

Dynamics of Depression Population in the United States:

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Introduction and Objectives

Defining Depression

- Depression, also called major depressive disorder or clinical depression, is a common mood disorder. It is a complex disorder that is caused by a combination of genetic, biological, environmental and physiological factors.
- The symptoms of depression — such as feeling hopeless, loss of interest and fatigue — can impact all aspects of a person's life, including how they think, feel and handle daily activities.
- Around 80% of adults with depression report at least some difficulty performing work, home or social activities.

Costs of Depression

- There are significant societal costs associated with depression. The economic burden of depression in the United States is estimated at \$210 billion, including direct medical costs, lack of workplace productivity and the cost of life lost due to suicide.

Commonly Known Risk Factors

- Family history of depression
- Major life changes or stressors
- Certain medications
- Illnesses such as diabetes, cancer or heart disease.

Other Possible Risk Factors

- Income
- Gender
- Race
- Level of Education
- Age

Which of these are factors that contribute to depression, and how much do these possibilities affect the risk for depression?

Methods

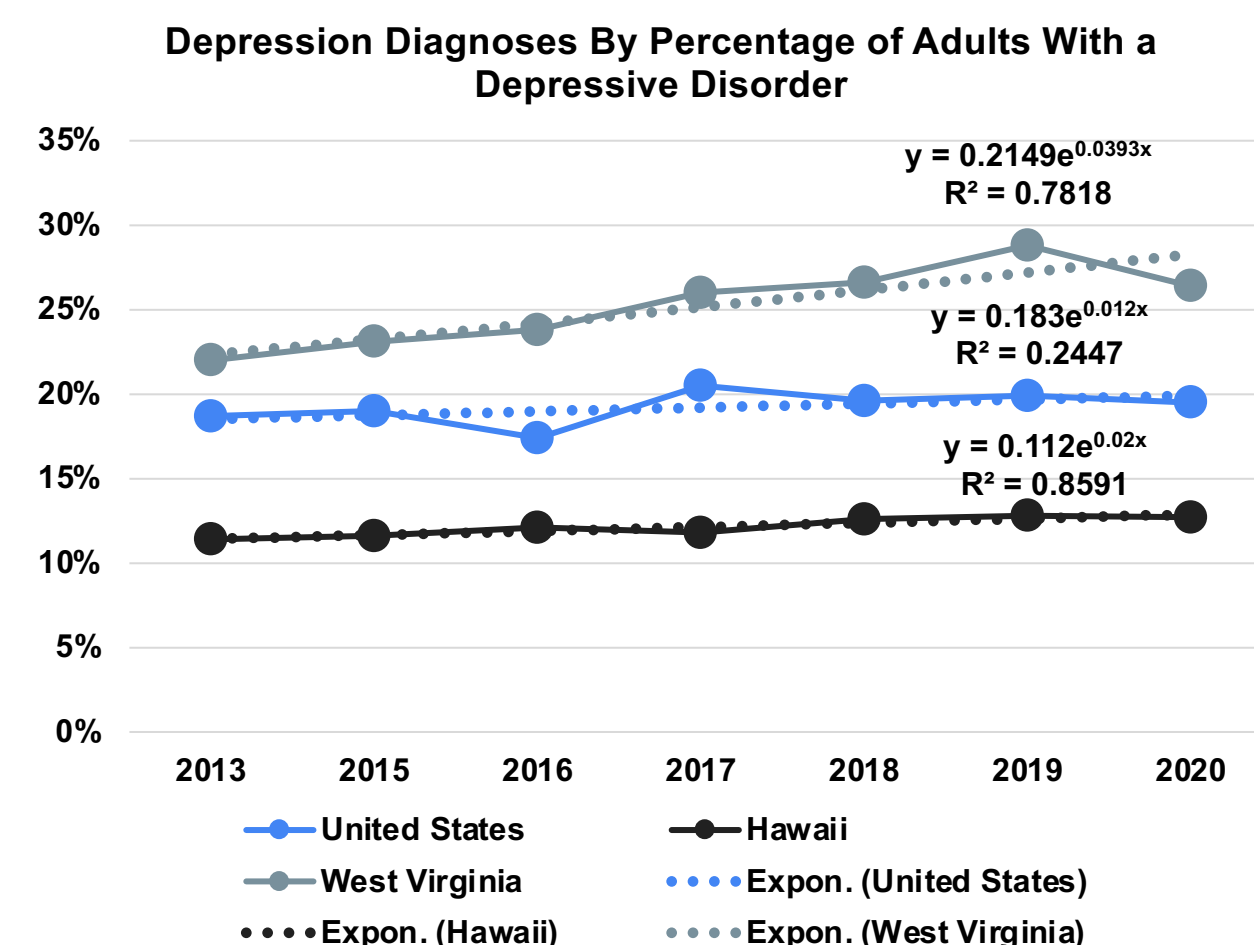
Data

- I collected the data from AmericasHealthRankings.org. They offer all sorts of data on many different health challenges that Americans face.
- I decided to focus on their data on depression. That involved collecting the data and formatting it in ways that I could then analyze it.

Analysis

- In order to determine if the above listed possible factors are actually contributing factors of depression, I decided to first look at the overall depression rates of each of the states in the United States. From there, I chose the state with the highest rates, and the state with the lowest rates to compare them to the average for the entire US.
- I then plotted all of the data for each of the demographics in each of the states compared to those same groups in the United States as a whole.

Results



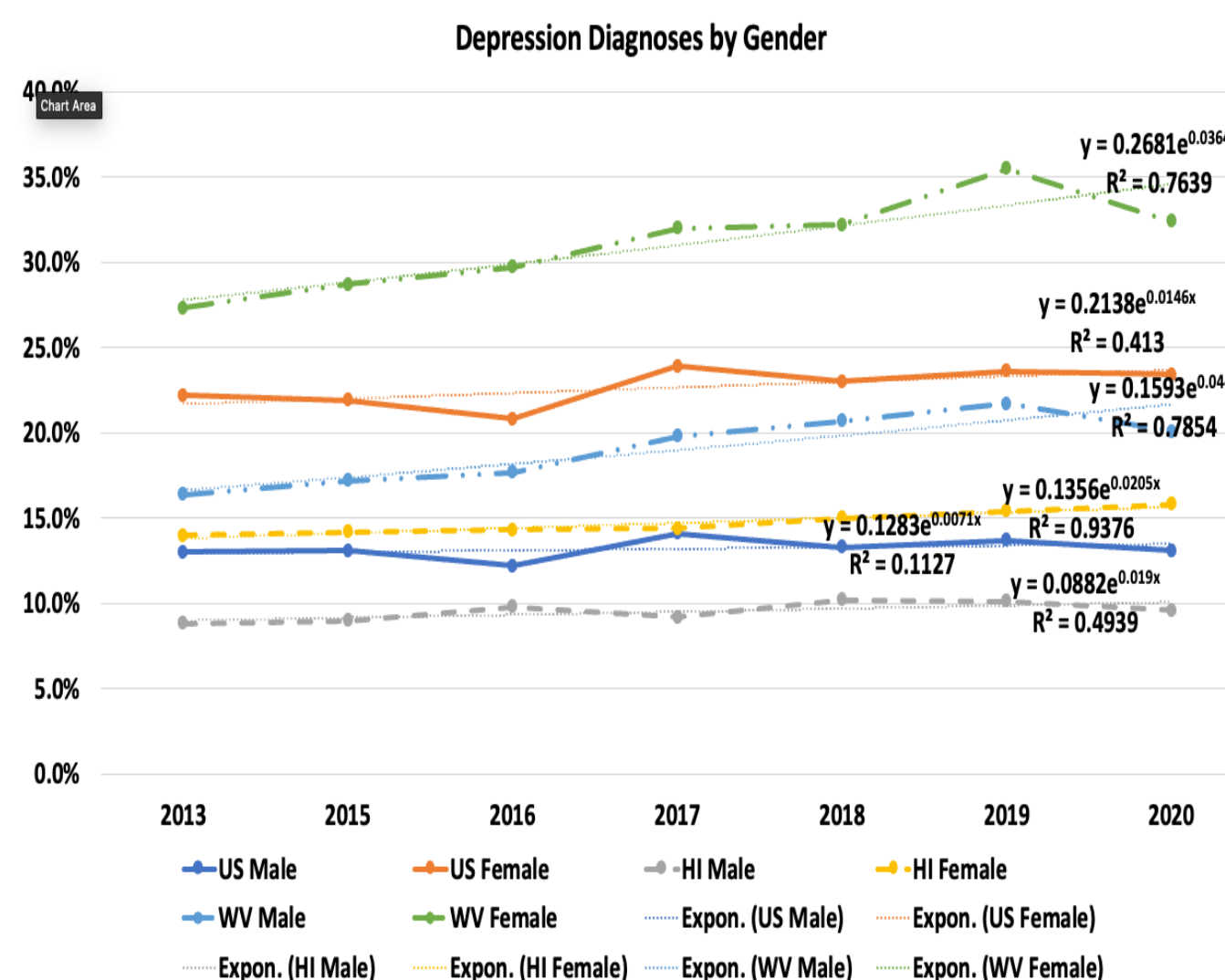
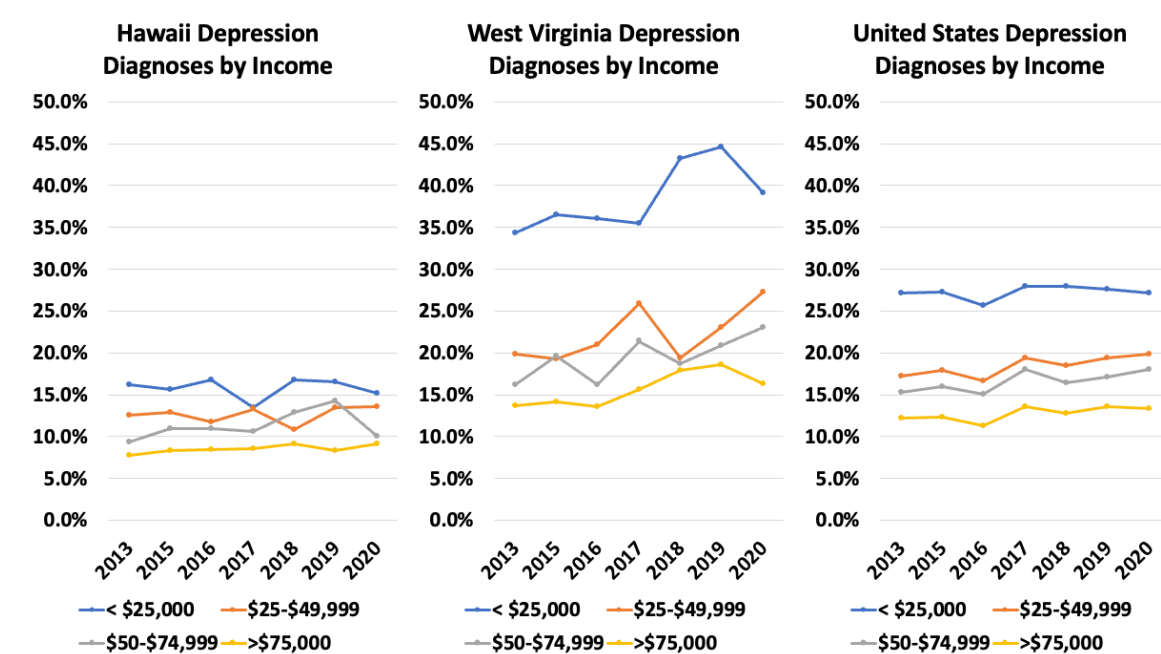
The depression diagnosis rates in each of the states, as well as the United States as a whole are increasing.

However, West Virginia is increasing at a higher rate than Hawaii and the United States.

Depression Growth Rates	Initial Condition	Growth Rate
United States	18.70%	0.012
Hawaii	11.40%	0.02
West Virginia	22.00%	0.039

Income Impacts

- Common Trends: Those making less money are diagnosed with a depressive disorder at higher rates.
- Differences: They key difference between Hawaii and West Virginia is the ratio of percentages of each population group.
- In West Virginia, the lowest income group is being diagnosed with a depressive disorder at almost twice the rate of any other income group whereas in Hawaii, the lowest income group still has significantly higher rates but the ratio isn't as big.
- This leads to the conclusion that there is more we can be doing to help the lowest income group throughout the US and especially in West Virginia.



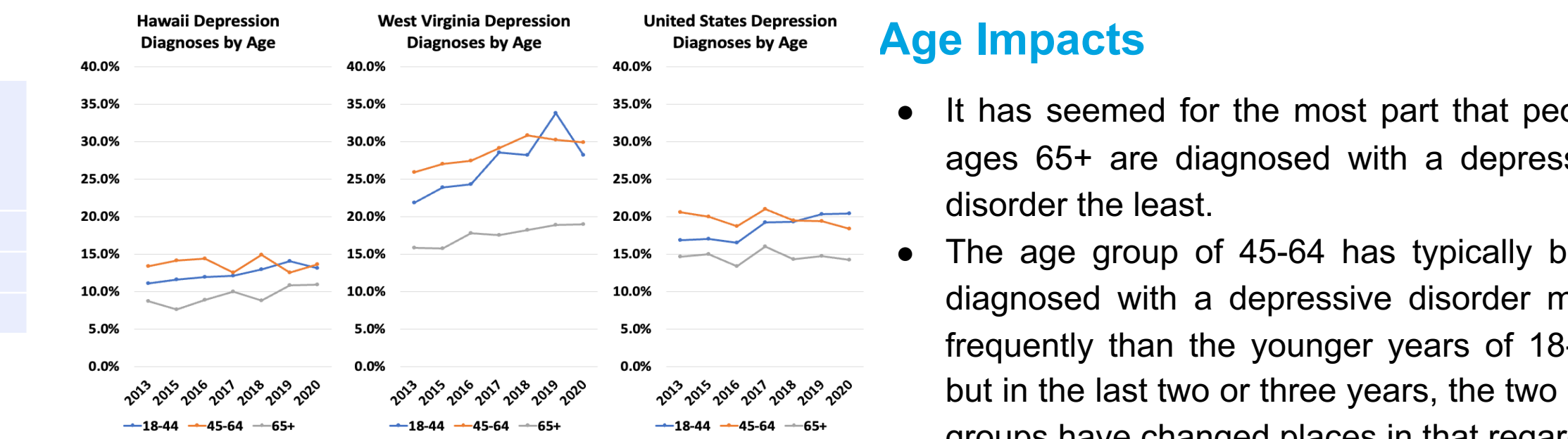
Gender Differences

- Females are being diagnosed with a depressive disorder at higher rates than males across the board.
- However, the growth rate of the male diagnoses in West Virginia is higher than the female growth rate of diagnoses. This is only the case in West Virginia as the female growth rate is the higher of the two in Hawaii and in the US as a whole.

Depression Growth Rates	Initial Condition	Overall Growth Rate	Male Growth Rate	Female Growth Rate
United States	18.70%	0.012	0.007	0.015
Hawaii	11.40%	0.02	0.019	0.021
West Virginia	22.00%	0.039	0.044	0.036

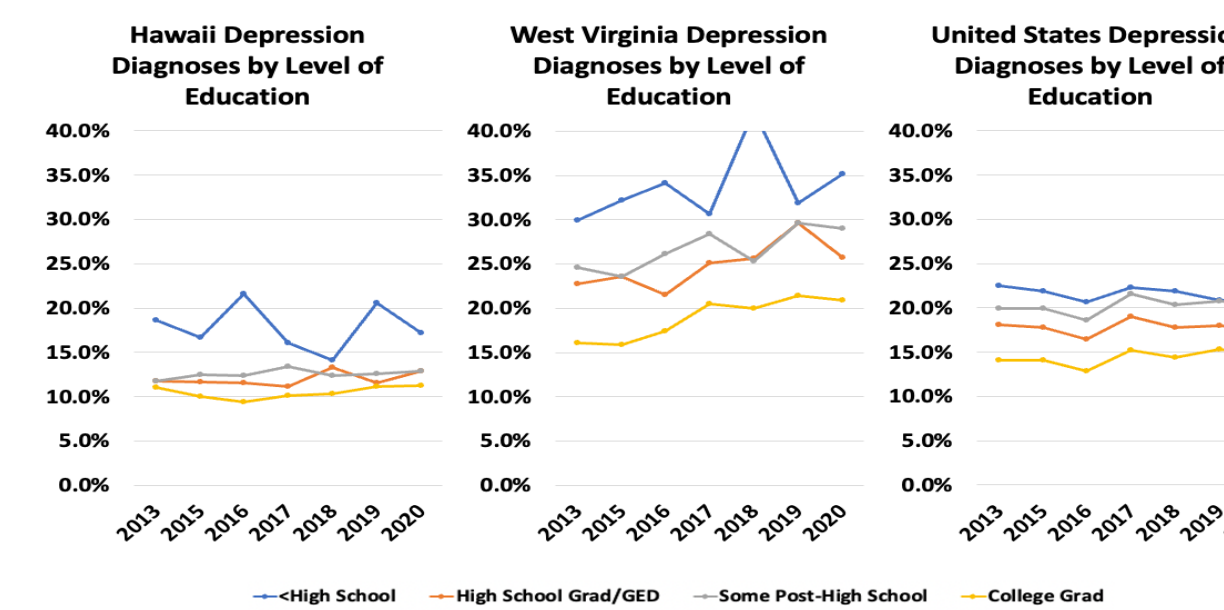
Race/Ethnicity

- In Hawaii, the Hispanics and Whites are diagnosed with the highest rates of depression whereas in West Virginia, the Multiracial and American Indians are diagnosed at the highest rates.
- With rates below those four groups in both states, we see the Blacks followed by the Pacific Islanders with Asians consistently diagnosed with a depressive disorder the least.



Education Impacts

- Those that did not complete high school are at the top of this list with college graduates being at the bottom.
- In the middle, it seems that those that have finished some post-high school education without becoming a college graduate are diagnosed at higher rates than those that simply finished high school.



Conclusion

Most research in the area of depressive disorders is focused on different types of treatments. Scientists continue to discover new ways to treat depression, but I would argue that as we look at the different categories that I have addressed here, there are in most of them, obvious groups of people that are more at risk for depression. I feel as though in several of these categories, if not all of them, there is more that can be done as preventative measures rather than simply treating the issue once it has already occurred. I believe more research into causes and possible preventative measures should be of higher priority going forward.

Literature Cited & Acknowledgements

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