Trends in Acute Myeloid Leukemia-Related Mortality Among Patients With Sepsis (1999–2023): A CDC WONDER Database Analysis

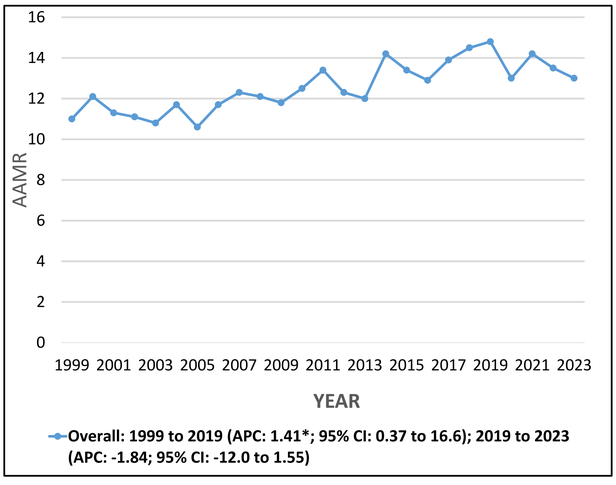
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Introduction

Acute Myeloid Leukemia (AML) increases the risk of sepsis, which is a life-threatening complication that significantly contributes to mortality among AML patients. Our study analyzes trends in AML mortality among patients with sepsis in the United States from 1999 to 2023.



Methods

Death records from the Centers for Disease Control and Prevention's Wide-ranging Online Data for Epidemiologic Research (CDC WONDER) database (1999–2023) included patients aged 65 and above having AML as the underlying cause of death and sepsis listed as a contributing cause. Age-adjusted mortality rates (AAMRs) per 100,000 population were analyzed, and temporal trends were assessed using Joinpoint regression to calculate the annual percent change (APC).

Results

From 1999 to 2023, a total of 13,829 deaths occurred from AML in patients with Sepsis. AAMR rose from 11 in 1999 to 13 in 2023, showing a prominent increase shift from 1999 to 2019 (APC: 1.41; 95% CI: 0.37 to 16.63). AAMR in males (17.7) reported by 2023 was twice that of females (8.7). NH Whites (12.7) recorded the highest AAMR compared to other racial/ethnic groups. Rates were also notably high in metropolitan areas (12.8) and the Northeast region (13.9).

Conclusion

Sepsis complicates AML management and contributes significantly to AML-related mortality. Rising AAMR trends across geographic and demographic groups highlight the need for targeted interventions and proper resource allocation to reduce this dual burden.

