

## What makes a country better prepared for a pandemic?

March 19 2024



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A new study has found that countries that had national policies aimed at preventing disease fared better during the global pandemic than those that did not.



Dr. Shimaa Elkomy, senior research fellow and lead author of the study at the University of Surrey, said, "Our findings pave the way for a deeper understanding of how national policy plays a pivotal role in the global fight against disease. By targeting the <u>risk factors</u> that lead to disease we can enhance preparedness for pandemics and mitigate the impact of future crises.

"As the world grapples with the far-reaching consequences of the COVID-19 pandemic, our work contributes vital insights to inform policy, <u>public health strategies</u>, and <u>international collaboration</u> in the ongoing fight against global health threats."

The Surrey researchers investigated the relationship between health "resilience" prior to the <u>pandemic</u> and COVID-19 mortality rates across 188 countries. Resilience was defined in terms of several factors known to affect health including:

- Social deprivation
- The incidence of non-communicable diseases (or NCDs) such as <u>diabetes</u>, <u>hypertension</u> and cardiovascular disease
- The prevalence of risk factors like smoking, obesity and alcohol use in the population
- The existence of national policies to control these risks.

The study revealed significant variations in COVID-19 mortality rates, with the total global death toll at the end of December 2020 was just over 1.9 million with an average global mortality rate of just under 25 deaths per 100,000 people. The range of mortality rates was striking, varying from zero to almost 20 times higher than the global mean.

Social deprivation, NCDs and higher risk factors were all associated with higher COVID-19 mortality rates. Robust health-related <u>policy</u> targets were associated with lower mortality.



Professor Tim Jackson, Director of the Center for the Understanding of Sustainable Prosperity and co-author of the study at the University of Surrey, said, "NCDs are responsible for almost three quarters of all deaths worldwide. Addressing the risk factors for disease has now become an urgent global health priority. Our research shows that policies aimed at improving health resilience also increase our preparedness for pandemics. Preventing chronic disease would mitigate the tragic loss of life associated with health crises like COVID-19."

The study is set to be published in the *Journal of International Development* on Monday 18 March.

More information: Journal of International Development (2024)

Provided by University of Surrey

Citation: What makes a country better prepared for a pandemic? (2024, March 19) retrieved 28 April 2024 from <u>https://medicalxpress.com/news/2024-03-country-pandemic.html</u>

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