**26/10/21**

**Finding N**

**Hospital Beds/1000 (World Bank): n =** 248 (of which 195 have country codes). No scarcity of data here at all.

* but many of these countries’ most recent value may have been very long ago.

Table

Description automatically generatedLooking at a tabulated form of the most recent values:

(so 41 countries have a value as recent as or more recent than 2018; 128 for 2017). *A good next step would be to maybe add continent identifiers to the dataset, so we can disaggregate (e.g of 44 European countries, 36 have a value more recent than 2017) to better understand systematic trends in data accessibility. Unfortunately I didn’t have enough time to do this.*

**Health Expenditure (as % of GDP): n =** 189 (of which 186 have country codes). All values are as of 2018.

**Past Disease Timeline -** Needed for the IV approach, if we use past pandemic experience as a instrument for preparedness.

**HCIDs:**

* No clear database – usage of the term seems to be fairly localised to the UK government
* In many cases number of countries (and number of cases sometimes) is not very large
  + HCIDs tend to be characterised by high fatality rates (COVID-19 mortality is too low).
    - Some specific HCIDs could be useful; see below.

**Some suggestive evidence that the instrument is relevant**

[**How the lessons of previous epidemics helped successful countries fight covid-19**](https://www.bmj.com/content/372/bmj.n486)**:** article focuses on Hong Kong, Liberia, Saudi Arabia, Singapore and Taiwan, post SARS/Ebola/MERS/H1N1.

* Argue that these countries increases spending on treatments/surveillance etc following their past pandemics– but no quantitative analysis.
* [**From SARS to COVID-19: The Singapore Journey**](https://www.mja.com.au/system/files/2020-04/Preprint%20Lin%20%28Lye%29%206%20April%202020.pdf): a specific Singapore case study

**Other papers that look at past experience with infectious disease**

[**Learning from the past: did experience with previous epidemics help mitigate the impact of COVID-19 among spine surgeons worldwide?**](https://link.springer.com/article/10.1007/s00586-020-06477-6)**:**

* ‘previous infectious disease outbreaks only had subtle influence on the impact of COVID-19 and no substantial bearing on preparation for the current pandemic
  + Use a survey approach (surveying spine surgeons) – doesn’t seem like the most rigorous empirical strategy, but nonetheless:
    - *‘Our survey results indicate that the GHSI was poorly correlated with COVID-19 preparedness and surgeons’ perceptions on response. Countries such as the USA were rated as “most prepared” by the GHSI yet were not adequately prepared based on our survey. China, a country rated as “more prepared” with a low GHSI of 48.2, had similar access to PPE and critical resources as the USA.’*

[**Past Epidemics, Natural Disasters, COVID19, and Mental Health: Learning from History as we Deal with the Present and Prepare For The Future**](https://link.springer.com/article/10.1007/s11126-020-09808-4#Sec8)

* Both papers focus on:
  + SARS CoV-1
  + Ebola
  + MERS
  + H1N1 – the most cases by far. *Maybe as a next step, regress rate of hospital bed increase from 2010 on H1N1 impact (measured in cases/deaths/salience in news networks?.*

**Also of note:** [**https://www.ecdc.europa.eu/en/publications-data/epitweetr-tool**](https://www.ecdc.europa.eu/en/publications-data/epitweetr-tool)

Tool created by ECDC to monitor social media trends – could be a good measure of ‘policy salience’ or ‘effective 1st case’ in country X.

* Look for the spike in traffic.