

## Improving Acute Myeloid Leukemia Survival in California: Roles for Follow-up and Quality Care

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There will be approximately 1,515 California residents diagnosed with acute myeloid leukemia (AML) this year and approximately 972 deaths, while little improvement in survival for AML has been achieved during the past decade. Together with colleagues at Loma Linda University and the Cancer Registry of Greater California (CRGC), John W. Morgan, DrPH, CPH, Epidemiologist for Regions 4, 5, 7 & 10 of the CRGC is conducting research that uses data from the three California SEER registries for 2003-2012 to identify potentially actionable predictors of improved AML survival.

Among 6,151 adult California patients who were diagnosed with AML during the study period and were well enough to receive chemotherapy, poorer survival was measured for males that was independent of other covariates and was worst of all among younger males. Differences in survival for race/ethnic groups were eliminated for patients that received chemotherapy, when differences in socioeconomic status (SES) were adjusted in the CRGC study, while survival remained progressively lower for patients residing in neighborhoods showing consecutively lower SES quintile levels.

Among the most provocative findings for AML patients that received chemotherapy was evidence of improved survival among those that were married, compared to patients that were never married and those that were separated, divorced or widowed. Morgan's research team noted that this finding is consistent with support provided by a spouse caregiver, with this hypothesis reinforced by evidence that the survival benefit was strongest among male patients and was diminished with higher SES levels. It seems reasonable to speculate that females may be better caregivers than males and that higher SES might provide improved access to a qualified caregiver, regardless of marital status, improving AML survival.

Previous studies have identified slight delays in initiation of treatment for AML patients admitted into hospitals on weekends, compared to week days, with the current study revealing slightly poorer survival for weekend admissions when other covariates are adjusted. Collectively, findings from this research are consistent with hypotheses that improved AML survival may be achieved for more patients through enhanced follow-up care and improved multidisciplinary quality care services, particularly on weekends.

This research work, utilizing data from the registries, would not be possible without the hard work of every registrar and their efforts to ensure that all reportable cases are identified and collected.