



COMMENT



Impact of COVID-19 on mortality under 5 years old

Yoshiyasu Takefuji^{1⊠}

© The Author(s), under exclusive licence to the International Pediatric Research Foundation, Inc 2023

This paper investigated impact of COVID-19 on mortality under 5 years old. The mortality effects were calculated with two CDC datasets such as the dataset from 2015 to 2020 and the provisional dataset from 2020 to 2022. The result shows that there is no effect of COVID-19 on mortality under 5 years old.

Pediatric Research; https://doi.org/10.1038/s41390-023-02612-3

Sir, Munoz et al. studies efficacy and safety of BNT162b2 COVID-19 vaccine in children younger than 5 years of age. ¹ Their research inspired us to study the impact of COVID-19 on mortality among children under five years of age. According to CDC, ² the dataset ³ entitled

"AH_Deaths_by_Year__Sex__and_Age_for_2015-2020.csv" from 2015 to 2020 is available in public. The Python program was developed with the dataset for calculating the impact of COVID-19 on mortality among children under five years of age. The program, child.py is automatically scraping the dataset over the Internet and generates a single figure with two graphs. Fig. 1 shows the number of deaths in two age groups: 0 years and 1-4 years. The result shows that there is no effect of COVID-19 on the mortality rate for children under 5 years of age in the United States. The number of deaths under the age of 5 has decreased

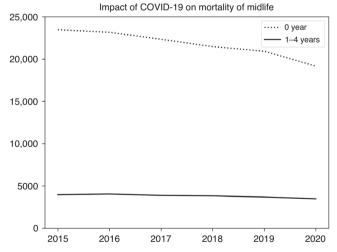


Fig. 1 the number of deaths under 5 years of age from 2015 to 2020.

monotonically for the past six years. According to the provisional CDC dataset,⁵ from Jan. 1, 2020 to Feb. 11, 2023, the total deaths of under 1 year and that of 1–4 years are 60687 and 11666 respectively. This means that the under-five mortality rate trend from January 1, 2020 to February 11, 2023 will be similar to the mortality rate trend from 2015 to 2020. The program child.py is available at the GitHub site.⁴

DATA AVAILABILITY

CDC datasets for this study are available in public at the following site: https://data.cdc.gov/api/views/chcz-j2du/rows.csv. https://data.cdc.gov/api/views/9bhg-hcku/rows.csv.

REFERENCES

- Muñoz, F. M. et al. Evaluation of BNT162b2 Covid-19 vaccine in children younger than 5 years of age. N. Engl. J. Med. 388, 621–34 (2023).
- 2. CDC.GOV. AH Deaths by year, sex, and age for 2015–2020. https://data.cdc.gov/ NCHS/AH-Deaths-by-Year-Sex-and-Age-for-2015-2020/chcz-j2du.
- 3. CDC.GOV. rows.csv. https://data.cdc.gov/api/views/chcz-j2du/rows.csv.
- 4. GitHub. child.py. https://github.com/ytakefuji/child/raw/main/child.py.
- CDC.GOV. Provisional COVID-19 deaths by sex and age. https://data.cdc.gov/ NCHS/Provisional-COVID-19-Deaths-by-Sex-and-Age/9bhg-hcku.

COMPETING INTERESTS

The author declares no competing interests.

ADDITIONAL INFORMATION

Correspondence and requests for materials should be addressed to Yoshiyasu Takefuji.

Reprints and permission information is available at http://www.nature.com/

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Received: 15 March 2023 Accepted: 30 March 2023

Published online: 17 April 2023