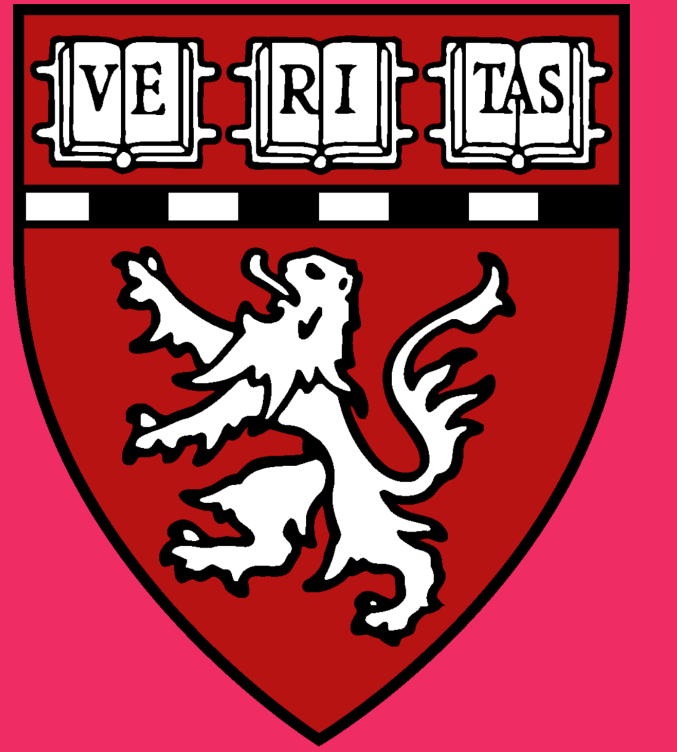


Comorbid Physical Illnesses and Depression Severity in Patients with Mood Disorders in an Online Study

Valerie L. Ruberto; Maya Kuperberg, MD; Marina Rakhilin; Selen Amado; Louisa G. Sylvia, PhD; Andrew A. Nierenberg, MD



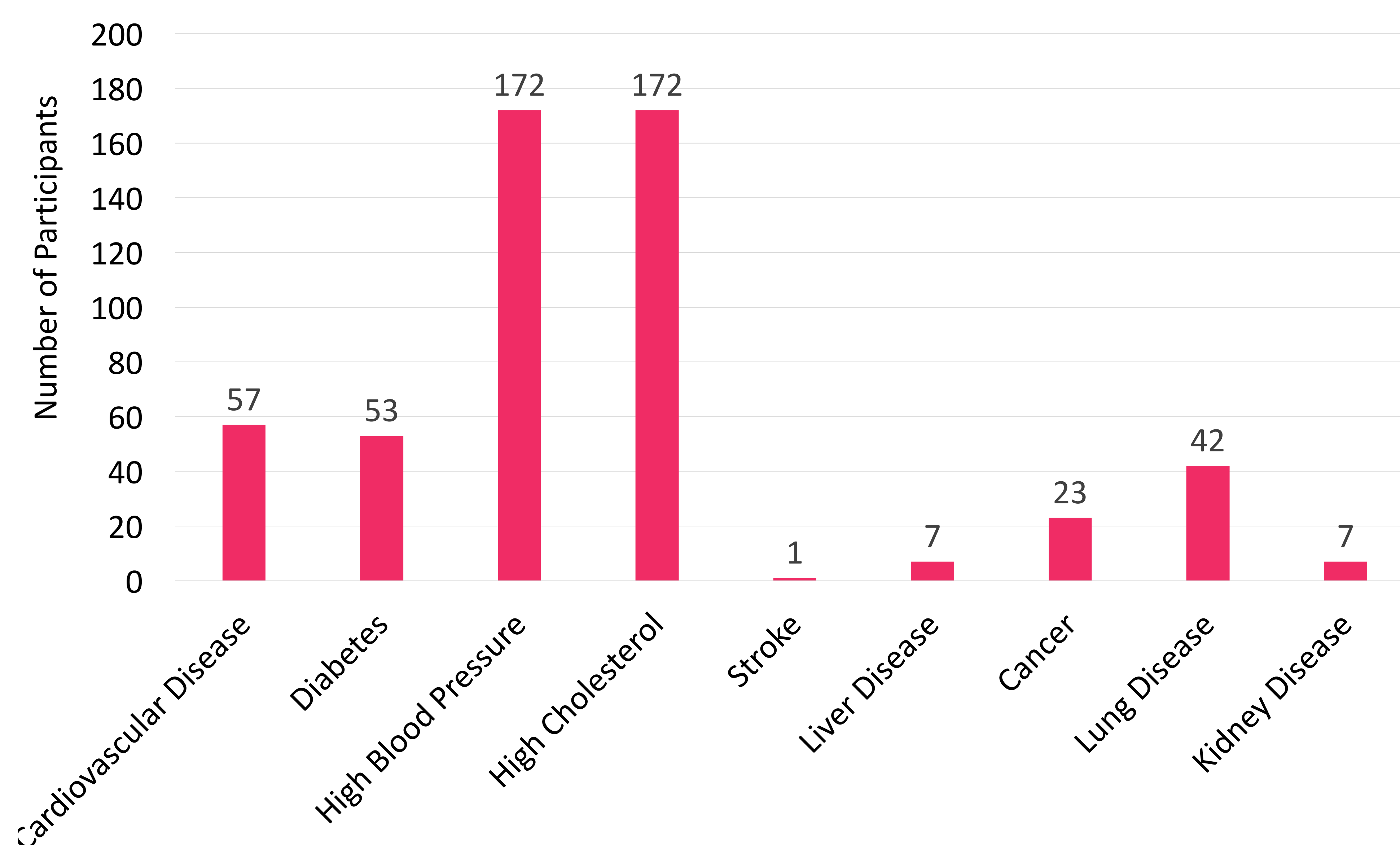
Introduction

- Major depressive disorder (MDD) and bipolar disorder (BD) share risk factors with comorbid medical conditions.
- These risk factors include lifestyle habits, such as lack of physical exercise, as well as genetic risk factors (Dennis et al. 2019; Chireh et al. 2019)
- We examined this association in a sample enrolled in a large, online study of physical activity.

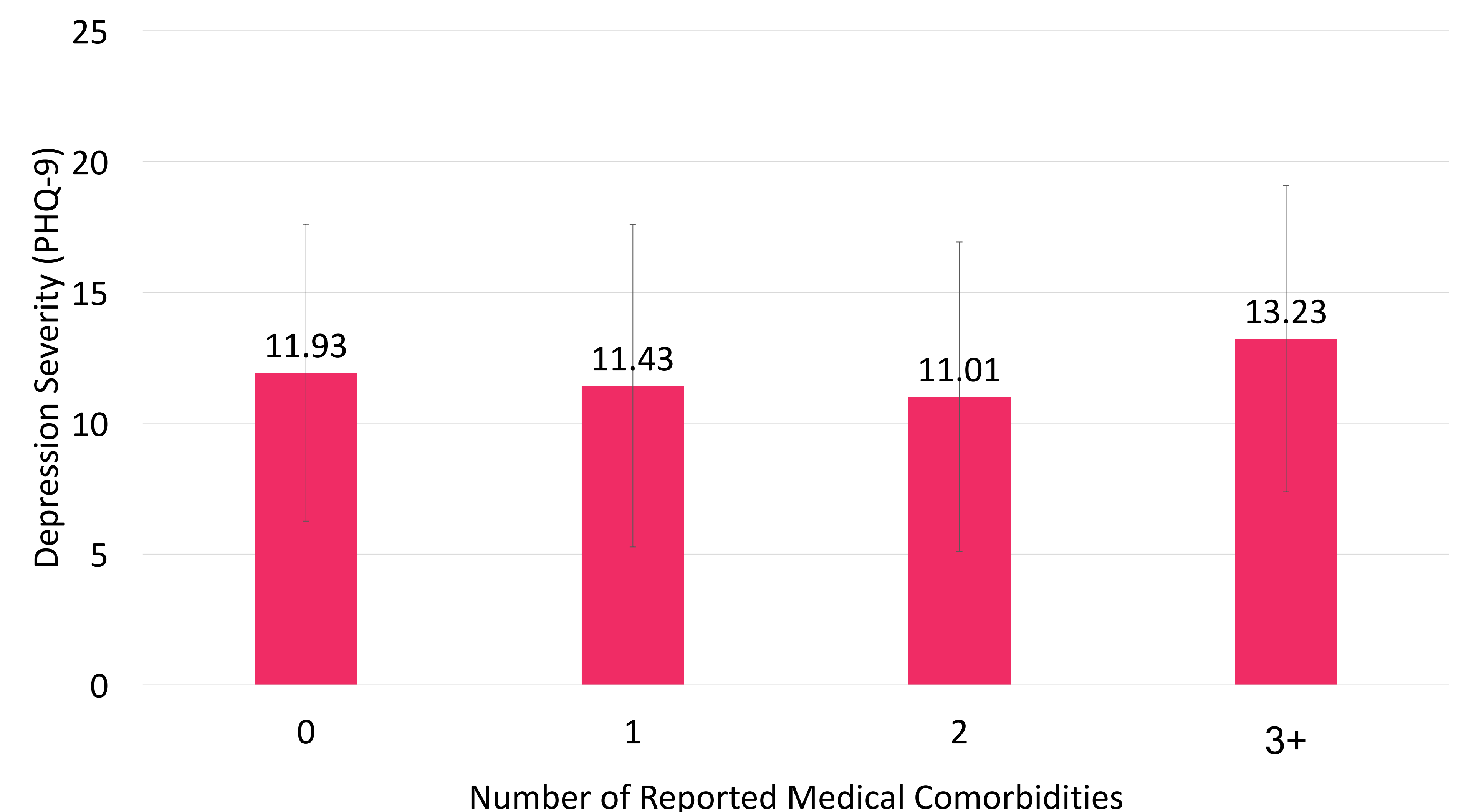
Methods

- The Healthy Hearts Healthy Minds study recruited participants from two online communities, enrolling individuals with a history of depression who exercise <150 minutes per week.
- We used a linear multiple regression to explore the association between self-reported comorbid medical conditions (self-reported) and current depression severity (Patient Health Questionnaire)

Types of Medical Comorbidities Reported



Average Depression Severity by Number of Medical Comorbidities



Linear Regression Summary: $R^2 = 0.051$; sum of squares = 824.231; $df = 5$; mean square = 164.846; $F = 5.352$; $p < 0.001$.

Results

- Participants (N=506) were mostly female (79.0%) and white (81.0%) with a mean age of 44.7 (SD=11.4) and a nearly even distribution of self-reported mood disorder diagnosis (47.1% MDD; 52.9% BD).
- A greater number of comorbid medical conditions predicted more severe depressive symptoms when accounting for sex, age, race, and type of mood disorder (MDD or BD) ($p = 0.041$).

Discussion

- These data suggest that there is an association between depression severity and number of comorbid medical conditions within an online sample of participants with mood disorders.
- Our study is limited by sampling bias and the reliance on self-report data.