



Epidemiological Disparities in Trends of Gastrointestinal Hemorrhage-Related Hospitalizations and In-Hospital Mortality in Young Females of Reproductive Age: A National Inpatient Perspective.



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Introduction

Epidemiology and outcomes pertaining to gastrointestinal hemorrhage (GIH) in young females remain under studied. We aimed to study the prevalence, odds and in-hospital mortality of GIH related hospitalizations with associated racial, socioeconomic and regional disparities in young females of reproductive age (YFRA, 18-44 years).

Methods and Materials

Data was obtained from National inpatient sample 2019 using relevant ICD-10 codes. We identified YFRA hospitalizations and categorized them into GIH and without GIH. Demographic data, comorbidities, Primary outcomes (prevalence of GIH, in-hospital mortality) were compared between groups stratified by race, socioeconomic status and geographic regions. Secondary outcomes were length of stay and cost. Multivariate regression analyses were performed adjusting for sociodemographics, hospital characteristics and comorbidities.

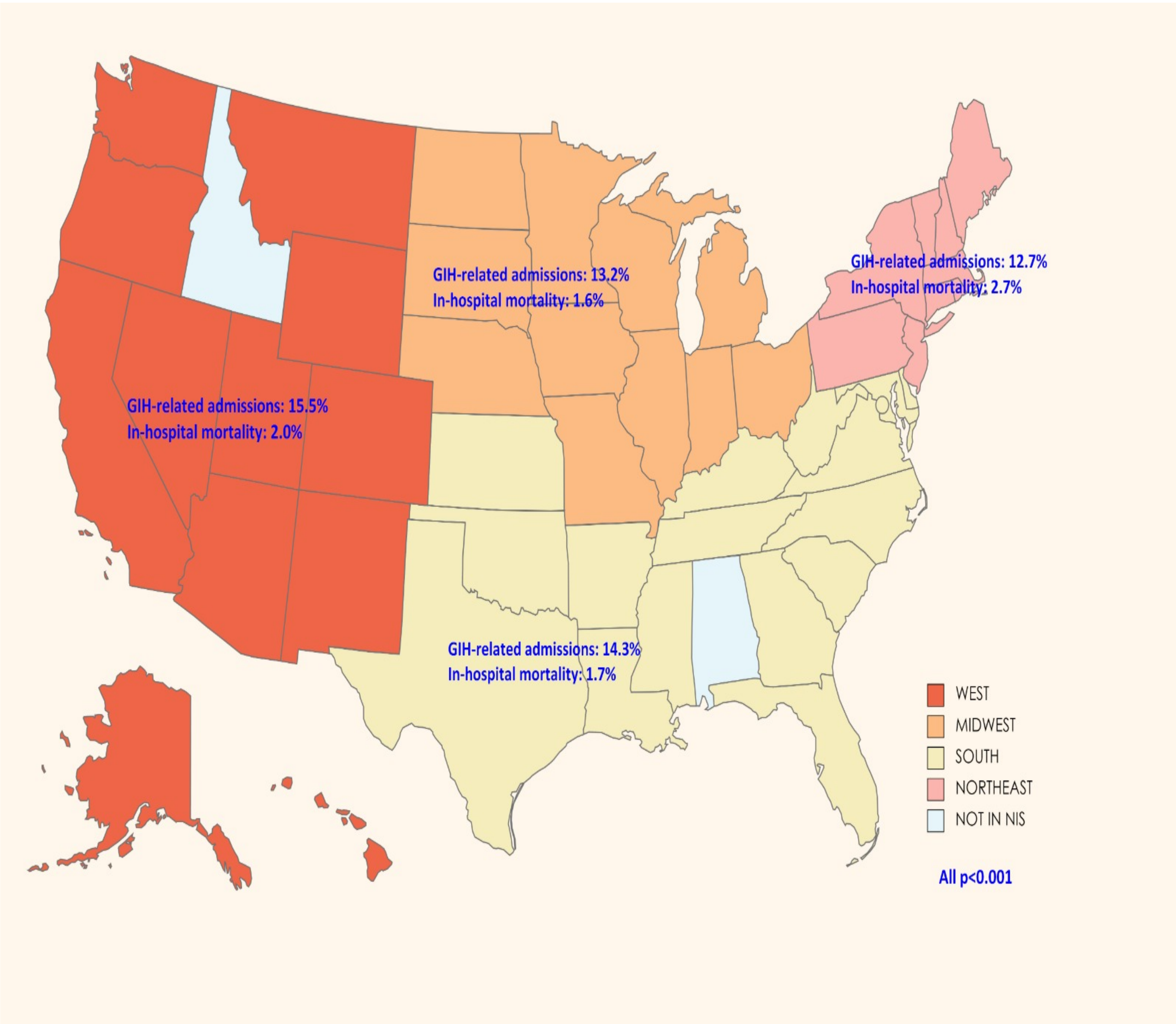


Figure 1

Results

Of total 6071529 admissions in YFRA, 48640 (0.8%) had GIH (median age 35, IQR 29-40). Stratified by race, Asian pacific islanders (API, 22.3%) followed by Hispanics (18.9%) had higher rates of GIH (p< 0.001). YFRA from Lowest median income quartile (14.5%) demonstrated higher rates of GIH. Geographically, Western region hospitals showed highest (15.5%) rate of GIH admissions followed by Southern (14.3%), midwest (13.2%) and northeast (12.7%) (fig 1). Rates of alcohol abuse, drug abuse, depression, diabetes, hypertension, hyperlipidemia were higher in the GIH cohort. When adjusted for confounders, the odds of GIH by race were higher in API vs. white (aOR 1.76;1.45-2.12) (p< 0.001) and by region, hospitals from West region demonstrated the highest odds vs. Northeastern region (aOR 1.20;1.10-1.31) (p< 0.001). In-hospital mortality in GIH admissions was comparable between all regions without statistically significant difference. Median length of stay for GIH hospitalizations was 3 days (IQR 2-6) and total charges were higher compared to non GIH cohort (\$37576 vs \$20613, p< 0.001).

Discussion

GIH related hospitalizations among YFRA were highest in the West whereas subsequent in-hospital mortality was highest in the Northeast region. API demonstrated the highest rates of GIH hospitalizations and in-hospital mortality. GIH admissions in YFRA from two lowermost income quartiles demonstrated the highest rate of GIH hospitalizations and subsequent mortality, respectively. Future studies are warranted to confirm these prevailing sex and regional disparities in GIH among YFRA.