## **UCSF**

## **UC San Francisco Previously Published Works**

## **Title**

Prevalence and Sociodemographic Correlates of Unmet Need for Mental Health Counseling Among Adults During the COVID-19 Pandemic

## **Permalink**

https://escholarship.org/uc/item/0sw453fv

## **Journal**

Psychiatric Services, 73(2)

#### **ISSN**

1075-2730

#### **Authors**

Nagata, Jason M Ganson, Kyle T Bonin, Sydell L et al.

## **Publication Date**

2022-02-01

## DOI

10.1176/appi.ps.202100111

Peer reviewed



# **HHS Public Access**

Author manuscript

Psychiatr Serv. Author manuscript; available in PMC 2023 February 01.

Published in final edited form as:

Psychiatr Serv. 2022 February 01; 73(2): 206–209. doi:10.1176/appi.ps.202100111.

# Prevalence and Sociodemographic Correlates of Unmet Need for Mental Health Counseling Among Adults During the COVID-19 Pandemic

Jason M. Nagata, MD, MSc<sup>a</sup>, Kyle T. Ganson, PhD, MSW<sup>b</sup>, Sydell L. Bonin<sup>c</sup>, Kaitlyn L. Twadell<sup>c</sup>, Maria E. Garcia, MD, MPH, MAS<sup>d</sup>, Olivia Langrock<sup>c</sup>, Eric Vittinghoff, PhD<sup>e</sup>, Alexander C. Tsai, MD, PhD<sup>f</sup>, Sheri D. Weiser, MD, MPH<sup>d</sup>, Hoda S. Abdel Magid, MHS, PhD<sup>g,c</sup>

<sup>a</sup>Department of Pediatrics, University of California, San Francisco, San Francisco, CA, USA

<sup>b</sup>Factor-Inwentash Faculty of Social Work, University of Toronto, Toronto, ON, Canada

<sup>c</sup>Public Health Sciences Program, Santa Clara University, Santa Clara, CA, USA

Department of Medicine, University of California, San Francisco, San Francisco, CA, USA

<sup>e</sup>Department of Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, CA, USA

<sup>f</sup>Center for Global Health and Mongan Institute, Massachusetts General Hospital, Boston, MA, USA; Harvard Medical School, Boston, MA, USA

<sup>9</sup>Department of Epidemiology and Population Health, Stanford University, Stanford, CA, USA

#### Abstract

**Objective:** The objective of this study was to determine the prevalence and correlates of unmet need for mental health counseling among US adults during the COVID-19 pandemic.

**Methods:** Data from the December 9–21, 2020 cross-sectional Household Pulse Survey (N=69,944) were analyzed.

**Results:** Overall, 12.8% of adults reported an unmet need for mental health counseling in the past month, including 25.2% of adults with a positive screen for depression or anxiety. Among adults with a positive screen for depression or anxiety, risk factors associated with an unmet need for mental health counseling included female sex, younger age, income below the federal poverty line, higher education, and household job loss during the pandemic, while Asian and Black races were negatively associated with an unmet need for mental health counseling.

**Conclusions:** Over a quarter of US adults with a positive screen for depression or anxiety experienced an unmet need for mental health counseling during the COVID-19 pandemic. Policymakers should consider increasing funding for mental health services as part of pandemic relief legislation.

#### Keywords

severe acute respiratory syndrome coronavirus 2; SARS-CoV-2; COVID-19; mental health; unmet need; counseling; therapy

#### Introduction

Since the outbreak of the coronavirus disease 2019 (COVID-19) pandemic, symptoms of poor mental health have become increasingly prevalent (1–3). The prevalence of anxiety and depressive symptoms was particularly high in December 2020, when the US was experiencing a second wave of the COVID-19 pandemic, leading up to the winter holidays which many Americans spent apart from family, and prior to widespread availability of a vaccine (4–6). Factors such as infection and fear of infection, social isolation and loneliness, job loss, and food insecurity may have contributed to stress and poorer mental health (7,8). Despite the known impacts of the pandemic on mental health, little is known about the unmet mental health needs of Americans, such as the inability to access counseling or therapy, during a period of widespread depressive and anxiety symptoms in the pandemic (4). The objective of this study was to estimate the prevalence and sociodemographic correlates of an unmet need for mental health counseling among US adults during the COVID-19 pandemic.

#### Methods.

We analyzed December 9–21, 2020 data from the cross-sectional, nationally representative Household Pulse Survey (HPS; N=69,944) which is conducted by the U.S. Census Bureau in collaboration with five other federal agencies to produce data on the social and economic impacts of COVID-19 among adults in the U.S. (https://www.census.gov/ householdpulsedata). The sampling frame was drawn from the Census Bureau Master Address File as the source of the sampled household units (9). This represents approximately 140 million housing units, phone contact for over 88% of addresses, and e-mails for almost 80% of addresses in the US (9). The sampling design was a systematic sample of all eligible housing units, with adjustments applied to select a large enough sample to create state-level estimates and estimates for the top 15 metropolitan statistical areas, in addition to national-level estimates. Sampled households were contacted by email or cell phone text messaging. The Census Bureau used Qualtrics as the primary data collection method. Research involving unidentifiable/deidentified information that is publicly available is not considered human subjects research by the NIH definition because investigators cannot ascertain the identities of the individuals in the data. In these cases, IRB review is not required.

To assess the unmet need for mental health counseling, participants were asked, "at any time in the last 4 weeks, did you need counseling or therapy from a mental health professional, but did not get it for any reason?" Response options were "yes" or "no". Depressive symptoms were assessed using an adapted version of the Patient Health Questionnaire 2-item (PHQ-2) (10). Anxiety symptoms were assessed using an adapted version of the Generalized Anxiety Disorder Scale 7-item (GAD-2) (10). The timeframe was adapted

from two weeks to seven days to be consistent with the timeframe of other questions in the HPS. A threshold of 3 was used to identify positive screens for both depressive and anxiety symptoms (10). Age (divided into 10-year increments), sex, race/ethnicity, household income (calculated as below or above the federal poverty line), and education (dichotomized to more than high school education versus high school or less), recent household job loss since March 13, 2020 (yes or no), and current health insurance (yes or no) were based on self-report.

We calculated the unadjusted prevalence of an unmet need for mental health counseling. We used logistic regression to estimate sociodemographic correlates of an unmet need for mental health counseling including self-reported age, sex, race/ethnicity, income below federal poverty line, education, insurance, and household job loss during the pandemic among the entire sample and among participants who had screened positive for depression or anxiety. The amount of missing data for each variable in the analysis and demographic comparisons of participants with complete versus any missing data are shown in the online supplement. Multiple imputation by chained equations was used to impute missing data. We applied preconstructed sample weighting to account for nonresponse and coverage of the demographics of interviewed participants to known age, sex, race, and ethnicity population distributions to yield nationally representative estimates. We used Stata 15.1 for all analyses.

#### Results

The sample (N=69,944) was 51.6% female. Participants were racially and ethnically diverse (62.6% White, 17.1% Hispanic, 11.1% Black, 5.1% Asian, 4.0% Multiple Races/Other), 18.2% had income below the federal poverty line, 49.5% reported experiencing household job loss during the pandemic, 60.8% had more than a high school education, and 10.7% reported not having current health insurance. Overall, 39.1% of participants had a positive screen for depressive or anxiety symptoms in the past seven days. 12.8% of participants reported unmet mental health need for counseling, including 25.2% of those who screened positive for depressive or anxiety symptoms.

Sociodemographic factors (Table 1) associated with an unmet need for mental health counseling overall included female sex (adjusted odds ratio [AOR] 1.76, 95% confidence interval [CI] 1.56–2.00), income below the federal poverty line (AOR 1.43, 95% CI 1.21–1.69), higher education (more than high school vs high school or less; AOR 1.30, 95% CI 1.12–1.51), lack of current health insurance (AOR 1.25, 95% CI 1.02–1.52), and experiencing job loss during the pandemic (AOR 1.99, 95% CI 1.77–2.23). Every decade of older age was associated with lower odds of unmet need for mental health counseling (AOR 0.73, 95% CI 0.70–0.77). Factors that were negatively associated with an unmet need for mental health counseling included Asian race (AOR 0.50, 95% CI 0.37–0.68), Black race (AOR 0.78, 95% CI 0.65–0.94), and Hispanic/Latino ethnicity (AOR 0.83, 95% 0.69–0.99).

Among participants with a positive screen for depressive or anxiety symptoms, the estimated associations were qualitatively similar. Sociodemographic factors (Table 1) associated with an unmet need for mental health counseling overall included female sex (adjusted odds ratio [AOR] 1.51, 95% CI 1.30–1.75), income below the federal poverty line (AOR 1.26,

95% CI 1.04–1.52), higher education (more than high school vs high school or less; AOR 1.31, 95% CI 1.11–1.55), and experiencing job loss during the pandemic (AOR 1.48, 95% CI 1.29–1.71). Every decade of older age was associated with lower odds of unmet need for mental health counseling (AOR 0.80, 95% CI 0.76–0.85). Factors that were negatively associated with an unmet need for mental health counseling included Asian (AOR 0.58, 95% CI 0.39–0.85) and Black (AOR 0.76, 95% 0.61–0.94) race..

#### **Discussion**

In this population-based study of US adults from December 2020, we demonstrate a large unmet need for mental health counseling during the COVID-19 pandemic. Over twelve percent of adults reported not being able to access mental health counseling services when needed. Notably, this estimate of unmet need for mental health counseling during the pandemic doubled from the estimates in years prior to the pandemic (5.6% in 2017–2018; 6.2% in 2018–2019) (11,12). This is likely to be an underestimate given that past studies have demonstrated that many individuals with mental illness do not perceive the need for counseling or therapy (13) and the prior comparisons included unmet need for both mental health counseling and treatment.

Women, who have disproportionately borne the burden of childcare and caregiving for older adults during the pandemic, and younger adults, who have disproportionately faced job insecurity and social isolation, are at higher risk of an unmet need for mental health counseling and may benefit from additional structural (e.g., employment, financial) or mental health support (7). Lack of health insurance, living in poverty, and experiencing job loss during the pandemic are risk factors for having an unmet need for mental health counseling (3).

Despite the social upheaval and mobilization by Black Lives Matter after the murder of George Floyd, and despite anti-Asian discrimination and violence (14), we found that Asian and Black race were negatively associated with an unmet need for mental health counseling. While initially counter-intuitive, these findings fit with existing patterns of decreased access to and underutilization of mental health services in these two racial/ethnic groups, even when experiencing a diagnosable mental condition (15,16). Cultural, gender, and educational differences (and the intersection of these factors) may be playing a role in the perceived need for and acceptance of therapy or counseling specifically (17). These findings may reflect the need for cultural adaptations of psychological interventions to make them more responsive to the needs of various racial/ethnic groups (18).

COVID-19 has laid bare the unmet need for mental health counseling that varies across gender and race lines throughout the adult population. The mental health of the population was closely tied to COVID-19 stressors, as the resultant widespread unemployment and social isolation are all fundamental causes of mental health concerns (7,8). For example, employment status - whether unemployment, unstable employment, or poor working conditions - is linked to higher rates of psychological distress (7,19). Psychological distress due to employment status, financial security, and social support occurs throughout the adult population, and strikes the hardest at groups such as women, those with low income,

racial/ethnic minorities, and other marginalized groups (7,19). We expand on the previous literature on social determinants of mental health by showing that experiencing household job loss during the pandemic was associated with an unmet mental health need for counseling.

There is a critical need to understand how the social determinants of mental health present at the population level, particularly in the times of COVID-19, as well as identify multilevel structural interventions that will address the unmet need for mental health counseling at the individual, family, and population levels (19). Future research should explore how schooling pressures relate to mental health and unmet mental health needs during the pandemic, particularly for women. Understanding and identifying these determinants of mental health provides an opportunity to inform structural interventions to reduce poor mental health outcomes.

Limitations of the study include missing data (21.7% of income data); however, we used multiple imputation by chained equations to address missing data. Participants with missing data were more likely to be racial/ethnic minorities, be younger, and have lower educational attainment. The use of self-reported measures may be subject to reporting bias. The cross-sectional design precludes causal interpretations. The question about unmet mental health need in the Household Pulse Survey was specific to counseling or therapy, and did not inquire about an unmet mental health need for medication, which is an important area of future research..

Although mental health services are now being offered via telehealth (2), this service may have limitations in addressing the mental health burden of Americans, particularly as it relates to equity in access and utilization (3). To address these limitations, population mental health interventions at the individual, community, and national levels should be expanded during the pandemic (20). Furthermore, policymakers should extend the use of telehealth past emergency use during the pandemic to ensure that it continues to be used to increase access to services even after the pandemic is over. Pandemic relief legislation should also include funding for mental health services to address widespread unmet mental health need for counseling.

## **Supplementary Material**

Refer to Web version on PubMed Central for supplementary material.

#### **Acknowledgements:**

We would like to thank Samuel Benabou for providing editorial assistance.

**Financial Disclosure:** Dr. Nagata is supported by the National Heart, Lung, and Blood Institute (K08HL159350) and the American Heart Association Career Development Award (CDA34760281). Dr. Garcia is supported by the National Institute on Minority Health and Health Disparities (K23MD015115). Dr. Tsai is supported by the Sullivan Family Foundation. Dr. Weiser is supported by the National Institute of Allergy and Infectious Diseases (K24AI134326). The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

## References

 Ganson KT, Weiser SD, Tsai AC, et al.: Associations between Anxiety and Depression Symptoms and Medical Care Avoidance during COVID-19. Journal of general internal medicine. 35: 3406– 3408, 2020. [PubMed: 32875507]

- 2. Pierce BS, Perrin PB, Tyler CM, et al.: The COVID-19 Telepsychology Revolution: A National Study of Pandemic-Based Changes in U.S. Mental Health Care Delivery. Am Psychol, 2020.
- 3. Purtle J: COVID-19 and mental health equity in the United States. Soc Psychiatry Psychiatr Epidemiol 55: 969–971, 2020. [PubMed: 32556376]
- Kaiser Family Foundation: Mental Health Impact of the COVID-19 Pandemic: An Update | KFF. 2021 [cited 2021 Apr 24] Available from: https://www.kff.org/coronavirus-covid-19/poll-finding/mental-health-impact-of-the-covid-19-pandemic/
- 5. Horton R: Offline: The second wave. Lancet 395: 1960, 2020. [PubMed: 32593328]
- Ershkov S V, Rachinskaya A: A new approximation of mean-time trends for the second wave of COVID-19 pandemic evolving in key six countries. Nonlinear Dyn 1–20, 2021.
- Ganson KT, Tsai AC, Weiser SD, et al.: Job Insecurity and Symptoms of Anxiety and Depression Among U.S. Young Adults During COVID-19. J Adolesc Heal 68:53–56, 2021.
- Nagata JM, Ganson KT, Whittle HJ, et al.: Food insufficiency and mental health in the US during the COVID-19 pandemic. Am J Prev Med 60:453

  –461, 2021. [PubMed: 33602534]
- 9. Fields J, Hunter-Childs J, Tersine A, et al.: Design and Operation of the 2020 Household Pulse Survey. Suitland, MD, 2020 [cited 2021 Apr 24] Available from: https://www2.census.gov/programs-surveys/demo/technical-documentation/hhp/2020\_HPS\_Background.pdf
- Staples LG, Dear BF, Gandy M, et al.: Psychometric properties and clinical utility of brief measures of depression, anxiety, and general distress: The PHQ-2, GAD-2, and K-6. Gen Hosp Psychiatry 56: 13–18, 2019. [PubMed: 30508772]
- 11. Kaiser Family Foundation: Mental Health and Substance Use State Fact Sheets: California, 2020. Available from: https://www.kff.org/statedata/mental-health-and-substance-use-state-factsheets/california/?utm\_campaign=meetedgar&utm\_medium=social&utm\_source=meetedgar.com
- 12. Kaiser Family Foundation: Adults Reporting Unmet Need for Mental Health Treatment in the Past Year, 2018. Available from: https://www.kff.org/other/state-indicator/adults-reporting-unmet-need-for-mental-health-treatment-in-the-past-year/? currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D
- 13. Han B, Compton WM, Blanco C, et al.: Prevalence, treatment, and unmet treatment needs of us adults with mental health and substance use disorders. Health Aff 36: 1739–1747, 2017.
- Jordan A, Dixon LB: Racial-Ethnic Disparities in Mental Health Care. Psychiatr Serv 72: 236–237, 2021. [PubMed: 33517692]
- 15. Kim K, Lehning AJ, Sacco P: The Role of County Characteristics in Mental Health Service Use by Older African Americans. Psychiatr Serv 71: 465–471, 2020. [PubMed: 31960776]
- 16. Yang KG, Rodgers CRR, Lee E, et al.: Disparities in mental health care utilization and perceived need among Asian Americans: 2012–2016. Psychiatr Serv 71: 21–27, 2020. [PubMed: 31575351]
- Garcia ME, Hinton L, Gregorich SE, et al.: Unmet Mental Health Need Among Chinese and Latino Primary Care Patients: Intersection of Ethnicity, Gender, and English Proficiency. J Gen Intern Med 35: 1245–1251, 2020. [PubMed: 31667737]
- 18. Hall GCN, Ibaraki AY, Huang ER, et al.: A Meta-Analysis of Cultural Adaptations of Psychological Interventions. Behav Ther 47: 993–1014, 2016. [PubMed: 27993346]
- 19. Alegría M, NeMoyer A, Falgàs Bagué I, et al. : Social Determinants of Mental Health: Where We Are and Where We Need to Go. Curr Psychiatry Rep 20: 95, 2018. [PubMed: 30221308]
- 20. Campion J, Javed A, Sartorius N, et al.: Addressing the public mental health challenge of COVID-19. The Lancet Psychiatry 7: 657–659, 2020. [PubMed: 32531299]

## **Highlights**

• Overall, 12.8% of US adults reported unmet need for mental health counseling in the past month.

- Of US adults with a positive screen for depression or anxiety, 25.2% reported unmet need for mental health counseling in the past month.
- Risk factors associated with an unmet need for mental health counseling included female sex, younger age, income below the federal poverty line, higher education, lack of current health insurance, and household job loss during the pandemic.

**Author Manuscript** 

**Author Manuscript** 

Table 1.

Sociodemographic characteristics associated with unmet mental health care need in the Household Pulse Survey, December 9-21, 2020

			Unmet Mental	Unmet Mental Health Care Need		
	Total Population	Total Population (N=69,944) Positive Screen for Depression or Anxiety (N=27,257)	n for Depression or	Among Participan	Among Participants with Positive Screen for Depression or Anxiety $(N\!=\!27,\!257)$	pression or Anxiety
	AOR	95% CI	ď	AOR	95% CI	d
Age (per 10 years)	0.73	0.70 – 0.77	<0.001	0.80	0.76 - 0.85	<0.001
Sex						
Male		referent			referent	
Female	1.76	1.56 - 2.00	<0.001	1.51	1.30 - 1.75	<0.001
Race/ethnicity						
White alone, not Hispanic		referent			referent	
Black alone, not Hispanic	0.78	0.65 - 0.94	0.009	0.76	0.61 - 0.94	0.010
Asian alone, not Hispanic	0.50	0.37 - 0.68	<0.001	0.58	0.39 - 0.85	0.005
Two or more races + Other races, not Hispanic	1.23	0.83 - 1.80	0.300	1.18	0.75 - 1.85	0.480
Hispanic or Latino (may be of any race)	0.83	0.69 - 0.99	0.043	0.83	0.67 - 1.04	0.101
Income below federal poverty line	1.43	1.21 - 1.69	<0.001	1.26	1.04 - 1.52	0.018
Education (high school or less)						
High school or less		referent			referent	
More than high school	1.30	1.12 - 1.51	0.001	1.31	1.11 - 1.55	0.002
No current health insurance	1.25	1.02 - 1.52	0.028	1.20	0.96 - 1.50	0.116
Job loss during the pandemic	1.99	1.77 - 2.23	<0.001	1.48	1.29 - 1.71	<0.001

Abbreviations: AOR, adjusted odds ratio; 95% CI, 95% confidence interval

All models include covariates age, race/ethnicity, income, education, health insurance, and job loss.