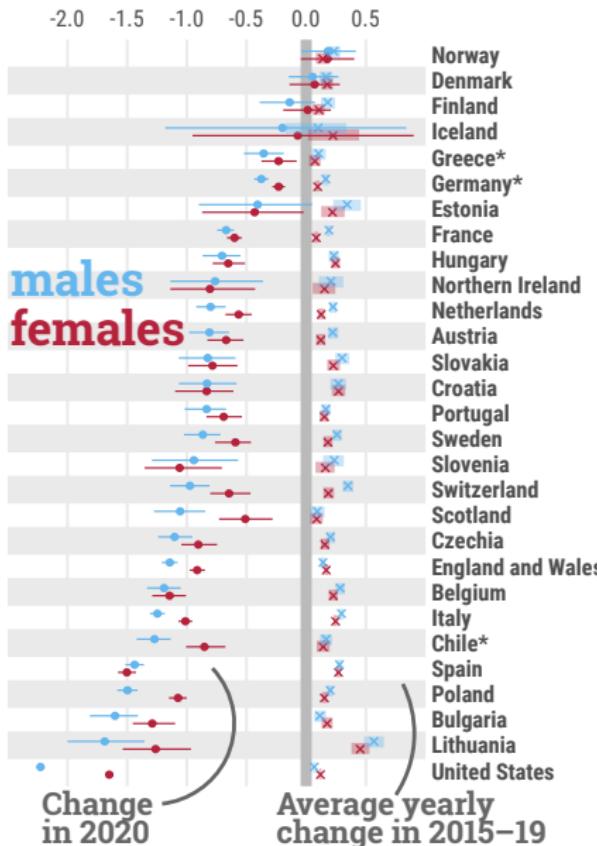
Most with improvements 2015-19

Eastern Europe, Scotland, USA lagging behind

Life expectancy losses in 2020



Life expectancy losses in 2020



Some observations

12 countries with over 1 year of loss

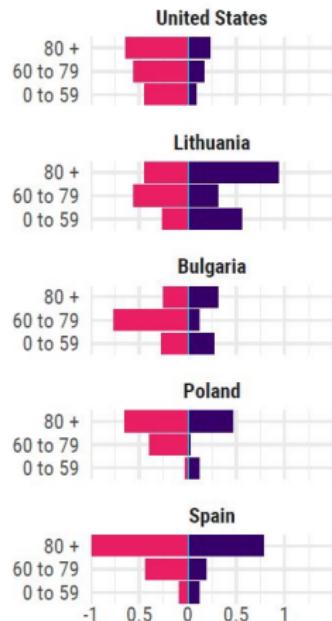
males > females

Scandinavia (-SWE) success cases

How big? In historical context

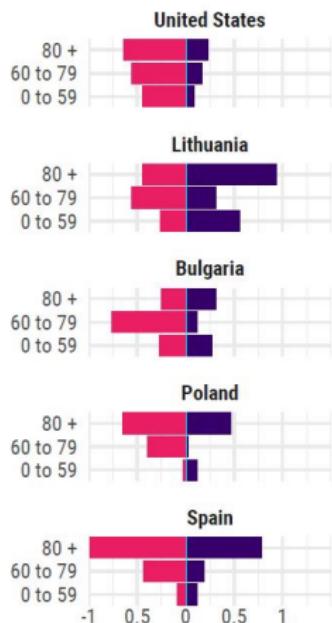
Age specific-contributions

Females

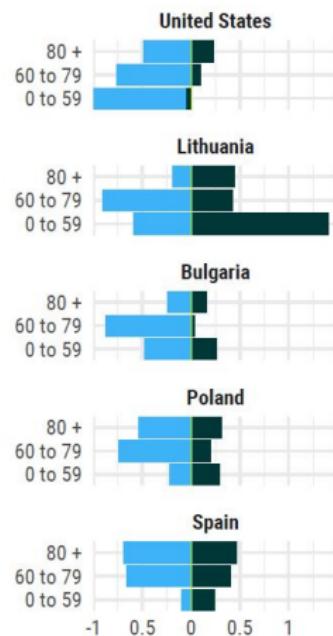


Age specific-contributions

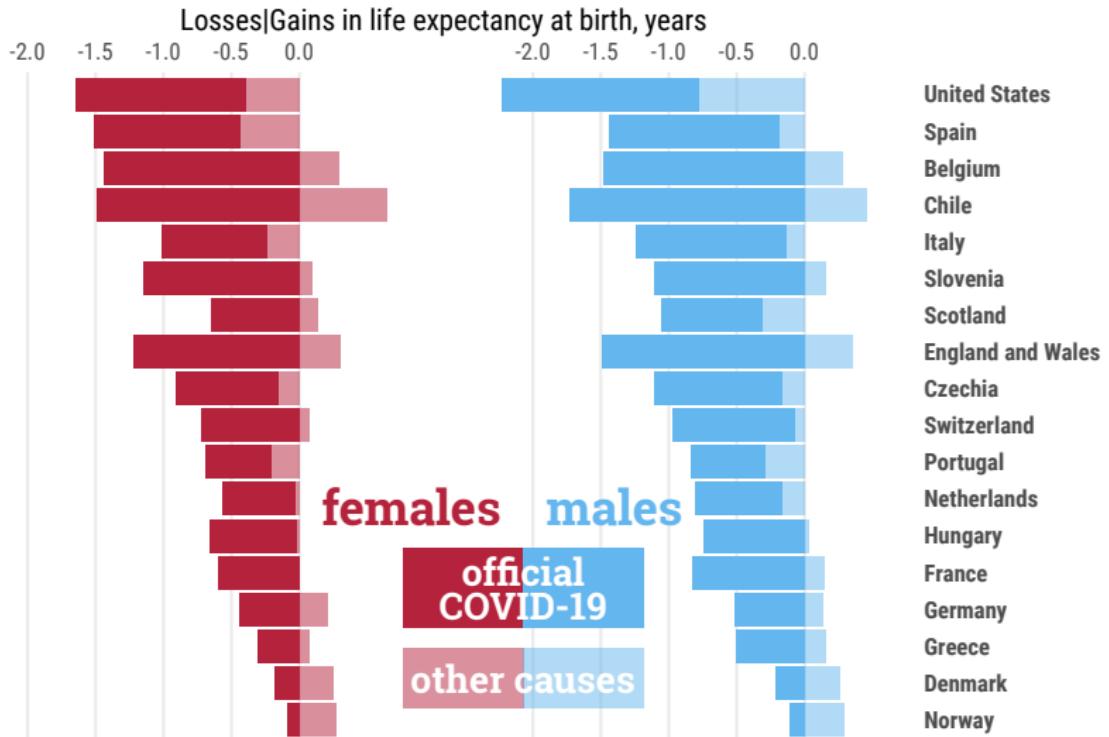
Females



Males



COVID-19 contribution



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