Racial/Ethnic Disparities in Mental Health

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Abstract

Sign Up:

One or two sentences providing a **basic introduction** to the field, comprehensible to a scientist in any discipline.

Two to three sentences of **more detailed background**, comprehensible to scientists in related disciplines.

One sentence clearly stating the **general problem** being addressed by this particular study.

One sentence summarizing the main result (with the words "**here we show**" or their equivalent).

Two or three sentences explaining what the **main result** reveals in direct comparison to what was thought to be the case previously, or how the main result adds to previous knowledge.

One or two sentences to put the results into a more **general context**.

Two or three sentences to provide a **broader perspective**, readily comprehensible to a scientist in any discipline.

Keywords: race, ethnicity, mental health disparities, depression, substance use

Word count: X

Racial/Ethnic Disparities in Mental Health

Introduction

Despite advances in access to health services, quality of care, and overall gains in life expectancy, racial/ethnic disparities in health in the United States (U.S.) remains to disproportionally affect the lives of racial/ethnic minority groups. D. R. Williams and Mohammed (2009) refer to the finding of Levine et al. (2016) that approximately 100,000 African Americans who would not die if there were no racial disparities die prematurely every year. Unfortunately, in the mental health arena, racial/ethnic disparities are no exception.

Even though the burden and impact of physical diseases on different racial/ethnic subgroups have been far more studied than the impact and burden of mental health disorders, we know that globally, depression is the leading cause of disability and loss of productivity, and that its direst outcome, death via suicide, is on the rise (WHO, 2018 (accessed December 4, 2018)). It is well-known that mental health services are costly and thus a high proportion of the American population cannot afford them.

Given that depression is usually screened and treated first in primary care settings, access to medical care is the first barrier to treatment that racial/ethnic minority groups face (D. R. Williams & Mohammed, 2009). From there, racial/ethnic minority groups experience barriers such as low detection rate of mental health disorders in comparison to Whites (Borowsky et al., 2000); language barriers for non-English speakers (Fiscella, Franks, Doescher, & Saver, 2002); use of screening measures not translated or validated for racial/ethnic minority groups; issues of trust related but not limited to underrepresentation of racial/ethnic minorities among mental health professionals, and cultural differences in understanding and treating mental health disorders (Miranda & Cooper, 2004). Overall, these and other barriers affect the access and quality of treatment racial/ethnic minority groups receive in respect to their mental health.

——Maria will do drug use onset and health disparities (short 1 paragraph) —- use of substances as an alternative treatment for depression that people may recur to—-

In the present study, we aim to explore some of the health disparities among different racial/ethnic groups using a nationally representative sample, the National Health and Nutrition Examination Survey (NHANES) 2015 – 2016.

NOTE: The WHO reference is not working well. Is showing the access date.

Methods

Sign up:

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study.

Participants

Sign up:

Measures

sign up:

To assess depression symptoms, we used the depression module from the full Patient Health Questionnaire (Kroenke, Spitzer, & Williams, 2001: PHQ). The PHQ-9 is a 9-item, self-report screening instrument. Participants are prompted by the stem "Over the last 2 weeks, how often have you been bothered by any of the following problems?". Sample questions include "Feeling down, depressed, or hopeless?" and "Thoughts that you would be better off dead or of hurting yourself in some way". The module uses a 4-point scale that goes from 0 (not at all) to 3 (nearly every day). "Refuse to answer" and "Don't know" options are also included. A single score is derived from the depression module by

summing the responses for the 9 items. Scores can range from 0 to 27; higher scores reflect more severe depressive symptoms.

Insurance coverage was assessed with the item "Are you covered by health insurance or some other kind of health care plan?" from the NHANES Health Insurance Questionnaire. Response choices included "Yes". "No", "Refused", and "Don't know".

Usage of mental health services was assessed with the item "During the past 12 months, have you seen or talked to a mental health professional such as a psychologist, psychiatrist, psychiatric nurse or clinical social worker about your health?" from the NHANES Hospital Utilization and Access to Care questionnaire. Response choices included "Yes". "No", "Refused", and "Don't know".

Data analysis

We used R (Version 3.5.1; R Core Team, 2018) and the R-packages *bindrcpp* (Version 0.2.2; Müller, 2018), *dplyr* (Version 0.7.8; Wickham, François, Henry, & Müller, 2018), *forcats* (Version 0.3.0; Wickham, 2018a), *ggplot2* (Version 3.0.0; Wickham, 2016), *here* (Version 0.1; Müller, 2017), *kableExtra* (Version 0.9.0; Zhu, n.d.), *papaja* (Version 0.1.0.9842; Aust & Barth, 2018), *purrr* (Version 0.2.5; Henry & Wickham, 2018), *readr* (Version 1.2.1; Wickham, Hester, & Francois, 2018), *rio* (Version 0.5.10; C.-h. Chan, Chan, Leeper, & Becker, 2018), *stringr* (Version 1.3.1; Wickham, 2018b), *tibble* (Version 1.4.2; Müller & Wickham, 2018), *tidyr* (Version 0.8.2; Wickham & Henry, 2018), and *tidyverse* (Version 1.2.1; Wickham, 2017) for all our analyses. sign up:

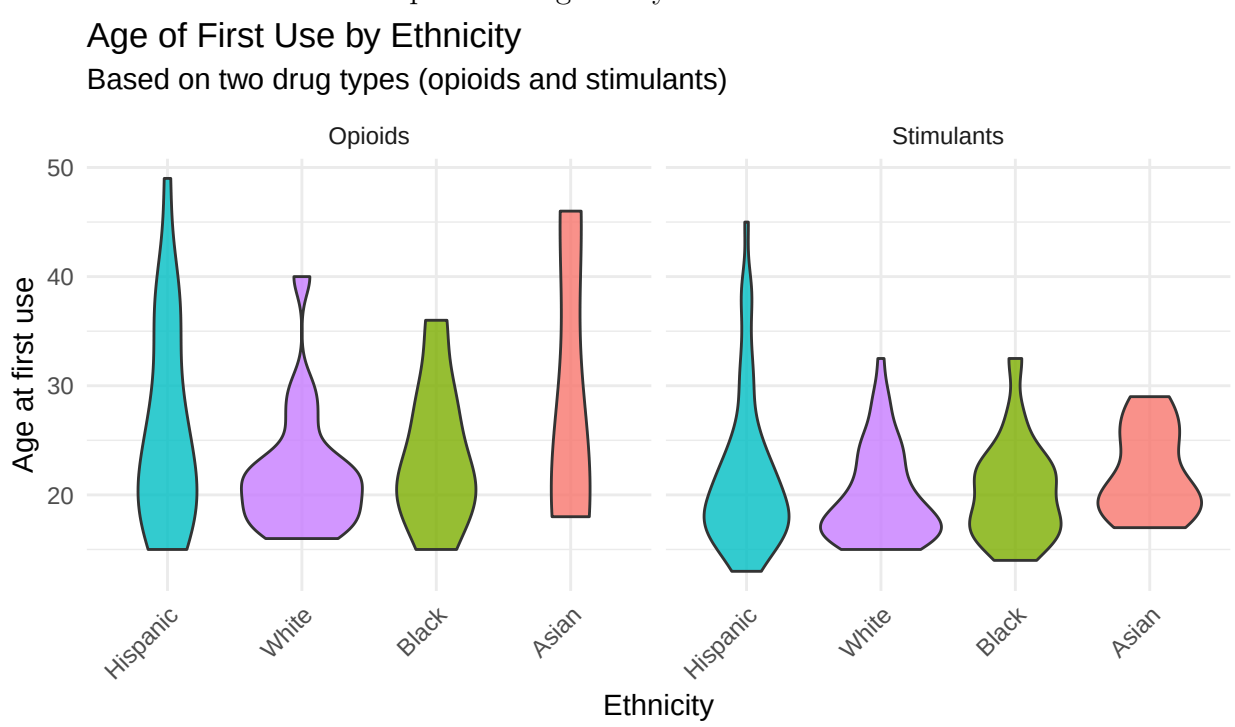
Results

We should use inline code here

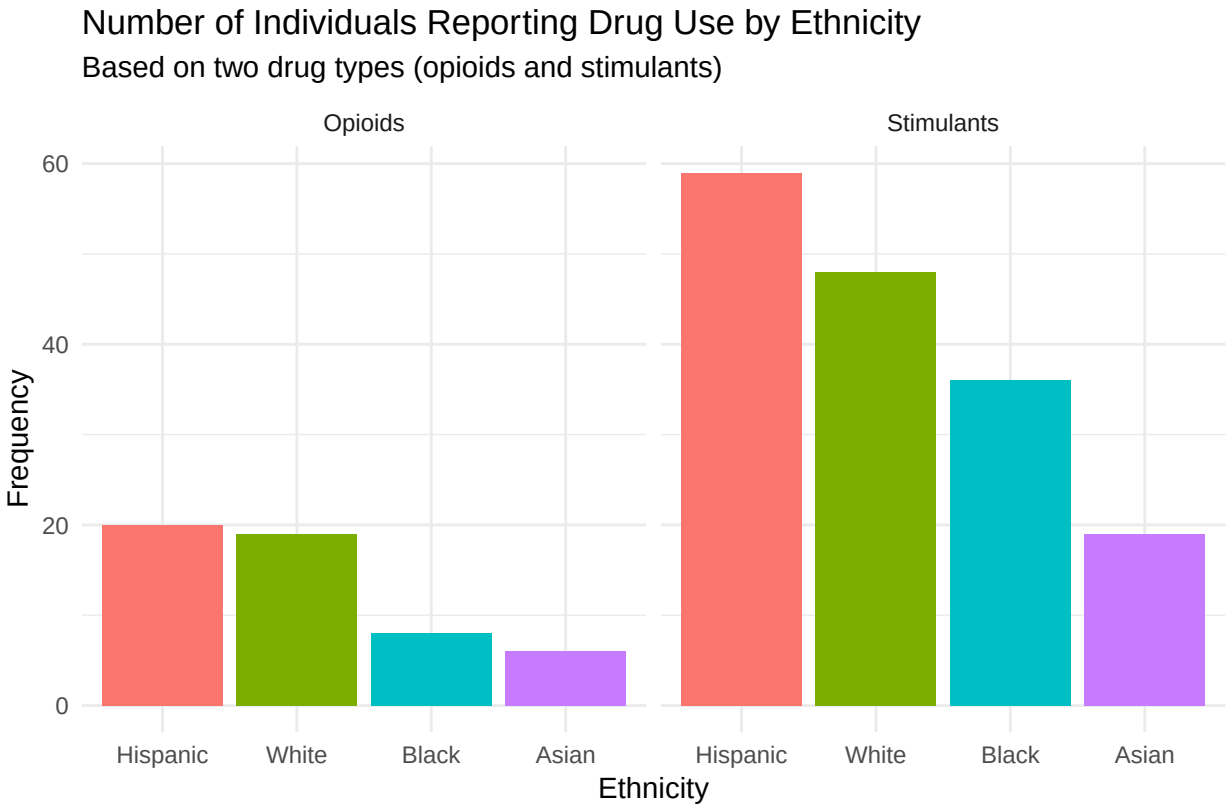
Description of plot 1: Alejandra

```
## Warning: Removed 425 rows containing missing values (geom_col).
```

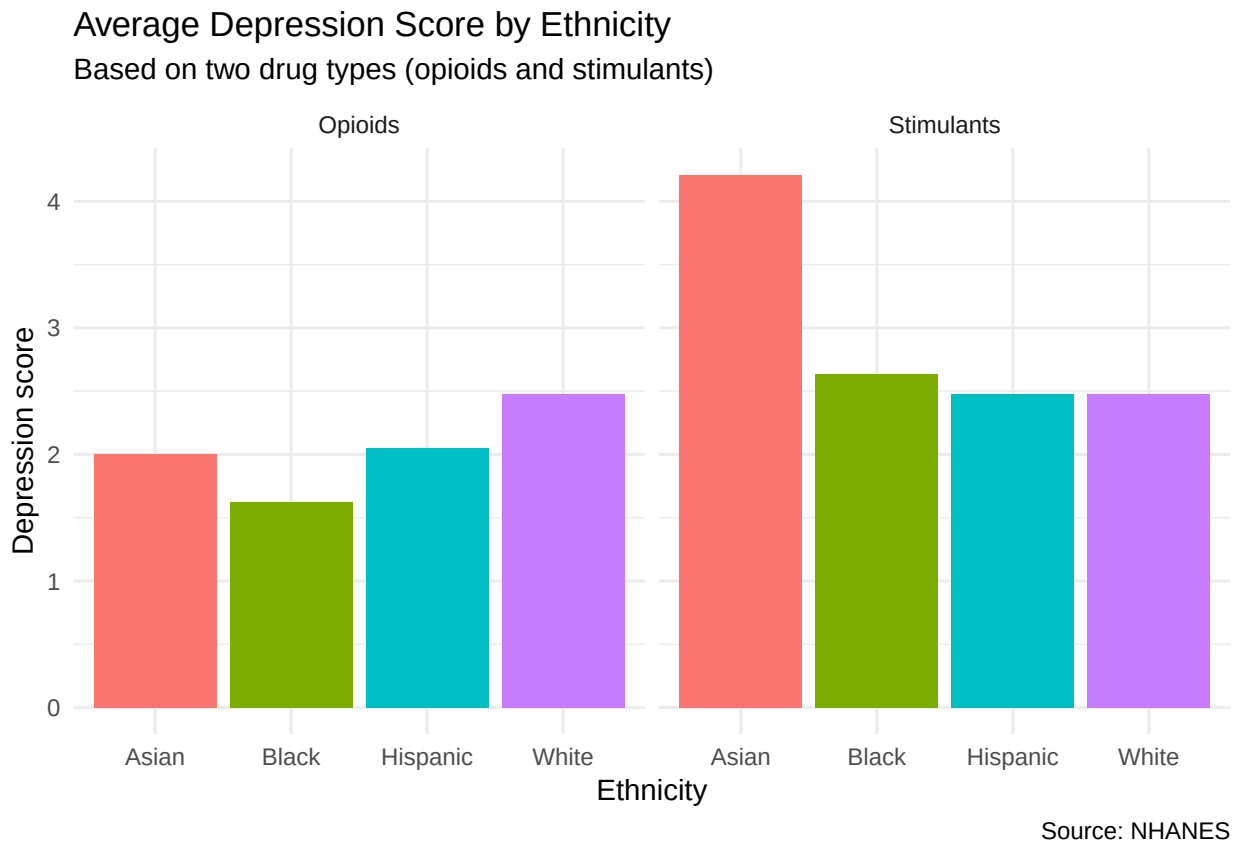
Shaina will describe her plot of drug use by ethnicities



plot 2


Number of Individuals Reporting Drug Use by Ethnicity
Based on two drug types (opioids and stimulants)
Opioids
Stimulants
60
40
20
0
Frequency
Hispanic
White
Black
Asian
Hispanic
White
Black
Asian
Ethnicity
Source: NHANES

plot 3



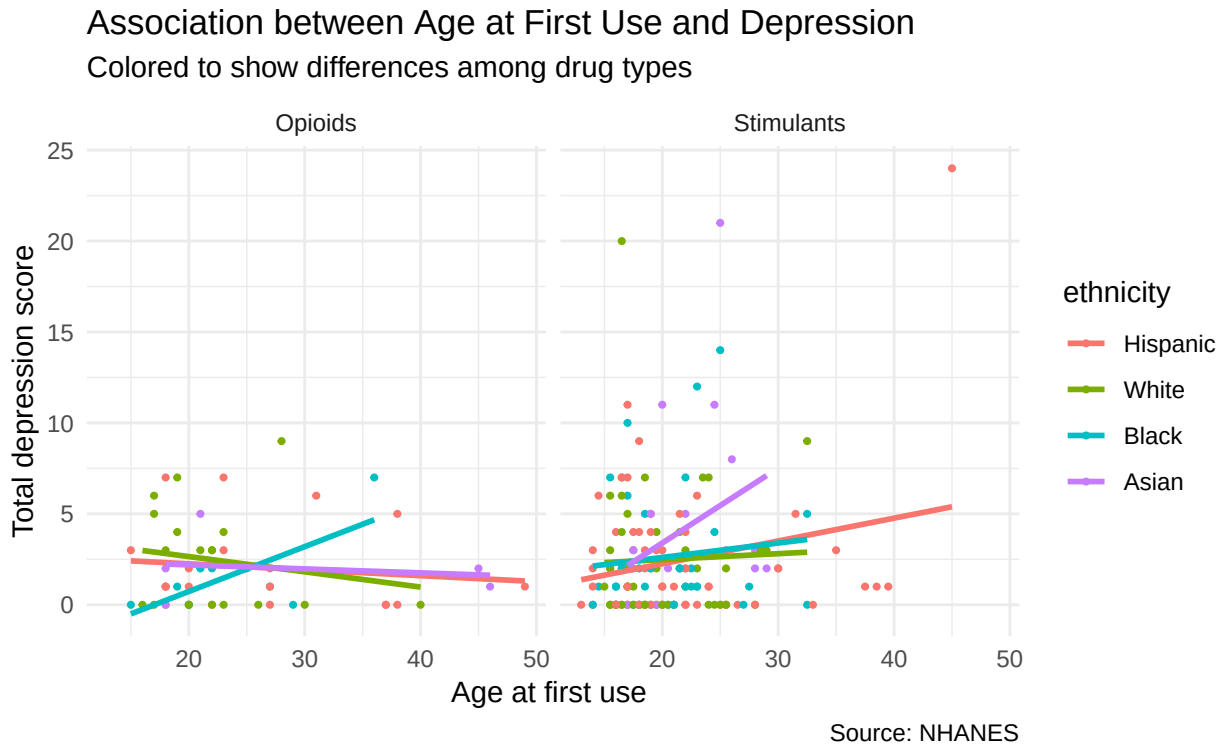
ST table

```
## Warning: Expected 2 pieces. Missing pieces filled with `NA` in 10 rows [1,
## 2, 3, 4, 5, 6, 7, 8, 9, 10].
```

Discussion

sign up:

Insert one data visualization – we are using two, I believe Alejandra's viz. and one from Shaina Exploratory association plot?



Insert Table – JP?

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Table 1

Average depression score and age of first opioid and stimulant use

Ethnicity	Depression Score	Opioid Use	Stimulant Use
Asian	3.01	27.86	21.73
Black	3.16	22.18	20.30
Hispanic	3.29	25.81	21.43
Other/Multiracial	3.47	22.33	18.93
White	3.53	21.60	20.23

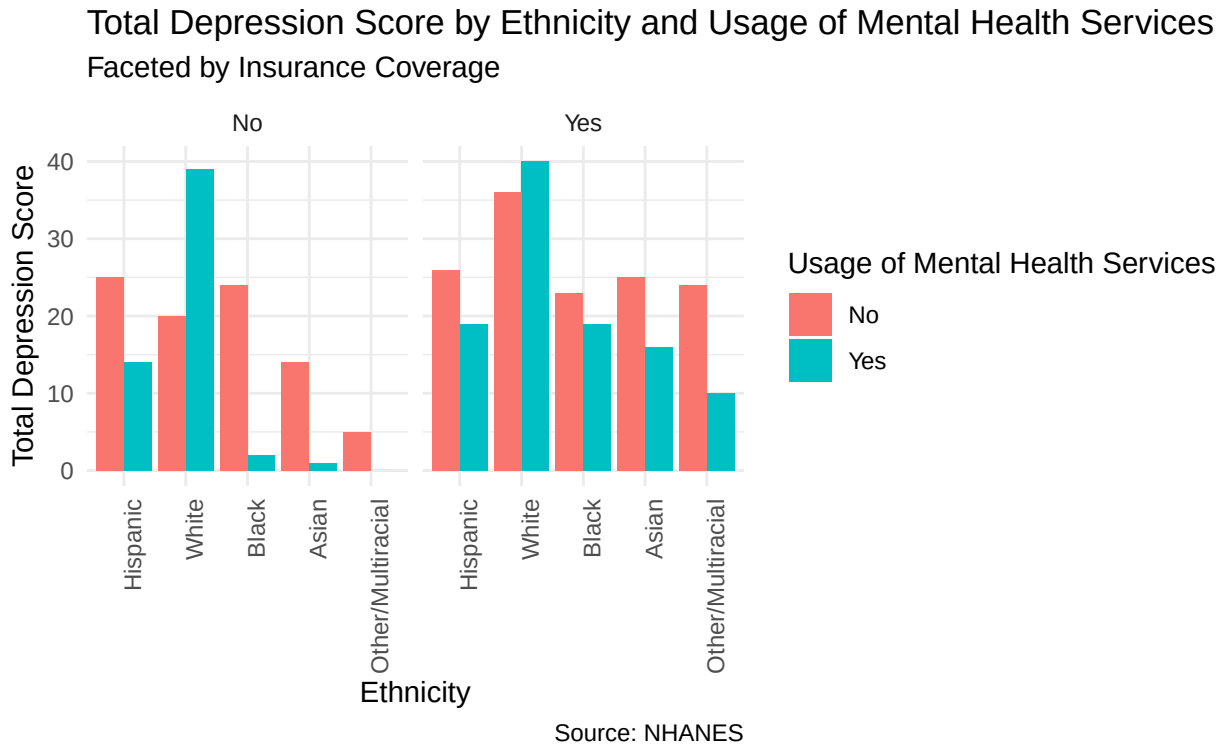
Total Depression Score by Ethnicity and Usage of Mental Health Services
Faceted by Insurance Coverage
No
Yes
Total Depression Score
40
30
20
10
0
Hispanic
White
Black
Asian
Other/Multiracial
Ethnicity
Usage of Mental Health Services
No
Yes
Source: NHANES

Figure 1