30 Day Post-Operative Mortality Disparities Among Lung Cancer Patients

**INTRODUCTION**

- Little research exists on disparities in 30-day post-operative mortality by race, ethnicity or socioeconomic status (SES) in lung cancer patients.
- Examining these disparities can help to understand differences in mortality rates in the short term and overall.
- The goal of this study was to determine if 30-day post-operative mortality disparities exist among race, ethnicity and SES in lung cancer patients.

**METHODS**

- Linked data (1996 -2009) from:
  - Florida Cancer Data System – a population based cancer registry for patients’ demographic and clinical characteristics
  - Florida’s Agency for Health Care Administration for patients’ procedure and diagnosis codes
  - U.S. census
- Primary outcome was 30-day post-operative mortality (yes/no)
- Primary predictors of interest:
  - Race: White, Black, Others (Native American, Pacific Islander, Asian Indian or Pakistani, and Other)
  - Ethnicity: Hispanic, non-Hispanic
  - SES: % of neighborhood living in poverty
    - lowest (≥20%), middle-low (≥10% and <20%), middle-high (≥5% and <10%), highest (<5%)
- Statistical analysis:
  - Univariate and multivariate logistic regression models to estimate unadjusted and adjusted odds ratios (OR) and corresponding 95% confidence intervals (95%CI).

**RESULTS**

- Our results show that race, ethnicity, and SES disparities in 30-day post-operative mortality for lung cancer patients do exist.
- Being Hispanic confers lower likelihood of 30-day post-operative mortality and being Black confers higher 30-day post-operative mortality.
- Further research is needed to understand the root cause of these disparities, and the mechanisms by which they are acting.

**CONCLUSION**

- Our results show that race, ethnicity, and SES disparities in 30-day post-operative mortality for lung cancer patients do exist.
- Being Hispanic confers lower likelihood of 30-day post-operative mortality and being Black confers higher 30-day post-operative mortality.
- Further research is needed to understand the root cause of these disparities, and the mechanisms by which they are acting.

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