

Introduction

- The U.S. is reported to have the largest number of confirmed cases and deaths due to COVID-19, with 33,041,551 confirmed cases and 590,012 deaths [1].
- Preexisting conditions such as hypertension, smoking, diabetes mellitus, and cardiovascular diseases pose higher risk of infection and complications due to COVID-19.
- Furthermore, early findings that have examined COVID-19 demographics show that racial and ethnic minorities in the U.S. are bearing a disproportionate number of COVID-19 cases and deaths irrespective of geographic region.
- Recent data from the Centers for Disease Control and Prevention (CDC) indicates that COVID-19 hospitalization rates among non-Hispanic Black people and Latinx people were both about 4.7 times the rate of non-Hispanic White people.

Objective

- To examine whether there are epidemiological differences of COVID-19 infection rates among Hispanic males and females hospitalized at Cook County Health in Chicago, Illinois.

Methodology

- Sample size of 393 Hispanic patients from Cook County Health in Chicago, IL who were hospitalized during the COVID-19 pandemic (March 16, 2020 – May 11, 2020).

Methodology

- Conducted a secondary data analysis and used the Chi-Square test in determining the association between gender and COVID-19 infections and other patient and ecological factors using SPSS 26 software.

Results

Fig. 1. Male COVID-19 cases

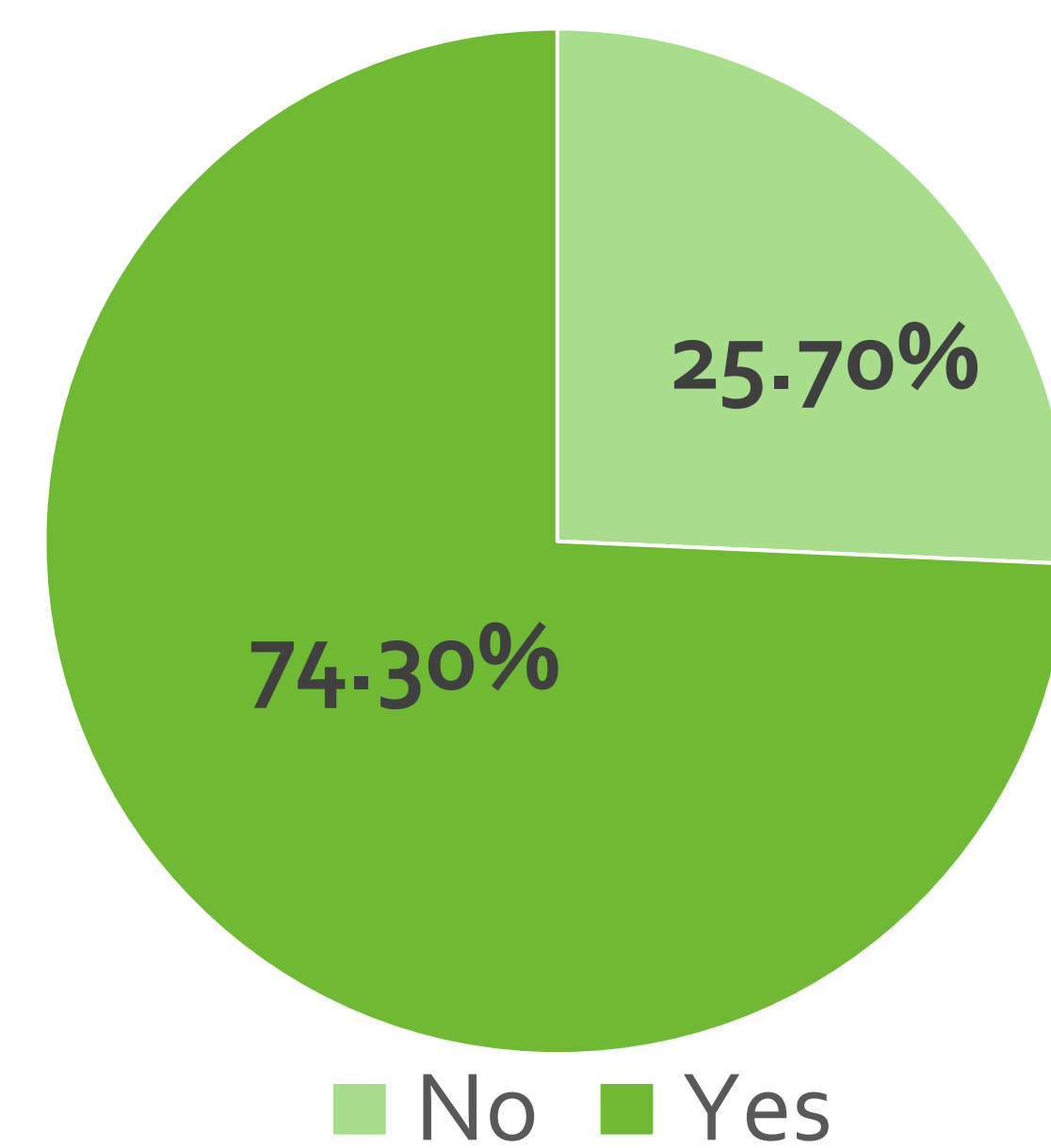


Fig. 2. Female COVID-19 cases

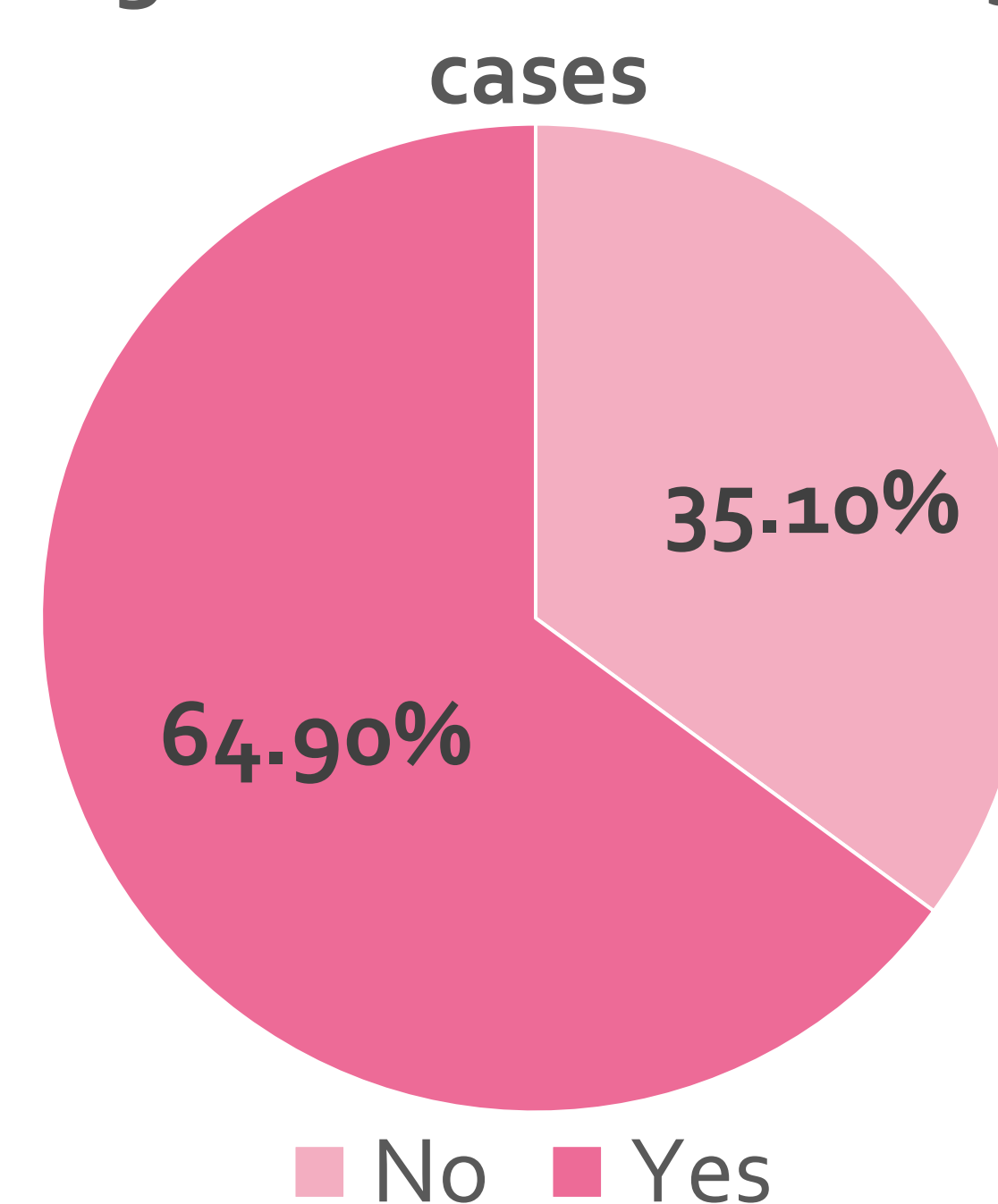
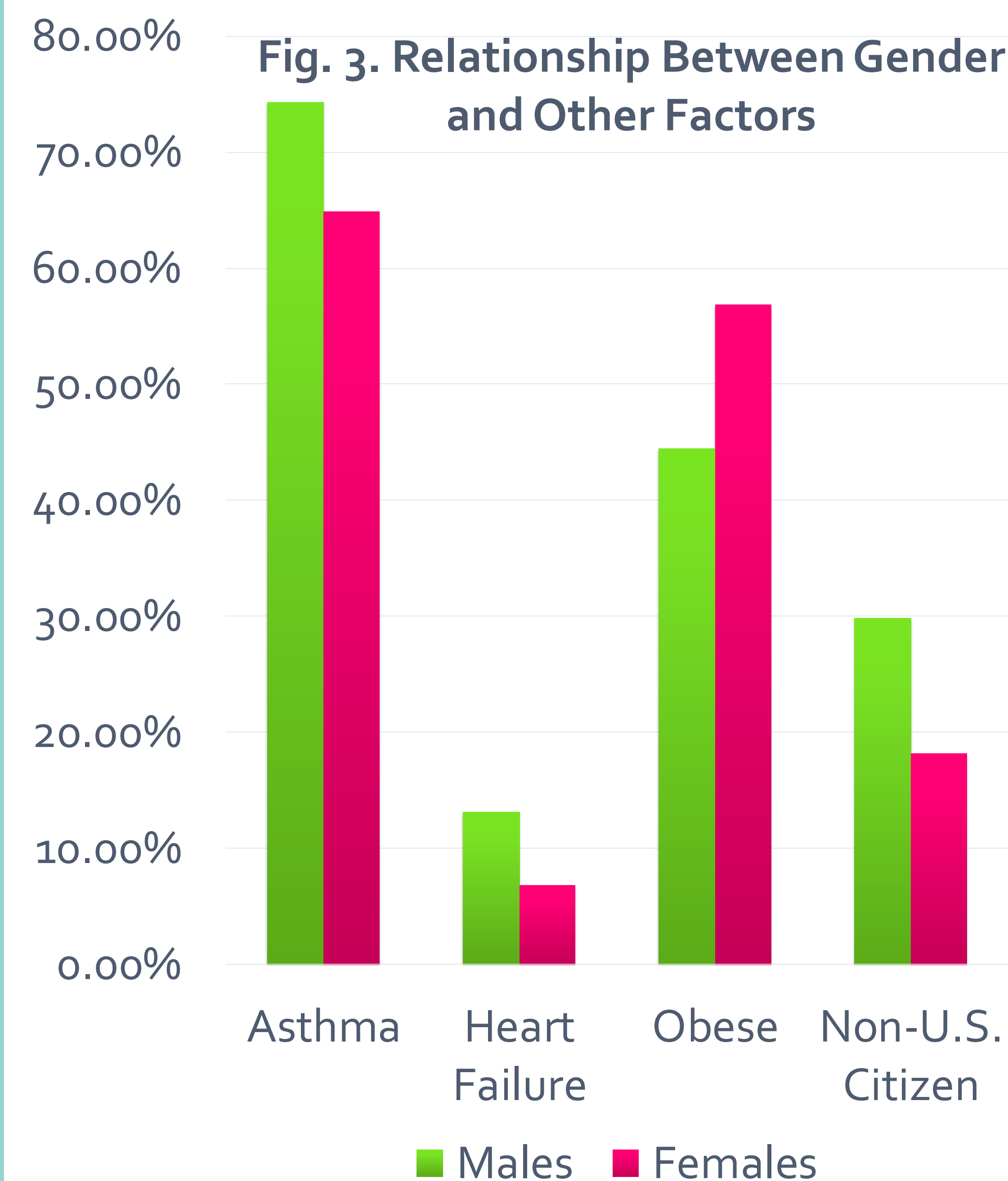


Fig. 1 and Fig. 2. Comparison of COVID-19 cases between Hispanic males and females. There was a significant association between gender and COVID infections, $\chi^2 (1, N = 393) = 3.9, p = .047$.

Results



Conclusion

- Significant difference in the difference between effects of COVID-19 on Hispanics versus other demographics.
- Hispanics are at a higher risk of adverse effects of the COVID-19 virus when compared to others.
- Predisposed health issues are a risk-factor in terms of disease morbidity and mortality.

References

1. Centers for Disease Control and Prevention. (n.d.). *CDC COVID Data Tracker*. Centers for Disease Control and Prevention. https://covid.cdc.gov/covid-data-tracker/#cases_totalcases.

- The following patient-level factors that were not statistically significant were:
 - ICU, ventilator, hypertension, diabetes mellitus, and COPD.
- Among the ecological factors:
 - no high school diploma, Spanish language preferred, social vulnerability index, manufacturing employment, construction employment, and overcrowding were also not statistically significant in relation to gender.
- Fig. 3. Significant Results in relation to gender:
 - Asthma, $\chi^2 (1, N = 393) = 4.8, p = .028$
 - Heart Failure, $\chi^2 (1, N = 393) = 3.8, p = .05$
 - Obese, $\chi^2 (1, N = 393) = 4.9, p = .026$
 - Non-U.S. Citizen, $\chi^2 (1, N = 393) = 6.5, p = .011$

Policy Implications

- Future policy implications should take into consideration the education level of the communities they are trying to protect, as well as funding for local health education programs that could serve as a tool.