

Mental health symptoms and substance use among non-healthcare essential workers during the COVID-19 pandemic

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INTRODUCTION

- Healthcare essential workers have reported adverse mental health effects during the COVID-19 pandemic. It is not clear the extent to which these symptoms are related to healthcare specific exposures
- Half of non-healthcare essential workers in Wuhan, China reported clinically significant levels of depression during the pandemic.

OBJECTIVES

- Assess association between non-healthcare essential worker status and mental health and substance use symptoms at the start of the COVID-19 pandemic.
- Describe the symptom trajectories of non-healthcare essential workers and compare them to the trajectory of workers in non-essential roles.

METHODS

- 3340 American adults completed an online survey in June 2020 regarding their experiences and mental health symptoms during the COVID-19 pandemic as part of a larger, longitudinal study
- 866 non-healthcare workers were compared to 658 peers who were working in non-essential positions at the start of the survey period.
- Participants completed psychometrically sound self-reported surveys of:
 - Depressive symptoms (Patient Health Questionnaire (PHQ)-2)
 - Anxiety symptoms (General Anxiety Disorder-7)
 - Loneliness (Three-Item Loneliness Scale)
 - Pain
 - Alcohol Use (Alcohol Use Disorders Identification (AUDIT))
 - Substance Use (NIDA Modified ASSIST)
 - COVID-19 diagnosis
- Objective 1:** Hierarchical linear and logistic regression models assessed association between symptoms and non-healthcare essential worker status over and above factors significant in univariate analyses
- Objective 2:** Difference-in-difference analyses was used to (a) estimate the magnitude of symptom change in essential workers and (b) to compare the pandemic era change symptoms of essential workers and peers with non-essential occupations.

RESULTS

Objective 1: Assessment of association between non-healthcare essential worker status and symptoms at Wave 1 in June 2020

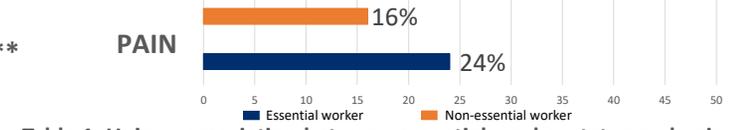
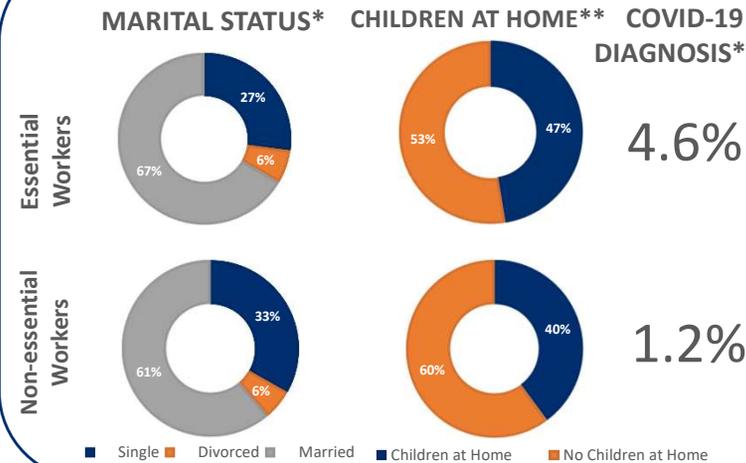


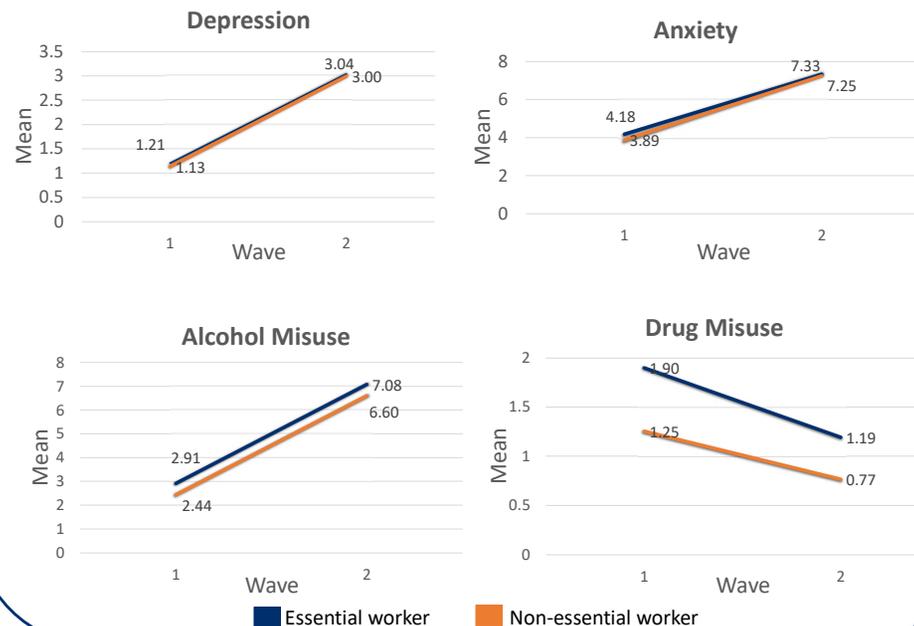
Table 1. Unique association between essential worker status and pain

	β	95% CI	Model χ^2
Pain			132.48***
Marital status			
Single	1.10	.60-2.03	
Divorced	1.23	.89-1.72	
Children at home	1.71	1.29-2.27	
COVID-19 diagnosis	28.02	10.87-72.29	
Essential Worker	.71	.54-.94	

* $p < .05$ ** $p < .01$ *** $p < .001$

Note: Non-healthcare essential workers left home significantly more often than non-essential workers and leaving home was associated with symptoms in univariate analyses. Leaving home and COVID-19 diagnoses were highly correlated and so leaving home was dropped from the multivariate analyses due to problems with collinearity. Sensitivity analyses that used leaving home produced similar results to those presented here.

Objective 2: Description of change in symptoms between Wave 1 and October 2020



CONCLUSIONS

- Non-healthcare essential worker status** was uniquely associated with **physical pain** the start of the COVID-19 pandemic.
- Over time** essential workers experienced significant increases in:
 - Depression
 - Anxiety
 - Alcohol Misuse
- Increases in essential workers symptoms **did not outpace** changes in peers' symptoms.
- Both groups experienced a small but significant decrease in drug misuse.
- Non-healthcare essential workers are facing the same increases in symptoms reported in the general population and healthcare workers.**
 - Targeted support efforts should account for the occupational and family demands faced by this group, as well as inherent group strengths.
- Limitation:** The high rate of missing data on pain symptoms at Wave 2 prevented analysis of change in this symptom that was different in essential workers.

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