

Unveiling the Trends: Growing Atrial Fibrillation and Dementia related Mortality in Older Adults in the United States, 2000-2020

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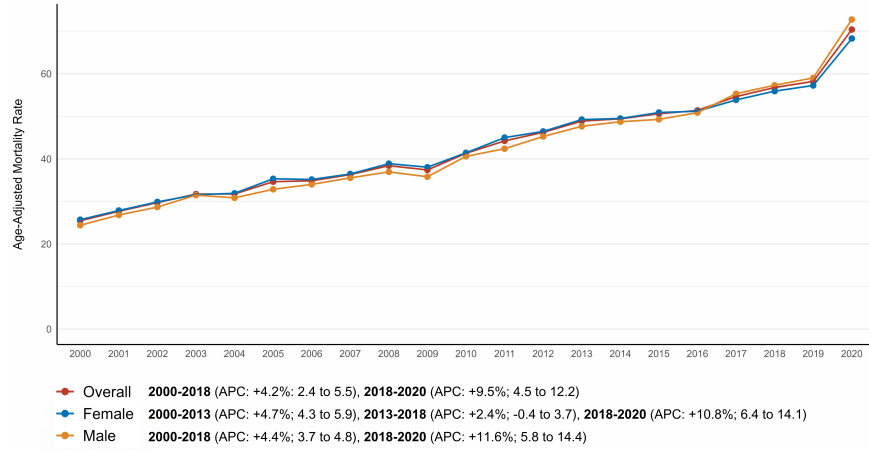
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Abstract

Background: Atrial fibrillation (AF) and dementia are increasingly prevalent in aging U.S. populations. Their association raises public health concerns, emphasizing the need to understand mortality trends in older adults. This study examines AF and dementia-related mortality trends from 2000 to 2020. **Methods:** Using the CDC WONDER Multiple Cause of Death database, we analyzed death certificates for individuals aged 65 and older, reporting age-adjusted mortality rates (AAMRs) per 100,000 persons. Trends were assessed through annual percent change (APC) analysis via Joinpoint regression, with stratifications by sex, race/ethnicity, urbanization, and Census regions. **Results:** A total of 400,103 AF and dementia-related deaths were recorded between 2000 and 2020. The AAMR increased markedly from 25.4 in 2000 to 70.4 in 2020. The overall AAMR showed a steady increase from 2000 to 2018 (APC: +4.4%; 95% CI: 3.7–4.8), with a sharper rise from 2018 to 2020 (APC: +9.5%; 95% CI: 4.5–12.2; $p < 0.001$). Mortality rates were comparable between men (AAMR: 72.7) and women (AAMR: 71.6). NH White individuals exhibited the highest AAMR (47.0), followed by NH Black (26.6), Hispanic (23.1), and NH Asian/Pacific Islander (18.0) populations. Nonmetropolitan areas had higher AAMRs (48.1) compared to metropolitan areas (43.5). Regionally, the Western U.S. recorded the highest AAMR at 48.2, while state-level disparities showed a nearly threefold difference between the top 90th and bottom 10th percentiles. **Conclusion:** Rising AF and dementia-related mortality rates among older adults highlight a need for targeted screening and intervention, particularly for high-risk demographics and underserved regions.

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