Racial Disparities in Patients Hospitalized with Follicular Lymphoma. A National Inpatient Retrospective Analysis.

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INTRODUCTION

- Follicular lymphoma (FL) is an indolent B-cell lymphoma with generally favorable long-term survival.
- Outcomes vary across racial and ethnic groups — prior work shows Black and Hispanic patients are diagnosed younger and have worse survival than White patients.
- Few studies have examined predictors of in-hospital mortality or inpatient complications specifically among hospitalized FL patients.

AIM

To evaluate predictors of in-hospital mortality and inpatient complications among white and non-white patients hospitalized with follicular lymphoma.

METHOD

- Retrospective cohort analysis using the National Inpatient Sample (NIS), 2016–2023.
- Cohort: adult hospitalizations with a diagnosis of follicular lymphoma, stratified by white vs. non-white race/ethnicity.
- Primary outcome: in-hospital mortality.
- Multivariable logistic regression adjusted for demographics, hospital factors, income, insurance, and Elixhauser comorbidities.
- Propensity score matching (PSM) performed on age, sex, race, income, and insurance.

CONCLUSIONS

- Non-white patients hospitalized with FL carry a greater socioeconomic burden and higher comorbidity prevalence than white patients.
- After propensity matching, non-white patients had significantly higher rates of sudden cardiac death, hemodialysis, cytokine release syndrome, and transformation to large B-cell lymphoma.
- Hospitalizations among non-white patients cost more and lasted longer on average.
- Despite these disparities, in-hospital mortality did not differ significantly by race/ethnicity.

RESULTS

30.8%
of hospitalized FL patients were non-white (n=29,400)

$25,885
lower mean inflation-adjusted cost per stay for white patients

6.26 vs 6.71
days mean length of stay, white vs. non-white (p=0.001)

- **95,335** of FL hospitalizations were identified nationally form 2016-2023.
- FL was more prevalent in **males** in both groups, although non-white females had slightly higher rates (47.3% vs 46.3%, p<0.001), compared to their white counterparts.
- Both groups were more commonly admitted to an urban setting, however white patients with FL had a higher proportion of being treated in rural settings (18% vs 7%, p<0.001).

Table 1. Demographic & Socioeconomic Characteristics

Characteristic	White	Non-White	p-value
Female sex	46.3%	47.3%	<0.001
Age 50–69 years	40.5%	44.0%	<0.001
Household income < $57,488	20.3%	29.2%	<0.001
Medicaid insurance	4.7%	13.0%	<0.001
West South-Central region	8.17%	15.5%	<0.001
Treated at rural hospital	18.0%	7.0%	<0.001

Table 2. Adjusted Outcomes After Propensity Score Matching

Complication	White	Non-White	aOR (95% CI)	p-value
Sudden cardiac death	0.46%	0.79%	0.57 (0.33–0.98)	0.041
Hemodialysis	1.5%	2.7%	0.55 (0.41–0.74)	<0.001
Cytokine release syndrome	0.5%	1.6%	0.31 (0.20–0.50)	<0.001
Transformation to LBCL	9.12%	10.7%	0.84 (0.73–0.97)	0.016
In-hospital mortality	***no significant difference***		**—**	***NS***

aOR < 1 favors white patients (lower odds relative to non-white patients). LBCL = large B-cell lymphoma. NS = not statistically significant.

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