

ALLEGATO A

ADVERTISEMENT

HOME > SCIENCE ADVANCES > VOL. 9, NO. 5 > A GLOBAL ASSESSMENT OF THE IMPACT OF VIOLENCE ON LIFETIME UNCERTAINTY

RESEARCH ARTICLE PUBLIC HEALTH



# A global assessment of the impact of violence on lifetime uncertainty

JOSÉ MANUEL ABURTO, VANESSA DI LEGO, TIM RIFFE, RIDHI KASHYAP, [...], AND ORSOLA TORRISI +1 authors Authors Info & Affiliations

SCIENCE ADVANCES 3 Feb 2023 Vol 9, Issue 5 DOI: 10.1126/sciadv.add9038



## Abstract

Uncertainty around age at death, or lifetime uncertainty, is a key public health indicator and a marker of inequality in survival. How does the extent of violence affect lifetime uncertainty? We address this question by quantifying the impact of violence on dispersion in the ages at death, the metric most used to measure lifetime uncertainty. Using mortality data from the Global Burden of Disease Study and the Internal Peace Index between 2008 and 2017, we find that the most violent countries are also those with the highest lifetime uncertainty. In the Middle East, conflict-related deaths are the largest contributor to lifetime uncertainty. In Latin America, a similar pattern is attributable to homicides. The effects are larger in magnitude for men, but the consequences remain considerable for women. Our study points to a double burden of violence on longevity: Not only does violence shorten individual lives, but it also makes the length of life less predictable.

Handwritten signature in blue ink.

Handwritten signature in blue ink.

SIGN UP FOR THE SCIENCE ADVANCES eTOC

Get the latest table of contents from *Science Advances* delivered right to you!

SIGN UP >

Handwritten signature in blue ink.

## INTRODUCTION

Uncertainty about the future, particularly survival, is a fundamental feature of human life, influencing behavior and long-term decision-making. Investments in education and savings (1-6), whether to adopt or adhere to healthy lifestyles (7), and even whether and when to engage in childbearing (8) have all been linked to perceptions about uncertainty of survival. At the population level, lifetime uncertainty can be measured as the spread, or inequality, in age at death within the population. Despite its centrality in key life course decisions, lifetime uncertainty is less well known than life expectancy, as a metric of population health.

We hypothesize that violence is a key predictor of lifetime uncertainty cross-nationally. Exposure to violence entails a fundamental state of vulnerability with important social and psychological implications. Among these is a high risk of premature death, causing higher lifetime uncertainty (9, 10). At the same time, higher levels of uncertainty make individuals more likely to engage in violent behavior, creating a vicious cycle that is difficult to break (11). Although substantial effort has been directed to studying the interplay of individuals' perceptions of uncertainty and violence, an empirical link between

Handwritten signature in blue ink.

Handwritten signature in blue ink.

Handwritten signature in blue ink.

Handwritten signature in blue ink.