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## **International study reveals that the pandemic has led to a rise in the percentage of deaths at home across 23 countries**

The percentage of people dying at home increased across 23 countries during the COVID-19 pandemic, according to an international study led by a Portuguese research team that analysed data from 32 countries.

Funded by the European Research Council (ERC) to analyse the impact of the pandemic on place of death, the study provides new evidence that can help inform health policy and planning strategies to improve the quality of end-of-life care.

The scientific paper 'The rise of home death in the COVID-19 pandemic: a population-based study of death certificate data for adults from 32 countries, 2012-2021', published in the prestigious journal 'eClinicalMedicine' edited by 'The Lancet', analysed data on the deaths of 100.7 million adults (aged 18 and over) in 32 countries: Austria, Belgium, Brazil, Bulgaria, Czechia, Cyprus, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, Mexico, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Uganda, the United Kingdom and the United States of America.

The research team studied trends in place of death by comparing the early years of the COVID-19 pandemic (2020-21) with the preceding eight years (2012-19). Across the countries studied, the proportion of deaths occurring at home increased from 30.1% in 2012-13 to 30.9% in 2018-19, and further to 32.2% during the pandemic (2020-21).

Hospitals or other health care facilities and 'place unknown' (the latter accounting for 11.1% of deaths) were included in the place of death categories considered in the research. Data on place of death for all deceased were analysed for all the deceased population by sex, age group and selected underlying causes of death (with a focus on cancer, dementia and COVID-19).

The team, led by Portuguese researchers Barbara Gomes (Faculty of Medicine of the University of Coimbra), and Sílvia Lopes (National School of Public Health of NOVA University Lisbon), further reveals that in all countries surveyed, "68% of decedents were over seventy years, with 20.4% dying

from cancer and 5.8% from dementia. 30.8% of deaths occurred at home". The percentage of home deaths increased during the pandemic in 23 countries, in descending order: Cyprus, United Kingdom, Malta, Poland, Lithuania, Slovenia, Spain, United States of America, Republic of Korea, Denmark, Mexico, Sweden, Estonia, Luxembourg, Slovakia, Czech Republic, Latvia, Netherlands, Italy, Greece, Croatia, Austria and Belgium.

The United States of America (USA) was the country with the largest number of people included in the study. There was an increasing trend in the percentage of deaths at home in the USA since 2012-13, which became more pronounced during the pandemic. The percentage of deaths at home increased from 28.8% in 2012-13 to 31.7% in 2018-19, and further to 33.6% in the pandemic (2020-21). The 'home' category in the U.S. also includes assisted living facilities.

In the United Kingdom, there was also a notable increase in the percentage of deaths at home, which was already a pre-existing trend before the pandemic and was further accentuated by it. Northern Ireland and Scotland were the regions that stood out the most. In Northern Ireland, the percentage of deaths at home increased from 26.9% in 2012-13 to 27.5% in 2018-19; and further to 33.1% in the pandemic (2020-21). In Scotland, the percentage of deaths at home increased from 24.9% in 2012-13 to 27.5% in 2018-19; and further to 32.7% in the pandemic (2020-21). In England and Wales, the percentage of deaths at home increased from 22.3% in 2012-13 to 24.1% in 2018-19; and further to 28.1% in the pandemic (2020-21).

"The increase in home deaths was higher for women and cancer patients in most countries", the researchers explain, adding that "There are several possible explanations for the observed sex difference, including women's greater involvement in discussions about end-of-life care planning and resistance to hospital admission". The increase in deaths at home among people who have died of cancer "may be due to the more predictable course of the disease compared with non-malignant conditions, as well as earlier and better integrated palliative care."

Regarding the relevance of the study, the researchers state: " If the shift we found towards dying at home is adequately supported, aligned with preferences and associated with good outcomes, such as improved symptom control and quality of life for both the patient and their family, we are in the right track facing a complex health transition. If, on the other hand, deficits in end of life care are found, with the risk of failing patients and families, we must rethink and improve home support, considering reallocation of resources from other places."

"It is crucial to consider both the international and local context, considering the importance of ensuring that people with advanced illness are able to choose a truly viable place to spend their final days." the researchers stress.

They further highlight the importance of future national and international health policies being attentive to this shift in order to "ensure that palliative and end-of-life care is adequately resourced to support the growing trend towards dying at home".

"In the coming years, it will be pivotal to monitor whether the trends we have observed are maintained or reversed across countries," stress Barbara Gomes and Sílvia Lopes. "To achieve this, we need to improve the way we classify place of death. Our team is currently developing an international classification system with more detailed and homogeneous categories of place of death, which will enable more robust comparisons between countries and a better mapping of patients' preferences for the place where they live in and receive care at the end of life," they add.

Researchers from Vrije Universiteit Brussel and Makerere College of Health Sciences were also part of the research team. The study was carried out within the framework of the project 'EOLinPLACE: Choice of where we die: a classification reform to discern diversity in individual end of life pathways', led by the University of Coimbra and funded by the European Research Council with 1.9 million Euros.

The EOLinPLACE project aims to improve end-of-life care by developing a strong foundation for a ground-breaking international classification tool that maps the places where people are cared for at the end of their lives and the places where they actually die.

More information about the project is available at [www.eolinplace.com](http://www.eolinplace.com) and on [X](#) (former Twitter).

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