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## Young Adult Anxiety or Depressive Symptoms and Mental Health Service Utilization During the COVID-19 Pandemic



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## ABSTRACT

**Purpose:** Young adult anxiety/depression (mental health) symptoms have increased from prior to the COVID-19 pandemic. This study assessed young adult (aged 18–25 years) anxiety/depressive symptoms, mental health care utilization (prescription drug use, counseling, and/or either), and unmet counseling/therapy needs utilizing the national Household Pulse Survey data from June to July 2021.

**Methods:** Young adult (n = 2,809) rates and subgroup differences in mental health symptoms (Generalized Anxiety Disorder-2 and/or Patient Health Questionnaire-2) were assessed, as were mental health care utilization and unmet counseling/therapy needs.

**Results:** In total, 48% of young adults had mental health symptoms. Among those, 39% received treatment and 36% reported unmet mental health counseling/therapy needs.

**Discussion:** These findings highlight young adults' ongoing mental health needs and low services receipt. Interventions and further research to reduce barriers to seeking and utilizing mental health care and to increase the capacity of providers to deliver culturally appropriate mental health care are needed.

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# IMPLICATIONS AND CONTRIBUTION

In this national young adult sample, 48% reported anxiety and/or depression symptoms indicating need for further screening or treatment. Among those with symptoms, about a third received care and roughly a third expressed unmet counseling/therapy need. Findings indicate sustained elevation of symptoms and low care utilization during the COVID-19 pandemic.

Young adult anxiety and depression are widespread. These conditions increased among adults during the pre-COVID years (from the 2000s to 2017–2018): young adult rates were the highest of any adult age group and their rates increased more than older adults [1,2]. In 2019, 20% of young adults had anxiety symptoms and 21% had depression symptoms [3]. The

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\* Address correspondence to: Sally H. Adams, Ph.D., University of San Francisco, California, 3333 California Street, Suite 245, San Francisco, CA 94118. E-mail address: Sally.Adams@ucsf.edu (S.H. Adams). immediate and long-term implications of untreated mental health conditions on health and well-being are well documented [4–6].

Overall adult mental health symptoms ([MHS]: anxiety and/or depression) increased from pre-COVID-19 to the COVID-19 time frame (early 2020); pre-to-during COVID-19, younger adults aged 18–39 years experienced greater increases in high levels of anxiety symptoms (from 9% to 21%) and moderate to high depression symptoms (9%–39%) than any other adult age group [7,8]. A Center for Disease Control and Prevention study utilizing Household Pulse Survey (HPS) data from June 2020 found that 63% of young adults aged 18–24 years reported MHS, greatly exceeding the full adult sample rate of 31% [9], a

finding replicated in a follow-up from September 2020 [10]. Recent research indicates that young adult MHS during the COVID-19 pandemic were associated with job insecurity [11] and loneliness [12].

Young adults also report greater unmet need for mental health services than older adults. In a 2019 subsample comparison of those with any mental illness, 41% of young adults aged 18–25 years reported unmet need for mental health services compared to 26% of all adults [13]. Among all young adults, regardless of symptoms status, unmet counseling need increased from 16% in August 2020 to 23% in January 2021, the highest increase of any adult age group [14].

Using HPS data, the purpose of this study was to investigate the following aims: (1) the current prevalence of young adult anxiety and/or depression symptoms (MHS), and among those with symptoms, rates of (2) mental health service utilization, and (3) unmet mental health counseling/therapy needs.

#### Methods

#### Sample

The analytic sample included young adults aged 18-25 years (N = 2,809 of 4,469) who completed the mental health section of the HPS from June 9 to July 5, 2021. The HPS, a national adult online survey conducted by the U.S. Census Bureau in collaboration with the National Center for Health Statistics and other federal agencies, aims to understand the COVID-19 pandemic's impact on U.S. families. The University of California, San Francisco Institutional Review Board approval was granted as exempt status.

## Study outcome measures for aims

Aim 1. Establish young adult rates of and subgroup differences in MHS (Generalized Anxiety Disorder-2 [range 0-6] and/or Patient Health Questionnaire-2 [PHQ-2 depression screener]) (range 0-6) [15,16]. Generalized Anxiety Disorder 2 or Patient Health Questionnaire 2 scores of  $\geq 3$  indicate that further screening or treatment is advised [15,16].

Aim 2. Among those with MHS, using a single yes/no item, establish rates of last 4 weeks: (a) prescription medication use to help with emotions, concentration, behavior, or mental health (type unspecified), (b) receipt of mental health professional counseling/therapy, and (c) recoded indicator of any treatment accessed: medications use and/or counseling/therapy receipt.

*Aim 3.* Among those with MHS, using a single yes/no item, establish last 4-week rate of unmet need for mental health counseling/therapy.

## **Analyses**

Analyses estimating outcomes were developed utilizing HPS weights adjusting for nonresponse (personal weight) and the complex survey design (80 replicate weights). Demographic subgroup differences (gender, race/ethnicity, insurance status) in MHS, receipt of services, and unmet need were tested utilizing logistic regression models conducted using SAS 9.4.

## Results

Table 1 presents descriptive characteristics of the sample and rates of MHS (anxiety/depression). Forty-eight percent of young adults had MHS. Among subgroups, MHS rates were highest for females (55%), non-Hispanic others (58%), and uninsured young adults (52%), with no significant subgroup differences.

Table 2 presents estimates of services utilization and unmet need rates among those with MHS (logistic regression results not

**Table 1**Household Pulse Survey Weeks 32–33, June to July 2021, young adults (ages 18–25) demographic characteristics and presence of mental health symptoms (anxiety and/or depression)

	Demographic characteristics weighted %	Mental health symptoms <sup>b</sup> weighted %
YA analytic sample <sup>a</sup>		47.9
(unweighted $N = 2,809$ )		
Gender		
Male	51.2	40.9
Female	48.8	55.3
Race/ethnicity		
NH <sup>c</sup> -White	57.9	46.5
NH-Black	8.0	50.0
Hispanic	23.2	50.9
NH-Asian	5.7	37.8
NH-Other, more than 1 race	5.2	58.3
Insurance status <sup>d</sup>		
Insured	85.0	48.3
Uninsured	15.0	51.8

<sup>&</sup>lt;sup>a</sup> Analytic sample included those who completed PHQ2 or/and GAD2 assessment, N=2,809/4,469 (61.5% of young adult sample).

**Table 2**Household Pulse Survey Weeks 32–33, June to July 2021 young adults (ages 18–25) with mental health symptoms: receipt of services and unmet need

Subsample of those positive for mental health symptoms unweighted (N = 1,311)	Receipt of mental health services among those positive for mental health symptoms			Unmet need for mental health counseling
	Used prescription meds weighted %		Received meds or counseling weighted %	Needed counseling but did not get weighted %
Analytic subsample	31.0	24.1	38.8	35.7
Gender				
Male	19.1	17.9	24.3	25.9
Female	40.4	28.9	50.1	43.4
Race/ethnicity				
NH <sup>a</sup> -White	37.1	29.2	46.3	34.0
NH-Black	6.3	9.6	11.9	22.2
Hispanic	20.3	14.2	25.9	43.9
NH-Asian	34.7	22.0	35.9	26.6
NH-Other	47.7	37.2	58.4	40.4
Insurance status				
Insured	34.1	27.4	42.6	35.0
Uninsured	15.5	7.1	19.5	38.8

<sup>&</sup>lt;sup>a</sup> NH = non-Hispanic.

 $<sup>^{\</sup>rm b}$  Mental health symptoms = had PHQ2 and/or GAD2 score  $\ge \! \! 3$  , indicating further screening or treatment advised.

<sup>&</sup>lt;sup>c</sup> NH = non-Hispanic. YA = young adult.

<sup>&</sup>lt;sup>d</sup> Missing insurance data (5%) resulted in higher MHS rates for the insurance subgroups than the overall rate for the analytic sample.

tabled). Thirty-one percent had used prescription medications, and rates within subgroups were highest among females (40%), non-Hispanic others (48%), and insured (34%) young adults, with no significant subgroup differences. Twenty-four percent received counseling. Subgroup rates were highest among females (29%), non-Hispanic others (37%), and insured (27%) young adults, with no significant differences. Thirty-nine percent had used medications and/or received counseling, and rates were highest for females (50%), non-Hispanic others (58%), and insured (43%) young adults, with no significant subgroup differences.

Among those with MHS, 36% reported unmet counseling need, and females (43%), Hispanic (44%), and uninsured (39%) young adults had the greatest unmet need, with no significant subgroup differences.

#### Discussion

Nearly half of the young adults exhibited MHS serious enough to warrant further screening or treatment. This finding from early June to early July 2021 shows continued elevation of MHS, extending earlier HPS COVID-19 pandemic findings [9,10]. The lack of significant differences within sex, race/ethnicity, and insurance status may be related to small sample sizes and/or HPS design and sampling factors including the complex survey design adjustments which can result in wide confidence intervals that yield nonsignificant subgroup differences.

Our findings that only about one third of young adults with MHS utilized medications and/or counseling and roughly one third reported unmet care needs support previous research on barriers to care [17] and low mental health care service utilization [18,19].

Given that approximately one third of those with symptoms received care, one might expect that closer to two thirds might report unmet needs. It is possible that those not reporting unmet needs did not recognize or feel that symptoms warranted treatment or feared stigma [17,18].

These findings highlight the importance of improving young adult mental health care through addressing the following: (1) their unique health care seeking considerations including barriers: costs, stigma, confidentiality concerns, and lack of awareness of need for care [17,18]; (2) their health care access and utilization patterns; and (3) the need to increase the size, distribution, and capacity of the mental health care workforce and primary care providers to deliver culturally appropriate mental health care [20].

A strength of this analyses is that it provides recent assessment of MHS and unmet care needs that can be tracked across the pandemic. Limitations include possible bias in results due to missing mental health data for roughly 40% of the sample, and potential noncomparability to longer-standing national survey findings due to significant differences in HPS data collection and editing, time frames of data collected, and data dissemination, all in the effort to provide timely data release for research purposes. The survey did not assess barriers relating to unmet care needs.

The rapid and successful adoption of telehealth care, necessitated by the COVID-19 pandemic, supports further development, optimization, and assessment for delivery of mental health

services, both independently and in combination with in-person care [21]. Identification and treatment of young adult anxiety and depression is crucial for supporting healthy development during this life stage that affects present and future well-being across the life course.

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