# Investigation in sociodemographic factors associated with caregiver strain

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## BACKGROUND

- 20.65% of people in the US are caregivers for individuals with long-term disabilities.<sup>1</sup>
- The number of caregivers is expected to increase with an aging population, and an increase in individuals living with chronic conditions.<sup>2</sup>
- The effective establishment of social and educational support programs, is made difficult by the multifaceted nature of the strain,<sup>3</sup> yielding a circular issue that often results in a higher incidence of depression in the caregiver.
- Meta-analyses into caregiver distress generally find that female caregivers, caregivers with low educational attainment, and caregivers who live with the care recipient, are associated with higher scores on depression indices. <sup>4-5</sup>

# **OBJECTIVE**

- Analyze factors associated with increased incidence of depression among people in the US caregivers.
- Our primary question is whether demographic factors were associated with increased incidence of depression in caregivers.
- Our secondary question is whether the relation between the caregiver and care recipient, the disease or disability of the care recipient, or the type of care provided was associated with higher levels of depression for the care provider.

### METHODS

- We conducted a cross-sectional analysis of data from the 2021 Behavioral Risk Factor Surveillance System (BRFSS) conducted by the CDC.
- Respondents were included in the study if they had 1) provided regular care to a family member or friend with a long-term disability within the last 30 days, and 2) have provided care for greater than 30 days.
- Demographic variables of sex, ethnicity, income, educational attainment, and urbanicity were analyzed with whether caregivers had received a diagnosis of depressive disorder.
- The care recipient's relationship to the caregiver, the type of care they received, and their disability were also analyzed with whether the caregiver had received a diagnosis of depressive disorder.

### RESULTS

- Caregivers who are female associated with increased incidence of depressive disorder compared to male caregivers.
- American Indian and Alaskan Native and "other race" caregivers reported significantly higher rates of depression, compared to white, black, Asian, and Hispanic caregivers.
- Statistically significant increase in depressive disorder among caregivers with lower income: 41.47% of caregivers earning less than \$15k, compared to 11.03% of caregivers earning >\$200k
- Educational attainment found statistically significant, with increased rates of depression among nongraduates of high school, and those who started college but did not finish.
- Caregivers of mothers-in-law and wives were associated with significantly lower rates of depressive disorder, while caregivers of live-in partners and either grandparent found to have higher rates of depression.
- Caregivers of individuals with HIV, mental illnesses, and substance use disorders found to have the highest rates of depressive disorder, whereas caregivers of individuals with fragility/infirmary and dementia had the lowest.

#### Rates of diagnosis of depression among caregivers in the US in 2021 (n=32.676. N = 17.274.935)

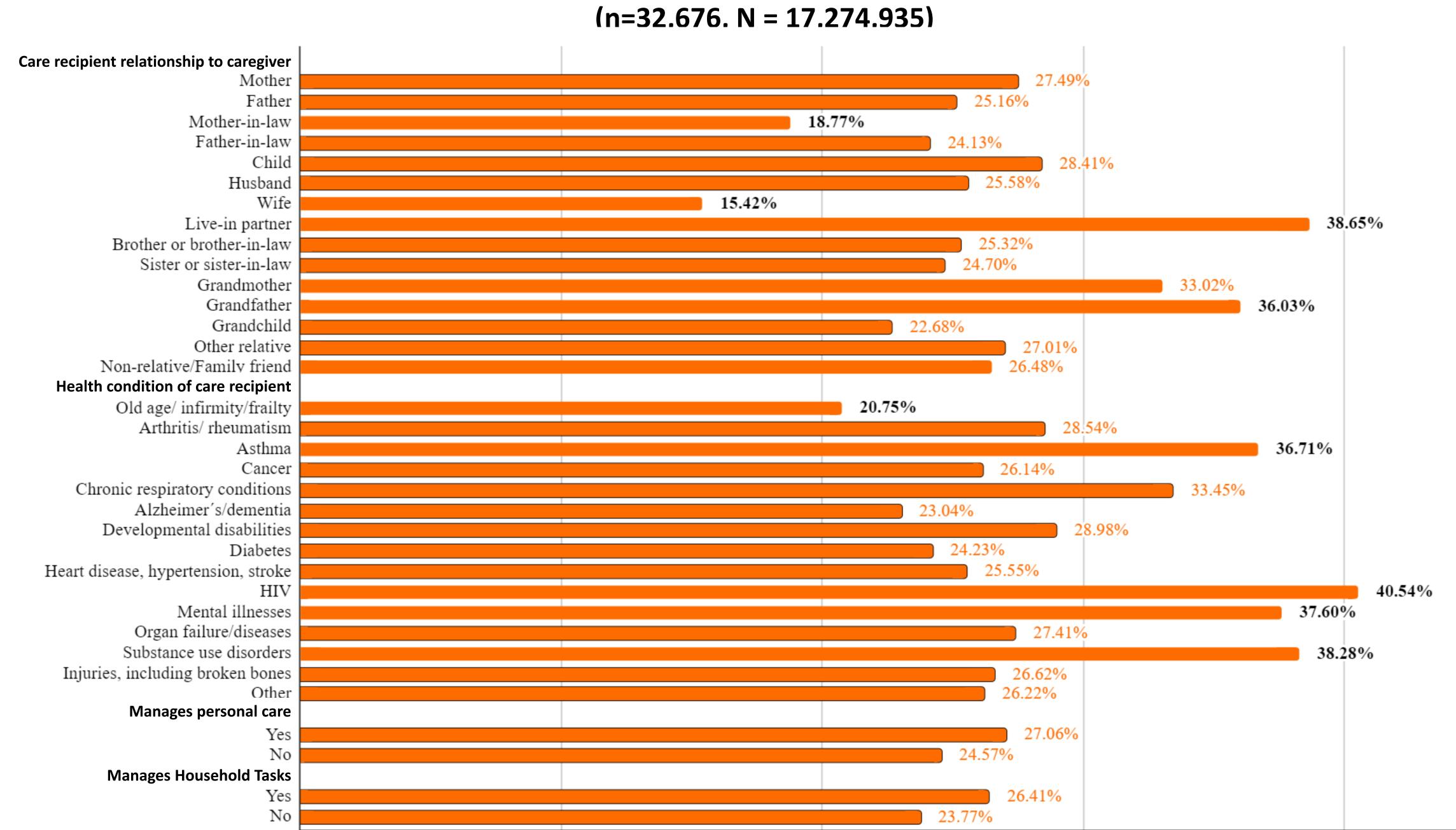


Figure 2. Displaying rates of depressive disorder compared among caregivers compared to 1) relation to caregiver, 2) disorder of care recipient, 3-4) type of care. Significant values bolded in black. \*HIV and Substance use Disorder had small sample sizes (n=12 and n=42 respectively)



#### **Rates of depression by demographic variables among** caregivers in the US in 2021 (n=32,676, N=17,274,935)

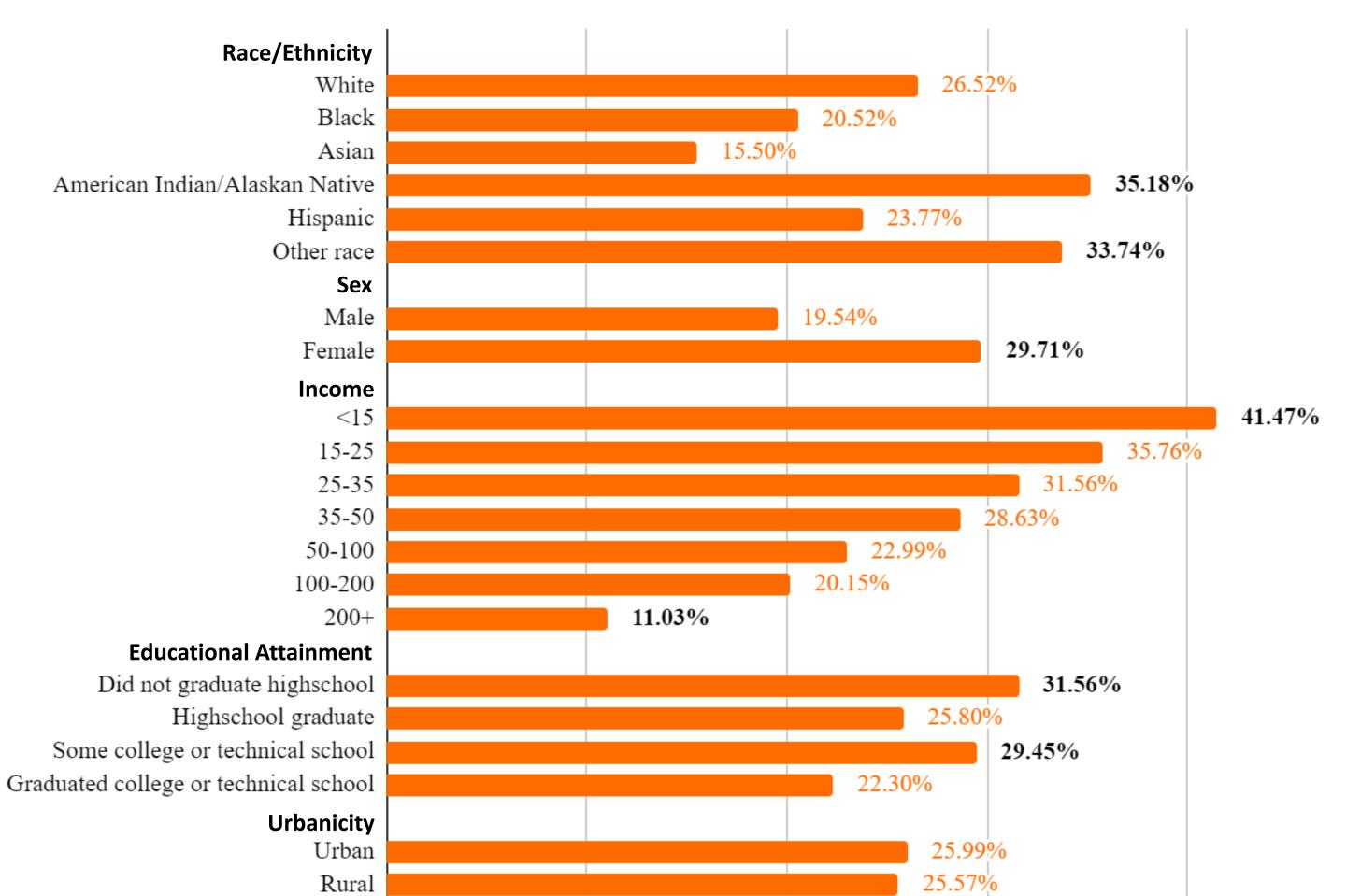


Figure 1. Displaying rates of depressive disorder compared among demographic factors of caregivers. Significant values bolded in black.

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# CONCLUSION

- Agreed with previous research that caregivers who are females and individuals with low income and educational attainment were associated with higher rates of depression.<sup>4-5</sup>
- Contrary to some previous research, we found no significant increase in the rate of depression for caregivers of individuals with dementia.<sup>5</sup> Individuals with mental illnesses and HIV were associated with higher rates of depression in the caregiver.
- Further research into the risk factors of caregiver distress can establish more directed and personalized therapeutic approaches, which-combined with effective community resources-can reduce emotional strain placed on caregivers, thereby mitigating the negative effects of caregiver stress on the prognosis and quality-of-life for care recipients.<sup>3</sup>

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