The Impact of Depression on Cardiovascular Disease

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Abstract

- Having depressive symptomology can greatly affect management of cardiovascular diseases and increase the likelihood of adverse outcomes.
- The purpose of this research is to examine the relationship between depressive symptomology and its impact, if any, on participants with pre-existing cardiovascular disease.
- Data for this study comes from the 2017-March 2020 National Health and Nutrition Examination Survey (NHANES).
- Analyses were conducted to determine possible associations between the comorbidities.
- These results have the potential to positively inform health care for individuals who experience these comorbid conditions.

Introduction

- Current research suggests there to be a strong association between mood disorders, such as anxiety and depression, and cardiovascular diseases.
- Reserach shows a strong positive association between anxiety diagnosed at a young age and subsequent coronary heart disease later in life (Janzsky et al., 2010).
- There is also evidence that individuals experiencing comorbid depressive disorders and anxiety disorders have a strong positive association with coronary heart disease (Kemp et al., 2015).
- Research, with an attention to sociodemographic characteristics, have found a strong association between employment status and depression, but not factors such as race, ethnicity, or healthcare coverage (Fan et al., 2015).
- For this research, it is expected to find a association between mood disorders and cardiovascular disease.

Methods

Dataset

- Data from the national data set NHANES (National Health and Nutrition Examination Survey) from 2017-March 2020 was utilized for this project.
- NHANES, which contains questionnaires and physical exams), was designed to assess the health and nutritional status of adults and children in the United States.

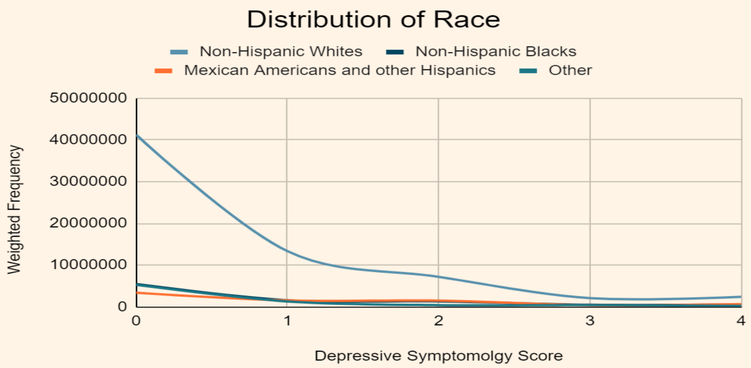
Statistical Analysis

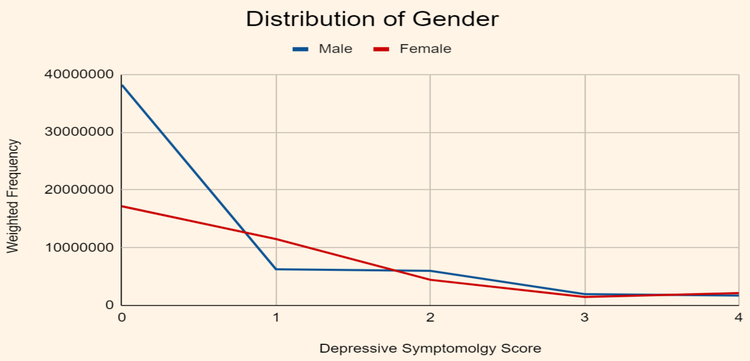
- SAS software was utilized to perform the statistical analysis.
- Chi-square tests were run to examine the relationship between depressive symptomology and cardiovascular disease.

Results

Chi-Square Analyses:

- The results demonstrated there to be a significant association/relationship between depressive symptomology and cardiovascular disease.





Conclusion

- There is a statistical significant association between depression and cardiovascular disease.
- The results were significant in all of the populations we analyzed: Non-Hispanic whites, Non-Hispanic Blacks, Mexican Americans and other Hispanics, Other Races, Males, and Females.
- We can conclude that there is an association between depressive symptomatology and cardiovascular disease for all of these populations.

Discussion

- Our results did suggest that there was an association between depressive symptomolgy and cardiovascular disease, specifically coronary heart disease, congestive heart failure, and/or heart attacks.
- Study limitation: Data consisted of self-reported measures, and this study did not control for extraneous variables.

References

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