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### Gender differences in substance use and depression among caregivers

Memunat Ogunmefun  
*East Tennessee State University*

Manik Ahuja  
*East Tennessee State University*

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# Gender differences in substance use and depression among caregivers

**Memunat Ogunmefun BDS, MPH Candidate, East Tennessee State University**  
**Manik Ahuja Ph.D. , MA, East Tennessee State University**

## Background

- Around 20% of adults in the United States provide care for a loved one, with approximately 61% of these caregivers identifying as women.
- Typically, a caregiver is defined as someone who provides help and support to a family member or friend who is facing illness or disability as a result of a medical condition.
- Caregiving may be rewarding, but it can also cause significant psychological strain, leading to adverse consequences, such as turning to substance use to cope with stress.
- Increased levels of stress in caregivers can make them more susceptible to various health problems, such as depression and anxiety disorders, sleep disturbances, compromised physical health, cardiovascular disease, and substance use disorders.

## Objectives

- Our study aimed to examine the gender differences in substance use and depression among caregivers using a nationally representative sample.

## Methods

- We used cross-sectional data from the 2021 Behavioral Risk Factor Surveillance System a nationally representative U.S. telephone-based survey of adults aged 18 years and extracted data for non-metropolitan/rural counties.
- Logistic regression analyses were conducted separately to test the association between self-identified caregiver status and two outcomes, including depression and current alcohol use.
- We controlled for past month's income, race, educational status, and age. Caregiver status was identified based on providing care or assistance to a friend or family member over the last 30 days.

## Results

- Overall, 20.9% of our participants self-identified as a caregiver, while 18.8% reported depression, past month alcohol use (48.2%), past month smoking (13.5%), and past month marijuana use (4.3%).
- Significant interactions were found between caregiver status and gender (p=.0001).
- We then stratified by gender. Among males, self-identified caregiver status was associated with higher odds of depression (OR=1.48, 95% CI, 1.41,1.55).
- Among females, caregiver status was associated with higher odds of depression (OR=1.34 95% CI, 1.29, 1.39). Caregiver status did not predict alcohol use.

### • MALES

	Depression Odds ratio,95% CI	Alcohol use Odds ratio,95% CI
<b>Caregiver status</b>	<b>1.48 (1.41, 1.55)*</b>	<b>1.23 (0.95, 1.42)</b>
<b>Race/ethnic minority</b>	<b>0.80 (0.60,1.09)</b>	<b>0.91 (0.72, 1.09)</b>
<b>Low Income</b>	<b>1.63 (1.34, 1.95)*</b>	<b>1.18(0.96,1.32)_</b>
<b>&lt; High School Education</b>	<b>1.10 (0.93, 1.19)</b>	<b>1.17 (0.96, 1.32)</b>
<b>Age</b>	<b>1.02 (1.00,1.07)*</b>	<b>1.01 (0.96,1.03)</b>

(\*) = P < 0.05

## Results, continued

### • FEMALES

	Depression Odds ratio,95% CI	Alcohol use Odds ratio,95% CI
<b>Caregiver status</b>	<b>1.34 (1.29, 1.39)*</b>	<b>1.06 (0.88,1.22)</b>
<b>Race/ethnic minority</b>	<b>0.83 (0.68,0.97)</b>	<b>0.90 (0.71, 1.09)</b>
<b>Low Income</b>	<b>1.63 (1.33, 1.92)*</b>	<b>1.08 (0.89, 1.24)_</b>
<b>&lt; High School Education</b>	<b>1.41 (1.28, 1.59)*</b>	<b>1.15 (0.98, 1.32)</b>
<b>Age</b>	<b>1.04 (1.01,1.07)*</b>	<b>1.01 (0.98,1.02)</b>

(\*) =P< 0.05

## Conclusion

- Caregiving has been known to cause psychological strain which may be associated with alcohol use and depression. According to this study, being a caregiver may contribute to depression regardless of gender, but it does not necessarily affect alcohol consumption.
- Significant interactions were found by gender.
- The gender differences observed in this study highlight the need for interventions and support programs that are tailored to meet the unique needs and challenges faced by male and female caregivers.
- It is important for healthcare professionals to consider caregiver status and gender when assessing mental health risk factors.