A Mixed Methods Study to Examine the Influence of Structural Racism on Treatment in Aggressive Hematologic Malignancies

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BACKGROUND

SEER and NCDB demonstrate a widening Black-White (B-W) survival disparity in AML. Our newly created Chicago AML registry analysis showed that this survival disparity is significantly mediated by residential census tract variables (Abraham. Blood 2022). The current study tries to operationalize mechanisms of structural racism contributing to disparities in hematologic malignancies.

METHODS

A prospective mixed-methods approach is employed to uncover the complex interrelationship between individual, neighborhood and community level factors (Fig. 1A) influencing treatment. Patients enrolled at diagnosis are followed for 2 years. Validated questionnaires evaluate: patients’ living conditions (AHC HRSN), health literacy (CHLT-6), financial toxicity (COST-FACIT), medication affordability/adherence (ARMS), and mental health (PHQ-4). This is complemented by qualitative data from semi-structured interviews which are coded, and emerging themes noted (Fig. 1B).

RESULTS

Data collection is ongoing and completed on 26 patients, majority with AML. The median age is 60 years with 40% self-declaring as NHB. Only 30% received a college education, 50% reported a household income below $50,000, and in 50% the patient was the primary financial provider. Patients expressed worry about long-term consequences such as job security and financial well-being. 62% reported access to internet. 15% reported that they could use more help with ADLs.

Half of patients reported loneliness and stress on the PHQ-4, and described isolation, missing family events in interviews. AYA patients also discussed grappling with their newfound cancer identity. Notably, 25% of patients reported >5 alcoholic drinks/day.

DISCUSSION

We present the first patient-reported experience of an understudied population at a minority serving cancer center. Several targetable barriers emerged include internet access, support for ADLs, mental health, and alcohol use. Specific challenges included isolation, and coping with the cancer identity in the AYA population.

Ongoing work is expanding the current cohort across a broader socioeconomic spectrum and linking this data to treatment outcomes.
Figure 1A. Individual, Neighborhood and Community factors that can influence AML treatment outcomes.

Figure 1B. Emerging themes from qualitative data analysis.