



Hospitalization and Mortality among Black Patients and White Patients with Covid-19

BACKGROUND

Objective: To compare the clinical characteristics and hospital course of laboratory-confirmed cases of Covid-19 among black non-Hispanic and white non-Hispanic subpopulations in Louisiana

Methods: A retrospective cohort study of positive Covid-19 patients that analyzed EHR data between March 1 and April 11 within Ochsner Health, an integrated-delivery health system in Louisiana

WHY?



As of May 2020, Black patients represented ~59% of all Covid-19-related deaths

in Louisiana, even though blacks represent only 33% of the overall population

RESULTS

Of the 3,481 Covid-19 positive patients:

39.7% were hospitalized

76.9% of the patients hospitalized were black

9.3% died

70.6% of the patients that died were black

Higher in-hospital mortality were associated with:



Increasing age



Elevated respiratory rate



Elevated levels of venous lactate, creatinine, or procalcitonin



Low platelet or lymphocyte counts

RESULTS

Odds Ratios for Hospitalization*	
Race: black vs. white	2.35 (1.97–2.80)
Age, in 5-yr units	1.34 (1.30–1.37)
Sex: female vs. male	0.57 (0.49-0.66)

Hazard Ratios for In-Hospital Death*	
Race: black vs. white	1.08 (0.84-1.38)
Age, in 5-yr units	1.18 (1.13–1.23)
Sex: female vs. male	0.63 (0.50-0.79)

^{*}model was risk-adjusted to include race with the additional covariates of age and sex

··· DISCUSSION

- Blacks were overrepresented among all patients who died in the hospital; however black race was not associated with higher in-hospital mortality than white race
- Frequency of Covid-19 observed in the study population are probably multifactorial
 - May reflect underlying racial differences in the types of jobs that may have an increased risk of community exposure (e.g., service occupations)
- Differences in clinical presentation may reflect a longer wait to access care among black patients, resulting in more severe illness on presentation to health care facilities



