

Conference Abstracts

Population-Based Trends in Acute Myeloid Leukemia: Racial and Gender Patterns from SEER, 1975–2022.

Madho Mal, MD^{1a}, Nayanika Tummala, MD², Mujahid Ali, MBBS³, Faiqa Amin, MD⁴, Love Kumar, MD⁵, Samhitha Gundakaram, MD¹, Leena Alhusari, MD¹

¹ Marshall University school of medicine , Huntigton, WV, huntington, wv, US, ² New York Medical College, ³ Nishtar Medical University, Multan, Pakistan , Multan, Multan, Punjab, Pakistan, ⁴ Bayhealth medical center, ⁵ CAMC cancer center

Corresponding author

^a Madho Mal, MD, Marshall University school of medicine , Huntigton, WV, huntington, wv, US, Email: madhomal1995@gmail.com

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Background

Acute myeloid leukemia (AML) is the most common acute leukemia in adults, with marked demographic disparities in incidence and outcomes. Understanding annual trends by race and gender is crucial for informing targeted interventions and allocating resources effectively.

Methods

Data from the SEER database records from 1975 to 2022 were extracted and stratified to quantify annual AML case counts by race (White, Black, Other [American Indian/Alaska Native, Asian/Pacific Islander], and Unknown) and gender (male and female). Trends were analyzed over nearly five decades, allowing for the assessment of continuous changes over time.

Results

From 1975 to 2022, 38,761 AML cases were reported (male and female, all races). The proportion of cases among Whites remained the highest throughout, but declined from 90.7% in 1975 to 77.4% in 2022, at a rate of 0.28% annually. Black patients accounted for 4.1% in 1975, rising to 8.7% in 2022 (0.10% annually). "Other" races (American Indian/Alaska Native and Asian/Pacific Islander) increased from 5.0% in 1975 to 13.7% in 2022, at a rate of 0.19% per year. The unknown race remained at less than 1%

annually. A gender analysis revealed a persistent male predominance, with males comprising 54.5% of cases in 1975 and 57.2% in 2022, representing an annual increase of 0.06%. Among males, Whites represented 92.0% in 1975, decreasing to 78.1% in 2022. The proportion of Black males increased from 3.6% to 8.4%, and the proportion of "Other" males increased from 4.4% to 13.3%. Among females, Whites comprised 89.2% in 1975, declining to 76.3% in 2022. The percentage of Black females increased from 4.7% to 9.1%, and females identifying as "Other" rose from 5.6% to 14.3%, but overall, there was a decline at a rate of 0.06% annually. Annual trend analysis demonstrates a steady decrease in the proportion of White AML cases and a corresponding increase among Black and "Other" racial groups, consistent across both genders.

Conclusions

From 1975 to 2022, AML incidence in the US has shifted, with a declining proportion of cases among Whites and an increasing representation of Black and "Other" racial groups. Male predominance persists, but demographic diversification is evident. These trends underscore the need for ongoing surveillance and tailored interventions to address evolving disparities in AML epidemiology.