

Mental Health Conditions Among Community College Students: A National Study of Prevalence and Use of Treatment Services

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Objective: This study estimated the prevalence of self-reported symptoms of mental health problems and treatment utilization in a U.S. national sample of community college students and made comparisons with data from a sample of students at 4-year educational institutions.

Methods: The study used data for 2016–2019 from the Healthy Minds Study, an annual cross-sectional survey. The sample included 10,089 students from 23 community colleges and 95,711 students from 133 4-year institutions. Outcomes were mental health symptom prevalence based on validated screening tools and rates of service utilization, such as use of therapy and psychotropic medication. Analyses were weighted by using survey nonresponse weights.

Results: Prevalence rates were comparably high in the sample of community college and 4-year students, with just more than 50% of each group meeting criteria for

one or more mental health problems. Analyses by age group revealed significantly higher prevalence for community college students ages 18–22 years, relative to their same-age peers at 4-year institutions. Community college students, particularly those from traditionally marginalized backgrounds, were significantly less likely to have used services, compared with students on 4-year campuses. Financial stress was a strong predictor of mental health outcomes, and cost was the most salient treatment barrier in the community college sample.

Conclusions: This is the largest known study to report on the mental health needs of community college students in the United States. Findings have important implications for campus policies and programs and for future research to advance equity in mental health and other key outcomes, such as college persistence and retention.

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U.S. colleges and universities are facing what many have referred to as a “campus mental health crisis” (1, 2). Recent years have been marked by high and rising prevalence rates of depression, anxiety, and other mental health problems in college populations (3). A substantial body of research has focused on the mental health needs of students on 4-year campuses. In the United States, 34% of undergraduates (defined as students in “a 4- or 5-year bachelor’s program, associate’s program, or vocational or technical program below the baccalaureate”) are enrolled in community colleges (4). Furthermore, 49% of students who completed a degree at a 4-year college had enrolled in a community college within the previous 10 years (5). Yet, even as research on college mental health has proliferated, gaps remain in knowledge around the mental health of community college students.

For numerous reasons, it is important to understand the unique mental health needs of community college students,

HIGHLIGHTS

- More than 50% of community college students nationwide screened positive for symptoms of one or more mental health conditions, with prevalence rates highest among younger students (ages 18–22 years) relative to students age 30 years or older.
- Among community college students with symptoms, less than 30% used mental health treatment in the past year, with larger disparities in use of therapy relative to psychotropic medication.
- Students from traditionally marginalized backgrounds experience a greater mental health burden than their counterparts and are less likely to access services when in need.
- Financial stress is a significant predictor of screening positive for one or more mental health conditions, and cost of care is the most salient treatment barrier for community college students in need.

including the importance of mental health as part of a broader dialogue about equity and college persistence. Students enroll in community colleges for a range of reasons, including academic preparedness, cost, and geographic proximity. Mental health may affect enrollment decisions, academic performance, retention, and other long-term outcomes. Just 20% of first-time community college students complete a credential within 150% of the intended time frame (6); 8 years after beginning community college, 43% are no longer enrolled nor have they earned any credential (7). Mental health is rarely mentioned among factors affecting community college persistence, even though mental health challenges are known to be strong predictors of adverse academic outcomes. For example, research with students from 4-year institutions has found depression to be associated with a twofold increase in the likelihood of dropping out of college (8).

A limited body of extant research on the mental health of community college students has focused primarily on treatment access. A survey of 30,000 California public college and university students found that community college students were less likely to receive treatment, compared with their counterparts attending 4-year institutions (9). This finding is problematic because community colleges serve a higher proportion of students of color, students from low socioeconomic backgrounds, and students who work full time (10). In other words, community colleges are serving a student body known to face barriers to mental health treatment (11). Further examination of the mental health of community college students is necessary to quantify the magnitude of symptom prevalence and service use in this diverse population.

To help fill this gap, we used national data from the Healthy Minds Study (HMS) to examine mental health and service utilization in a sample of more than 10,000 community college students. Two prior peer-reviewed studies have used a modified version of the HMS questionnaire as part of a separate study, excluding 4-year campuses, to examine mental health and service use outcomes for veteran and civilian community college students in Arkansas (12, 13). One additional non-peer-reviewed report used a modified version of the HMS, with a focus on community college students (14). The current study is the first analysis of national HMS data to focus on the full population of community college students and to make comparisons with a sample of 4-year students. It is one of the largest known studies to focus on mental health in community college populations. It is important to note that this study takes a population-level approach by examining outcomes in a randomly selected sample. This method has advantages over studies that rely on clinical samples and offers new knowledge about population-level prevalence and the degree to which community college students who screen positive on validated screening tools are seeking care. Leveraging the large-scale HMS data, we also examined individual-level predictors of mental health and service use, focusing on variations by age,

race-ethnicity, financial stress, and other key characteristics across which outcomes have been shown to vary in adolescent and young adult populations (9, 11). Our focus on age, race-ethnicity, and financial stress is further motivated by known demographic differences in enrollment across institutions of higher education, namely that community college students are, on average, older than students at 4-year universities and that community colleges are composed of a higher proportion of students of color and students from low-income backgrounds (10). The findings have implications for campus policies as well as future efforts to advance equity in mental health and other key outcomes, such as college persistence and retention.

METHODS

Data

Data for this study came from the national HMS, an annual cross-sectional survey examining mental health in college populations (15). We analyzed data from six semesters from the fall of 2016 through the spring of 2019 and included 23 community colleges and 133 4-year institutions. Campuses voluntarily elect to participate in HMS, which is available for implementation at all types of postsecondary education institutions. Although the selection of campuses was not random, the sites were diverse across numerous campus characteristics, including enrollment, graduation rates, and geographic region. Previous papers using HMS data have reported on characteristics of participating 4-year institutions (15). The 23 community college sites in the current study were all public institutions and were located in seven of the nine U.S. census regions. Unrepresented were West North Central and South Atlantic. In the community college sample, enrollment ranged from less than 1,000 to more than 17,000 students. The percentage of students of color ranged from 11% to 87%, with students of color making up 30% to 40% of students at a majority of schools ($N=14$). Graduation rates, defined as degree completion within 150% of the expected time, ranged from 11% to 55%, with a majority of schools ($N=14$) having graduation rates between 20% and 40%. Funding from state governments ranged from 7% to 50% of institutional finances. Data on institutional characteristics were drawn from the Integrated Postsecondary Education Data System (16).

At campuses with more than 4,000 students, a random sample of 4,000 degree-seeking students were invited to participate in the HMS; at smaller institutions, all students were invited. The only exclusion criterion was that students had to be at least 18 years old. Within HMS, students were asked to report their degree program, with “associate’s” and “bachelor’s” as two responses; other categories were graduate programs (such as medical doctor or doctor of philosophy) not offered at community colleges. Certificate programs, a common offering at community colleges, were not an option in the survey. To compare 4-year and community college campuses, the analytic sample in the current study

was restricted to students in associate's or bachelor's programs.

The HMS used a mobile survey, and recruitment was conducted by e-mail. Students were presented with an informed consent page and agreed to the terms of participation before entering the Qualtrics survey. Students were informed of their eligibility for one of 12 cash prizes totaling \$2,000 annually (two \$500 and 10 \$100 gift cards). All students were eligible for incentives, which were not contingent on participation. Response rates were 23% in 2016–2017 and 2017–2018 and 16% in 2018–2019. The HMS was approved by institutional review boards on all campuses and was covered by a National Institutes of Health Certificate of Confidentiality.

To adjust for potential differences between responders and nonresponders, the study team constructed sample probability weights. Administrative data, including information about students' sex, race-ethnicity, and grade point average, were obtained from institutions. These data were used to construct weights, equal to 1 divided by the estimated probability of response. Thus, weights were larger for respondents with underrepresented characteristics, ensuring estimates were representative of the full population for these known characteristics.

Measures

Prevalence of mental health problems. We examined six prevalence outcomes. Binary outcomes were used because most of the measures used have been validated on the basis of standard cutoff scores and have been reported in prior studies (3, 17). Symptoms of depression over the past 2 weeks were examined with the nine-item Patient Health Questionnaire (PHQ-9) (18). Across settings and populations, the PHQ-9 has been validated as internally consistent and highly correlated with diagnosis (19). The standard cutoff score of ≥ 10 was used. Symptoms of anxiety over the past 2 weeks were measured by using the seven-item Generalized Anxiety Disorder scale (GAD-7) (20). We used the standard cutoff score of ≥ 10 , which has been shown to have high sensitivity (89%) and specificity (82%) (20). Symptoms of eating disorders were assessed by using the SCOFF Questionnaire (21), on which a score of ≥ 2 constitutes a positive screen. The following item was used to assess nonsuicidal self-injury: "This question asks about ways you may have hurt yourself on purpose, without intending to kill yourself. In the past year, have you ever done any of the following intentionally?" Students were instructed to select all that applied from a list that included cutting oneself, burning oneself, and interfering with wound healing. The responses were encompassed in a variable of any nonsuicidal self-injury versus no nonsuicidal self-injury. A single question, originally developed for the National Comorbidity Survey Replication (22), was used to assess suicidal ideation: "In the past year, did you ever seriously think about attempting suicide?" Possible responses were "yes" and "no." Finally, we created a variable for having one or more mental health

problem, defined as one or more of the following assessment results: a positive PHQ-9, GAD-7, or SCOFF screen or past-year nonsuicidal self-injury or suicidal ideation.

Academic performance. Students were asked, "In the past 4 weeks, how many days have you felt that emotional or mental difficulties have hurt your academic performance?" Students' responses were categorized as 0 days versus 1 or more days.

Service use. We examined past-year use of therapy and psychotropic medication among students with one or more mental health problem, as defined above. Among students who sought services, we reported the location of service as on campus versus off campus. We also examined treatment barriers by asking students why they had not received treatment or had "received fewer services than they otherwise would have." Students were instructed to select all that applied from eight options: financial, deal on own, not enough time, no need, don't know where to go, difficulty finding an appointment, plan to go, and other.

Individual characteristics. Within the community college sample, we explored variations by age, gender identity (female, male, transgender or gender nonconforming), race-ethnicity (White, Black, Asian, Latinx, Arab American, other, multiracial), sexual orientation (heterosexual versus lesbian, gay, bisexual, or queer [LGBQ]), and current and past financial stress.

Statistical Analysis

Analyses were intended to elucidate variations in mental health and service use among community college students, relative to students on 4-year campuses, and by individual characteristics within the community college sample. (Variations within the community college sample are presented in an online supplement.) Differences reported in the Results section are significant at $p < 0.001$. We report weighted percentages, unweighted sample sizes, odds ratios (ORs), t statistics, degrees of freedom (df), and 95% confidence intervals (CIs). Analyses were conducted using Stata, version 14.2, and weighted using the sample weights described above.

RESULTS

Sample

The sample comprised 10,089 students from 23 community colleges and 95,711 students from 133 4-year institutions (Table 1). Gender was similar in the two samples, with 56%–57% identifying as female and 40% as male. Relative to students from 4-year campuses, community college students were significantly older (mean \pm SD age = 26.1 ± 1.12 versus 21.3 ± 0.02 years, $t = 37.77$, $df = 105,777$, 95% CI = 4.49–4.98, $p < 0.001$), and a higher proportion were Latinx: 13.4% ($N = 1,081$) versus 6.2% ($N = 5,908$) (OR = 2.35, $t = 18.94$, $df = 105,777$, 95% CI = 2.15–2.56, $p < 0.001$). Community college

students reported higher rates of current and past financial stress.

Prevalence

Overall prevalence of mental health problems was similar in the community college and 4-year samples, with more than half of students meeting criteria for one or more mental health problem, roughly one-third screening positive for depression and for anxiety, and approximately 15% reporting suicidal ideation (Table 2). Relative to their same-age peers on 4-year campuses, community college students ages 18–22 years were more likely to screen positive for depression (OR=1.21, $t=4.77$, $df=82,090$, 95% CI=1.12–1.32, $p<0.001$) and anxiety (OR=1.25, $t=5.28$, $df=81,139$, 95% CI=1.15–1.35, $p<0.001$) and were more likely to report suicidal ideation (OR=1.27, $t=4.60$, $df=81,847$, 95% CI=1.15–1.40, $p<0.001$).

Service Use

Among students with one or more reported mental health problems, community college students had lower rates of therapy in the past year (30.0%, $N=1,565$) (OR=0.66; $t=-9.49$, $df=56,199$, 95% CI=0.60–0.72, $p<0.001$), relative to 4-year students (39.5%, $N=19,866$) (Table 3). Medication use was similar in both groups, with roughly one-third of students reporting use. Just 5.4% of community college students ($N=263$) who used services did so on campus, compared with 23.4% of students at 4-year institutions ($N=11,678$) (OR=0.19, $t=-18.70$, $df=56,199$, 95% CI=0.16–0.22, $p<0.001$). It is important to note that community college students ages 18–22 years were less likely to use treatment. Just 25.3% of community college students ages 18–22 years used therapy ($N=780$), compared with 39.7% ($N=17,451$) of 4-year students in the same age group (OR=0.51, $t=-11.88$, $df=47,521$, 95% CI=0.46–0.57, $p<0.001$), and 25.8% of community college students ages 18–22 years used psychotropic medication ($N=815$), compared with 31.5% ($N=13,308$) of 4-year students in the same age group (OR=0.76, $t=-4.93$, $df=46,234$, 95% CI=0.68–0.84, $p<0.001$). As shown in Figure 1, financial constraints were the most common barrier to treatment among community college students (30.1%, $N=1,693$) and the fourth most common among 4-year students (22.5%, $N=10,961$).

Within the community college sample, 56.6% of female ($N=4,050$) (OR=1.40, $t=5.72$, $df=10,084$, 95% CI=1.25–1.57, $p<0.001$) and 73.9% of transgender or gender nonconforming students ($N=160$) (OR=3.04, $t=5.29$, $df=10,084$, 95% CI=2.01–4.58, $p<0.001$) met criteria for one or more

TABLE 1. Characteristics of a U.S. national sample of community college students and 4-year college students who participated in the annual Healthy Minds Study in 2016–2019^a

Characteristic	Community college students (N=10,089)		4-year college students (N=95,711)		p
	N	%	N	%	
Age (M \pm SD years)	26.1 \pm .12		21.3 \pm .02		<.001
18–22	5,113	52.2	83,175	85.1	<.001
23–29	2,382	23.1	8,540	10.2	<.001
≥ 30	2,594	24.8	3,996	4.7	<.001
Gender identity					
Female	7,180	57.2	64,764	56.2	.2
Male	2,704	40.8	28,305	40.5	.7
Transgender or gender nonconforming	205	1.9	2,642	3.3	<.001
Race-ethnicity					
White	6,387	60.7	62,124	63.6	<.001
Black	875	8.9	5,208	7.6	.001
Asian	481	4.1	10,147	9.8	<.001
Latinx	1,081	13.4	5,908	6.2	<.001
Multiracial	898	9.2	9,663	9.7	.2
Other	283	3.1	1,461	1.8	<.001
Arab or Arab American	84	.7	1,200	1.3	<.001
Sexual orientation					
Heterosexual	8,221	83.5	76,585	79.3	<.001
Lesbian, gay, bisexual, queer	1,702	16.5	18,683	20.7	
Current financial stress					
Always	2,198	21.3	12,040	14.2	<.001
Often	2,838	27.7	22,182	24.2	<.001
Sometimes	3,507	35.6	33,479	35.1	.4
Rarely	1,180	12.3	20,038	19.6	<.001
Never	285	3.2	7,157	6.9	<.001
Past financial stress					
Always	1,783	18.0	7,552	8.9	<.001
Often	2,089	21.5	14,213	15.9	<.001
Sometimes	2,885	28.7	24,693	26.8	.003
Rarely	2,211	21.8	29,960	30.6	<.001
Never	1,038	10.0	18,461	17.9	<.001

^a Values are unweighted sample numbers (N) and weighted percentages, except for mean \pm SD age; p values are based on unadjusted linear and logistic regressions.

mental health problem, relative to 48.2% of males ($N=1,278$). (Data are available in the online supplement to this article.) LGBTQ students had higher prevalence for all outcomes, with 69.8% of LGBTQ ($N=1,227$) and 50.6% of heterosexual students ($N=4,196$) (OR=0.44, $t=-10.43$, $df=9,918$, 95% CI=0.38–0.52, $p<0.001$) meeting criteria for one or more mental health problem. Financial stress was associated with higher prevalence; 70.4% of students who reported their current financial situation as “always stressful” ($N=1,592$) (OR=4.05, $t=7.44$, $df=10,003$, 95% CI=2.80–5.86, $p<0.001$) and 61.9% who reported “often stressful” ($N=1,744$) (OR=2.77, $t=5.56$, $df=10,003$, 95% CI=1.93–3.96, $p<0.001$) met criteria for one or more mental health problem, relative to 37.0% of those who reported “never stressful” ($N=109$). Less than half (43.3%) of the “never stressful” group ($N=122$) reported academic impairment, compared with 87.3% among the “always stressful” group

TABLE 2. Prevalence of mental health conditions and symptoms in a U.S. national sample of community college students and 4-year college students who participated in the annual Healthy Minds Study in 2016–2019, by age group^a

	Community college students		4-year college students		
Age group	N	%	N	%	p
All students ^b					
Depression	3,568	37.9	31,877	37.3	.4
Anxiety	3,112	33.0	27,125	31.3	.01
Eating disorder	2,433	24.5	22,874	24.8	.7
Nonsuicidal self-injury	1,871	19.7	22,030	26.6	<.001
Suicidal ideation	1,368	14.7	12,229	14.7	.96
One or more mental health problems ^c	5,488	53.5	52,575	55.0	.04
Academic performance affected	7,438	72.9	74,115	78.0	<.001
Ages 18–22 ^d					
Depression	2,059	42.0	27,567	37.3	<.001
Anxiety	1,766	36.3	23,548	31.4	<.001
Eating disorder	1,388	27.5	20,170	25.2	.007
Nonsuicidal self-injury	1,280	27.1	19,973	28.0	.3
Suicidal ideation	847	18.2	10,801	15.0	<.001
One or more mental health problems ^c	3,087	58.1	45,958	55.3	.005
Academic performance affected	3,937	75.8	64,545	78.2	.007
Ages 23–29 ^e					
Depression	873	39.8	3,241	41.5	.3
Anxiety	789	35.4	2,708	34.4	.6
Eating disorder	567	24.5	1,969	24.2	.8
Nonsuicidal self-injury	406	17.0	1,678	22.7	<.001
Suicidal ideation	308	14.0	1,134	15.7	.2
One or more mental health problems ^c	1,336	55.6	4,883	57.8	.2
Academic performance affected	1,782	74.8	6,794	80.6	<.001
Ages ≥30 ^f					
Depression	636	28.0	1,069	28.5	.7
Anxiety	557	24.0	869	22.0	.2
Eating disorder	478	18.5	735	19.2	.6
Nonsuicidal self-injury	185	7.4	379	10.4	.004
Suicidal ideation	213	8.3	294	8.4	.9
One or more mental health problems ^c	1,065	41.9	1,734	42.7	.6
Academic performance affected	1,719	65.1	2,776	69.1	.01

^a Values are unweighted sample numbers (N) and weighted percentages; p values are based on unadjusted logistic regressions.

^b Community college students, N=10,089; 4-year college students, N=95,711.

^c Students with one or more mental health problems had one or more of the following characteristics: a positive screen for depression (nine-item Patient Health Questionnaire score ≥10), positive screen for anxiety (seven-item Generalized Anxiety Disorder scale score ≥10), positive screen for an eating disorder (SCOFF Questionnaire score ≥2), any past-year nonsuicidal self-injury, and any past-year suicidal ideation.

^d Community college students, N=5,113; 4-year college students, N=83,175.

^e Community college students, N=2,382; 4-year college students, N=8,540.

^f Community college students, N=2,594; 4-year college students, N=3,996.

(N=1,915) (OR=9.02, $t=11.29$, $df=9,880$, 95% CI=6.16–13.21, $p<0.001$) and 82.4% of the “often stressful” group (N=2,335) (OR=6.12, $t=9.80$, $df=9,880$, 95% CI=4.26–8.79, $p<0.001$). Similar patterns were revealed for past financial stress. For service use, we found significant variations by race and ethnicity. It is noteworthy that one-third of White

students (33.3%, N=1,101) used therapy, compared with 6.8% of Arab American students (N=5) (OR=0.13, $t=-4.04$, $df=5,257$, 95% CI=0.05–0.35, $p<0.001$). Similarly, just 18.2% of Latinx students (N=120) used medication, compared with 37.9% of White students (N=1,314) (OR=0.36, $t=-7.08$, $df=5,116$, 95% CI=0.28–0.48, $p<0.001$).

DISCUSSION

Although much attention has been paid to student mental health at 4-year institutions, findings from this study underscore that the campus mental health crisis extends to community colleges. Overall, we found comparably high self-reported prevalence of mental health problems in the full sample of community college and 4-year students, with more than 50% of each group meeting criteria for one or more mental health problems. We also found significantly higher prevalence for community college students ages 18–22 years, relative to their same-age peers on 4-year campuses, as well as significantly lower therapy use among community college students. There were significant disparities across community college student characteristics, with those from traditionally marginalized backgrounds having higher prevalence of mental health problems and lower service utilization.

Consistent with past research (23, 24), we found that financial stress is a contributor

to community college mental health problems in this sample. Financial stress was also associated with academic impairment due to mental health, a finding that underscores mental health as a potential mechanism driving low persistence and retention and associated inequalities. Collectively, the findings point to a need to assess financial

stress as part of the full picture of student well-being and academic persistence and to consider high levels of financial stress as a risk factor not only for retention but also for mental health. Within U.S. higher education, community colleges continue to be underfunded relative to 4-year institutions (25). Yet, given the link between student mental health and academic outcomes, including college graduation (8), there is a strong economic case for federal, state, and local investments in the mental health of community college students through programs and services aimed at treatment and prevention and for social support services that could reduce financial stress.

Financial constraints were the most common barrier to treatment in the community college sample. This finding adds to the limited research comparing community college students to those at 4-year colleges (9, 26). Differences between rates of therapy and medication use were notable and may suggest that community college students are relying on more accessible and affordable treatment. Although it is well established that antidepressants can be equally efficacious as evidence-based psychotherapies (27, 28) and access to antidepressants is easy for many people, research has indicated that antidepressants are no more cost-effective than cognitive-behavioral therapy (29). Given that psychotherapy is often viewed as preferable to medication (30–32), it is imperative that community college students be better supported in accessing these services, including through mobile resources. This is especially important for younger students, who, on the basis of the epidemiological onset of mental illness, may be experiencing their first symptoms and would benefit from the cognitive tools and coping skills built through therapy. The past-year treatment gap—the proportion of students reporting one or more mental health problems who did not use therapy or medication—was wider for community college students ages 18–22 years, relative to their peers at 4-year institutions. Age appears to be a protective factor, and analyses that do not account for age may hide, to some extent, the greater risk of mental health problems and lower use of care by community college students.

We also found significant disparities across racial-ethnic characteristics of community college students. For example, we found that Latinx students used medication at

TABLE 3. Past-year service use among students with one or more mental health problems in a U.S. national sample of community college students and 4-year college students who participated in the annual Healthy Minds Study in 2016–2019, by age group^a

Age group	Community college students		4-year college students		p
	N	%	N	%	
All students ^b					
Therapy	1,565	30.0	19,866	39.5	<.001
Psychotropic medication	1,762	32.2	15,766	32.5	.7
On-campus service use	263	5.4	11,678	23.4	<.001
Ages 18–22 ^c					
Therapy	780	25.3	17,451	39.7	<.001
Psychotropic medication	815	25.8	13,308	31.5	<.001
On-campus service use	145	5.4	10,696	24.7	<.001
Ages 23–29 ^d					
Therapy	400	33.3	1,705	36.3	.2
Psychotropic medication	478	36.6	1,704	36.7	.95
On-campus service use	64	6.1	800	17.4	<.001
Ages ≥30 ^e					
Therapy	385	39.5	710	43.2	.2
Psychotropic medication	469	45.5	754	44.0	.6
On-campus service use	54	4.6	182	10.0	<.001

^a Values are unweighted sample numbers (N) and weighted percentages; p values based on unadjusted logistic regressions. Students with one or more mental health problems had one or more of the following characteristics: a positive screen for depression (nine-item Patient Health Questionnaire score ≥10), positive screen for anxiety (seven-item Generalized Anxiety Disorder scale score ≥10), positive screen for an eating disorder (SCOFF Questionnaire score ≥2), any past-year nonsuicidal self-injury, and any past-year suicidal ideation

^b Community college students, N=5,488; 4-year college students, N=52,575.

^c Community college students, N=3,087; 4-year college students, N=45,958.

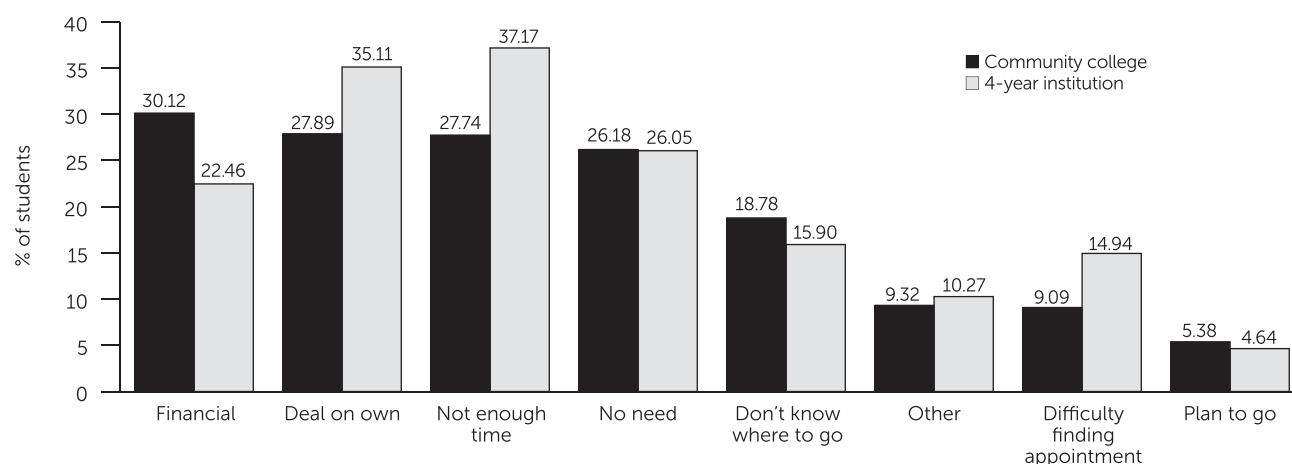
^d Community college students, N=1,336; 4-year college students, N=4,883.

^e Community college students, N=1,065; 4-year college students, N=1,734.

roughly half the rate of White students. It is unclear if this difference was due to cultural preferences or lack of access. This is an important area for future research, especially given that college enrollment among non-Hispanic Whites has declined steadily since 2010, while minority groups' enrollment has remained fairly steady, largely because of increases in Latinx enrollment (33). Although Arab Americans were a small group within our study, it is notable that they reported the lowest use of therapy but had rates of medication use similar to those of White students. This finding is consistent with past work demonstrating that Arab Americans often present with somatic complaints and are more comfortable with medical approaches (34).

Although generalizability of findings is strengthened by the HMS's multisite sample and random sampling at the student level, this study had several limitations. First, although symptoms were measured with validated screens, these assessments do not represent diagnoses. Second, although the institutional sample is large and diverse, it is not random. Survey weights do not account for probability of school selection, and findings may not be generalizable; a fully representative national sample of community colleges is another priority for future research. Third, although response rates were typical for online surveys (35), this method clearly raises the potential for nonresponse bias. Researchers applied weights for known characteristics of

FIGURE 1. Barriers to mental health service use among community college and 4-year college students with one or more mental health problems^a



^a Values are weighted percentages among students with one or more mental health problems, defined by one or more of the following characteristics: a positive screen for depression (nine-item Patient Health Questionnaire score ≥ 10), positive screen for anxiety (seven-item Generalized Anxiety Disorder scale score ≥ 10), positive screen for an eating disorder (SCOFF Questionnaire score ≥ 2), any past-year nonsuicidal self-injury, and any past-year suicidal ideation.

the full population, but there may be differences on unobserved characteristics.

CONCLUSIONS

In one of the largest known studies of its kind, findings revealed a high prevalence of mental health problems among community college students and lower rates of treatment use, compared with treatment use by students at 4-year settings. As U.S. higher education is shaped by the COVID-19 pandemic, shifts in enrollment could exacerbate known disparities in mental health, college persistence, and other key social and economic outcomes. Continued research on the unique mental health needs of community college students is imperative in promoting equity across these domains, and funding for mental health services on community college campuses is a high priority. Publicly available national data sets, such as the HMS, provide important opportunities for researchers to contribute evidence that can be used by campus leaders, state governments, and others positioned to address system-level disparities.

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