

Data Concealment and Mortality in Covid-19 Pandemic

An illustrative Figure and a Hypothesis

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Introduction

Public information provision by the government is essential to create trust in the government and government decisions [1] [2], especially in the Covid-19 pandemic, when citizens' compliance to the government measures is essential to curb the pandemic. On the other hand, the public information provided by the government supports that the government decisions on pandemic based on experts' opinion, well-founded evidence, and analysis.

Therefore, it is worth analyzing how governments' pandemic-related data communication policies and data collection, typically established in the first phase of the pandemic, relate to the subsequent severity of the pandemic in the given country.

Data

Data on the deaths of the Covid-19 pandemic were taken from the <https://www.worldometers.info/coronavirus/> website in April 28, 2021.

The number of indicators and the number of data that pandemic-related websites of government publish are calculated based on these pages. Each indicator was calculated separately. We also considered that these pages only provide data for the publication day or time series for the whole period. For example, if the number of infected people was reported broken down by gender, that indicator was counted twice. We also calculated separately that the given indicator was only available at the national level or the regional levels. For a list of government sites analyzed, see [3]. For instance, on the Hungarian government's web page, only 20 indicators are available, while on the pandemic-related webpage of the United Kingdom, there are 81 indicators or data-field.

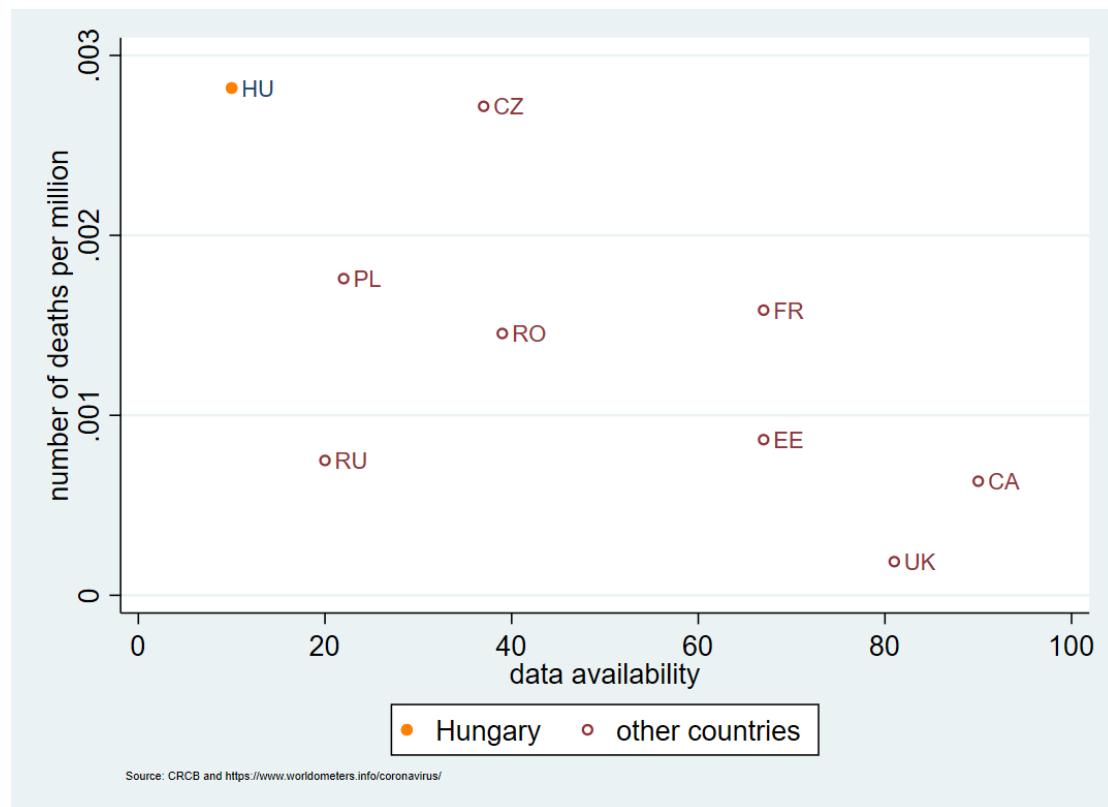
Of course, we could have made mistakes during the data collection. However, these errors are random. The reported calculation is intended to illustrate a possible relationship between government reporting of pandemic-related data and pandemic intensity in the given country.

Illustrative Results and a Hypothesis

In Fig. 1, the horizontal axis shows how many indicators or pieces of data a government publishes on its pandemic-related website. On the vertical axis, the number of deaths in the Covid-19 pandemic per million people from February 2020 to 17 April 2021. The autocratic regime of Hungary dominated by the System of National Cooperation is marked in orange (the symbolical color of the Fidesz, the leading party of this regime). It clearly can be seen that the more complete the government information concerning the pandemic, the lower the number of deaths per million people. We assume an inverse relationship between informing citizens by the government and the mortality rate. If a government provides more profound and more comprehensive information about the pandemic, it reduces the number of fatalities in the country (if we control this impact with other effects). An informed citizen could adapt more rationally and quickly to the pandemic and rather comply with the government's restrictive measures than a less informed one. So, the information saves lives.

In contrast, a government that consciously conceals pandemic data will contribute to higher mortality rates. It is with this decision that this government is sending its citizens to their deaths. This assumption can only be rejected or supported based on the results of empirical studies.

Fig. 1. Fig. 1. The number of data and indicators on pandemic-related governmental webpages and number of deaths by Covid-19 pandemic per million population by countries.



References

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- [2] Rose-Ackerman, S. 2001. "Trust, honesty and corruption: reflection on the state-building process." *European Journal of Sociology / Archives Européennes de Sociologie / Europäisches Archiv für Soziologie*. Vol. 42, No. 3, pp. 526-570.
- [3] Toth, I. J. 2021. *Adatok, járvány, intézményi minőség* (Data, COVID-19 Pandemic, Institutional Quality) Presentation in Hungarian in the Budapest Science Meetup. Budapest: CRCB. http://www.crcb.eu/wp-content/uploads/2021/04/2021_adatok_jarvany_intezmenyek_210407_1634.pdf