

README: covidmort-who-sexage

Examining how COVID mortality rates vary by sex and age using WHO excess mortality estimates

Description

This package contains all of the data and code necessary to reproduce the results in the paper: “COVID-19 Increased Existing Gender Mortality Gaps in High Income More than Middle Income Countries”.

Data and Code Availability Statement

The primary data set used in this analysis is available publicly from the WHO, specifically in the files produced by the [Technical Advisory Group \(TAG\) on COVID-19 mortality assessment](#). Auxiliary data files: used for this analysis include: (1) the list of countries in 2020 and 2021 for which **actual** deaths by gender and age are available (found here: *Data/who_data_bysex_2023.csv*) This .csv file was manually constructed from the table in the TAG’s [methodology document](#) on pps. 22-23 and (2) Income per capita estimates from the World Bank World Development Indicators Database accessed through the “WDI” package available for R.

UPDATE: As of Late 2023, after an update, the WHO TAG data files no longer include population estimates by country, sex and age, so rather than downloading the latest data from the WHO website as defined in the *get_raw_data* function, the *get_raw_data_fromfile* function is used to retrieve that data originally used for the study, stored in the WHO_COVID_Excess_Deaths_Estimates folder.

Computational requirements This analysis was conducted using R/version 4.2.3 (2023-03-15) and RStudio/version 2023.03.0+386 (2023.03.0+386).

sessionInfo() R version 4.2.3 (2023-03-15) Platform: x86_64-apple-darwin17.0 (64-bit)
Running under: macOS Ventura 13.3.1

Instructions for Data Preparation and Analysis The full workflow for data downloading, cleaning, analysis and visualization of results is set out in the file: *covidmort-who-sexage-results.qmd*. This is a quarto file which when run, generates as output the *covidmort-who-sexage-results.md* and *covidmort-who-sexage.html* files. The individual functions which perform the data downloading, data cleaning, data analysis and data visualization tasks are in the R subfolder.

Outputs All outputs used for the paper can be found in the files generated automatically when running the main .qmd file in */covidmort-who-sexage-results_files/figure-html*