

The DRAM, Vol. 17(10) - COVID-19-related social isolation stressors and their relationship to drinking behaviors in the general adult population

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Editor's Note: Today's review is part of our month-long [Special Series on Managing Addiction during COVID-19](#). Throughout September, The BASIS is highlighting how the COVID-19 pandemic has impacted people managing addiction. This Special Series is generously sponsored by the [Greater Boston Council on Alcoholism](#).

In attempts to control the spread of COVID-19, national, state, and local governments across the globe adopted a range of [precautionary restrictions](#), from stay-at-home orders to curfews to mass quarantines. These measures resulted in widespread social isolation and heightened stress for many, raising concerns over potential negative mental health consequences, including [drinking to cope](#). This week, as part of our [Special Series on Managing Addiction during COVID-19](#), The DRAM reviews [a study by Samantha N. Sallie and colleagues](#) that investigated how COVID-19-related stress may have affected drinking behaviors in the general adult population.

What was the research question?

How have COVID-19-related social isolation stressors affected drinking behaviors in the general adult population?

What did the researchers do?

The researchers developed an online survey called [Habit Tracker \(HabiT\)](#) to assess the effects of isolation related to the COVID-19 quarantine on drinking behaviors. Through the University of Cambridge and various social media channels, the researchers disseminated HabiT internationally in May 2020 (during quarantine). A total of 1,346 individuals from 83 countries completed the survey.

Participants gave information about their drinking behavior¹ in a typical week in November 2019 (i.e., pre-quarantine) and within the last week (i.e., during quarantine). To measure current severity of alcohol use, the survey included a timescale adaptation of the [Alcohol Use Disorders Identification Test \(AUDIT\)](#). Participants also responded to items related to ten factors that may contribute to COVID-19-related stress, including: being an essential worker, having children, changes in employment status due to COVID-19, knowing someone who has become seriously ill or died due to contracting COVID-19, and isolating alone. Other survey items assessed depression and anxiety.

The researchers compared weekly alcohol consumption and severity of alcohol use before and during quarantine. They divided participants into three groups based on changes in alcohol consumption - increased consumption, no change, and decreased consumption - and compared the groups on alcohol use severity and other outcomes. They also tested for associations between COVID-19-related stressors and drinking behavior, depression, and anxiety, controlling for gender, age, depression, and anxiety.

What did they find?

Overall, severity of alcohol use and amount of weekly alcohol consumption decreased from pre-quarantine to quarantine. Twenty percent of participants reported abstaining from alcohol during quarantine. Forty-five percent reported a decrease in weekly alcohol consumption, 36% reported an increase, and 19% reported no change. Those who reported increased consumption showed higher current drinking severity scores compared to individuals whose consumption remained unchanged or decreased.

Being an essential worker and having children was associated with a greater increase in alcohol consumption and drinking severity, as well as greater current drinking severity (see Figure). Healthcare workers - a subset of essential workers - showed a greater change in alcohol consumption and greater severity of current alcohol use. Personally knowing someone who had become severely ill or died from COVID-19 was associated with higher current drinking severity but not with changes in drinking behavior from pre-quarantine to quarantine. Changes in employment status and isolating alone were associated with greater depression scores but not with drinking behavior. Drinking severity scores among individuals whose alcohol consumption increased during quarantine was associated with depression and anxiety.

COVID-19-related social isolation stressors' relationship with drinking behaviors

COVID-19 STRESSOR	GREATER INCREASE IN DRINKING AMOUNT (PRE-QUARANTINE TO QUARANTINE)	GREATER INCREASE IN DRINKING SEVERITY (PRE-QUARANTINE TO QUARANTINE)	GREATER CURRENT DRINKING SEVERITY
ESSENTIAL WORKER	✓	✓	✓
HAVING CHILDREN	✓	✓	✓
KNOWING SOMEONE WHO BECAME SEVERELY ILL FROM COVID-19	—	—	✓
CHANGE IN EMPLOYMENT STATUS	—	—	—
ISOLATED ALONE	—	—	—

Figure. COVID-19-related social isolation stressors and their relationship with greater increase in drinking amount and severity (pre-quarantine to quarantine) and greater current drinking severity. Check marks indicate a statistically significant relationship between the stressor and drinking behavior after controlling for age, gender, depression, and anxiety. Click image to enlarge.

Why do these findings matter?

While alcohol consumption decreased overall during quarantine, these findings indicate that specific groups may be at increased risk of problematic alcohol use. The necessity of essential workers and additional [burden of childcare](#) and homeschooling appear to exacerbate drinking, possibly as a stress-related coping mechanism. Individuals experiencing COVID-19-related stressors may benefit from [stress management techniques](#) and social supports like government-funded daycare and universal income. Rates of depression and anxiety have [increased](#) throughout the COVID-19 pandemic, highlighting the crucial need for early detection and treatment of these psychiatric conditions. While the initial COVID-19 lockdowns are long over, healthcare providers should be aware of who is at higher risk of problematic alcohol use during quarantine-like conditions, given that [localized lockdowns may continue](#) with the emergence of new COVID-19 variants.

Every study has limitations. What are the limitations in this study?

[Recall bias](#) may have influenced the results of this study given the [retrospective](#) nature of the HabiT survey. This study aimed to investigate drinking behaviors in the general adult population. As such, the HabiT survey was completed by individuals in 83 countries, each with different [COVID-19 lockdown timelines](#) and varying restrictions. These differences may have influenced the study results.

For more information:

The [National Institute on Alcohol Abuse and Alcoholism](#) offers tips and resources for people struggling with problem drinking. For additional drinking self-help tools, please visit the BASIS [Addiction Resources](#) page.

— Kira Landauer, MPH

What do you think? Please use the comment link below to provide feedback on this article.

[1] Respondents reported the number of units of alcohol consumed within the last week. They also completed a timescale-adapted version of the [AUDIT-C](#), which assessed frequency and amount of alcohol consumption.