

Gender and Racial Disparities in NAFLD With Outcomes in the United States

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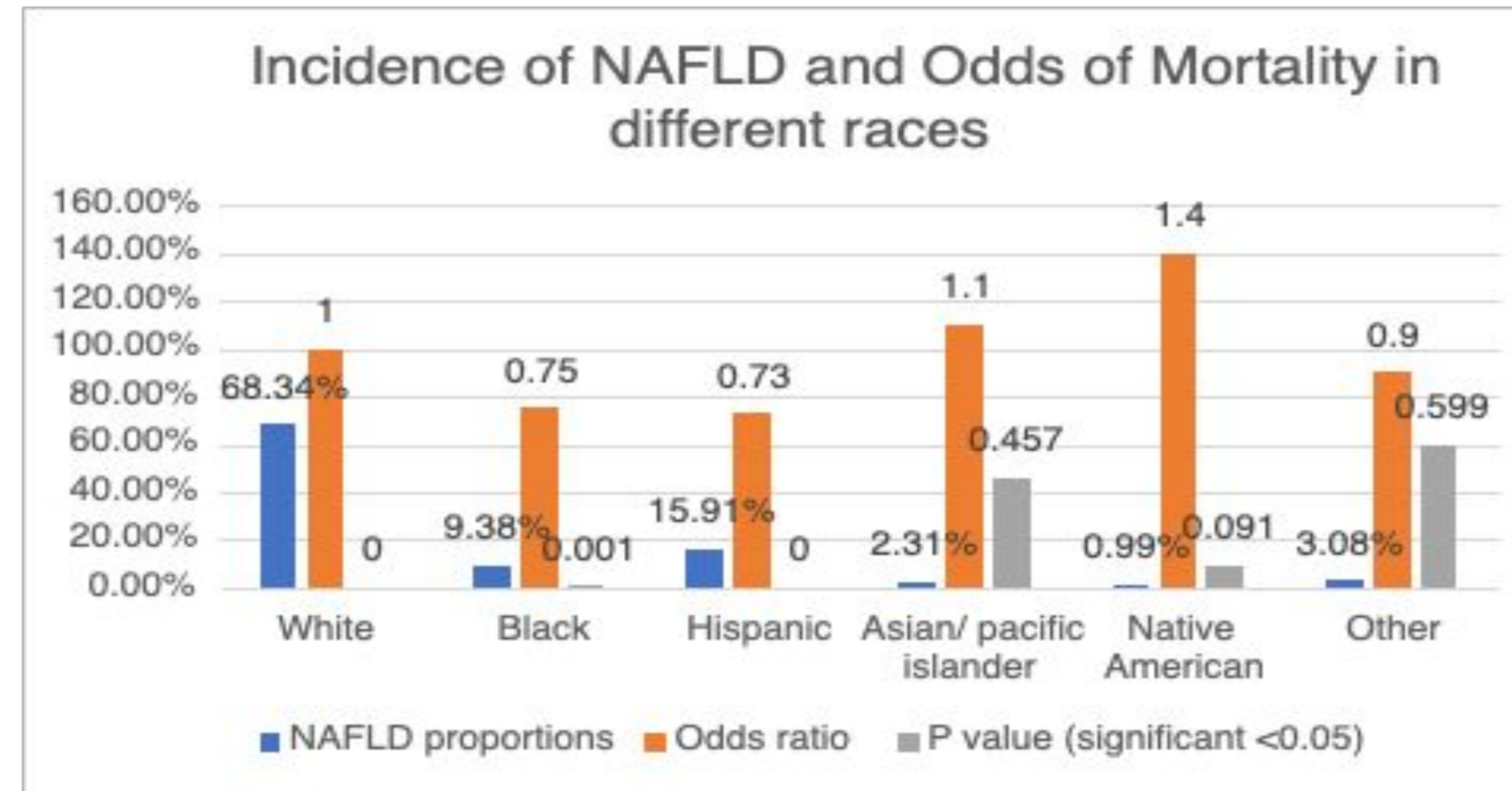
BACKGROUND

- Different races and genders have been known to have a different prevalence of Non-alcoholic fatty liver disease (NAFLD).
- We conducted a nationwide study with National Inpatient Sample (NIS) database to identify the prevalence of NAFLD among races and gender, along with their associated mortality.

METHODS

- We used the 2019 NIS database to identify adults (>18 years) diagnosed with NAFLD using the relevant ICD-10-CM codes.
- Gender and racial distribution amongst NAFLD patients were obtained using the variables available within the database.
- We conducted univariate screen and multivariate logistic regression to adjust for potential patient and hospital level confounders to evaluate if there is any association of racial or gender groups with mortality.
- All statistical analyses were carried out using Stata 17.0 software.

RESULTS



Total NAFLD patients in NIS database 2019 : 532,485

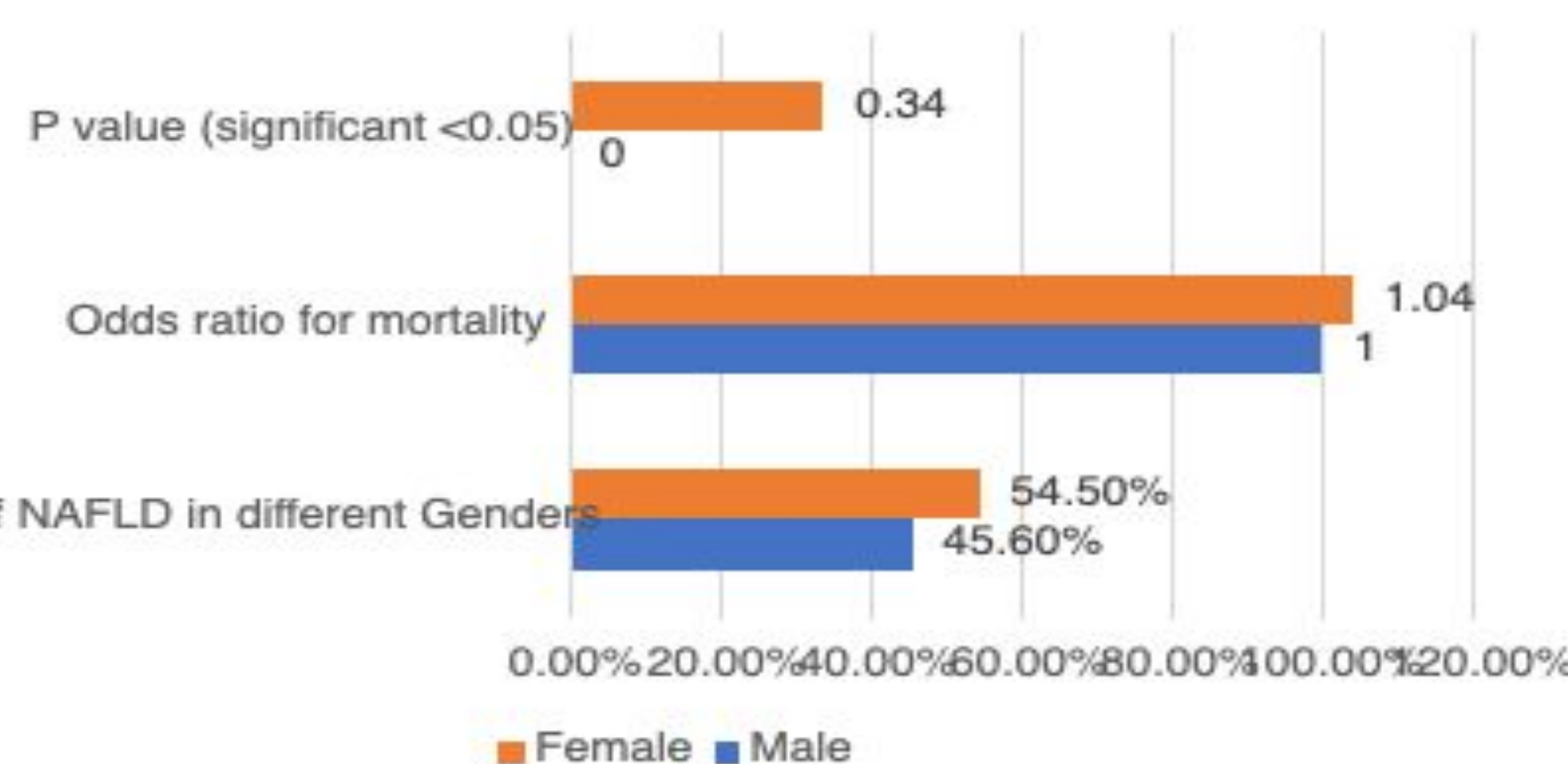
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DISCUSSIONS

- Our study shows a significantly higher prevalence of NAFLD in Whites followed by Hispanics and Blacks respectively.
- Interestingly, in our study, blacks were found to have lower odds of mortality compared to whites.
- Studies have found a higher rate of rs738409 SNP (G-allele) mutation in whites compared to blacks. This has been linked to severe fibrosis and increased mortality in whites with NAFLD possibly due to the development of cirrhosis and hepatocellular carcinoma.
- Interestingly, we found more females with NAFLD in 2019 this is in contrast to the general idea that male are more risk for NAFLD.
- Our study findings of higher NAFLD prevalence in females and lower odds of mortality in blacks compared to white are based on a one-year analysis and needs more extensive studies to identify potential causes for the observed differences.

Incidence of NAFLD and odds of mortality



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