Trends in Multiple Myeloma and Cardiovascular Diseases Related Mortality (1999-2023): A CDC Wonder Database Analysis

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Introduction

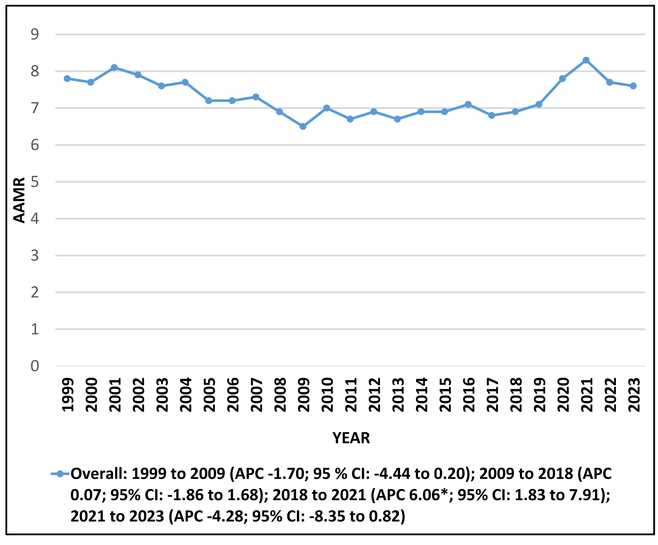
Multiple myeloma and cardiovascular diseases (CVD) frequently coexist among older adults, increasing the risk of mortality. As advancements in myeloma therapy extend survival, CVD-related complications have become gradually prominent. However, mortality trends related to these highly interlinked conditions remain understudied. Our study analyzes mortality trends from 1999 to 2023 related to Multiple Myeloma and CVD in the U.S.

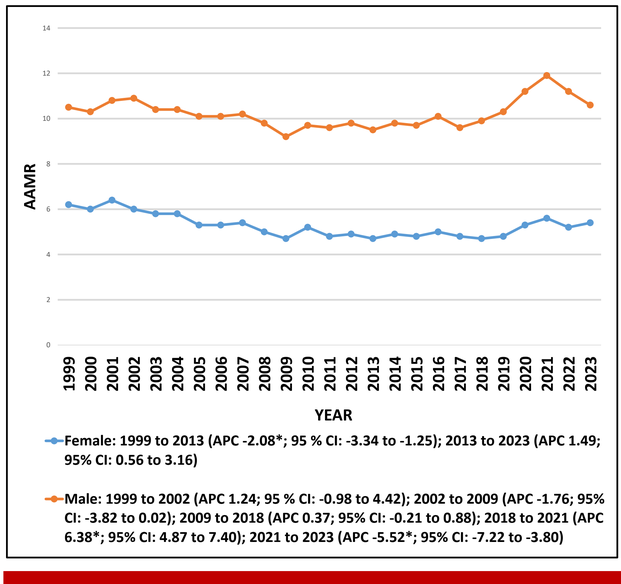
Methods

Using the Centers for Disease Control and Prevention's Wide-Ranging Online Data for Epidemiologic Research (CDC WONDER) database, we conducted a retrospective analysis of death certificates of adults (aged 65≤) having both Multiple Myeloma and CVD. Age-adjusted mortality rates (AAMR) per 100,000 population and annual per cent changes (APC) in age-adjusted mortality rates were determined and measured across different demographics and geographics in the U.S.

Results

Multiple Myeloma and CVD have caused a total of 78,178 deaths. No significant changes were seen from 1999 to 2018, followed by a sharp incline in AAMR until 2021 (APC: 6.06) then a steady decline was observed till 2023. Recorded AAMR in Males (10.2) was doubled that of females (5.3), while a top AAMR of 13.6 was seen in NH African Americans compared with other races/ethnicities. Geographically, AAMR was higher in metropolitan areas (7.2) and Northeast region (8.5).





Conclusion

Observed variations among different demographic and geographic variables need proper resource allocation and targeted interventions to lower the Multiple Myeloma and CVD-related death burden.