Major Article

Mental Health Treatment Barriers Among Racial/Ethnic Minority Versus White Young Adults 6 Months After Intake at a College Counseling Center

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Abstract. Objective: This study examined mental health treatment barriers following intake at a counseling center among racially/ethnically diverse college students. **Methods**: College students ($N = 122$) seen for intake at a college counseling center in 2012–2013 completed self-reports of depressive symptoms, suicidal ideation, and mental health treatment barriers 6 months later. **Results**: Racial/ethnic minority students less often reported previous mental health treatment and treatment after being seen at the counseling center, compared with white students. They also endorsed more treatment barriers—most commonly, financial concerns and lack of time—and more often endorsed stigma-related concerns. Treatment barriers were associated with not following through with counseling center recommendations and with greater depressive symptom severity but not with suicidal ideation during follow-up. **Conclusions**: Improving mental health treatment seeking among racial/ethnic minority college students should involve decreasing treatment barriers, improving access to affordable options, providing flexible scheduling or time-limited options, and decreasing stigma.,

Keywords: college students, counseling, depression, mental health treatment barriers, suicidal ideation

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Despite a high prevalence of psychiatric disorders,[1] college-aged racial and ethnic minorities are less likely than their white counterparts to seek mental health treatment.[2] The Substance Abuse and Mental Health Services Administration (SAMHSA) has identified mental health service underutilization on college campuses, coupled with increased prevalence of depression and suicide attempts, as a national health crisis.[3] A nationwide survey of students from 26 colleges found that only 31% of students who endorsed clinically significant depressive symptoms and 38% of students who reported suicidal ideation in the previous 12 months had received mental health treatment during that period of time.[4] Research examining the causes of such low service use among college students has consistently identified several barriers to care.[5–7] A study of college students with a lifetime history of suicidal ideation found that students who perceived that they had insufficient mental health treatment cited a number of barriers that kept them from obtaining treatment, including thinking they could handle the problem without treatment (58%), lack of time (42%), thinking treatment would not be helpful (36%), thinking that others would have a negative opinion of them (39%), and not knowing where to get treatment (24%).[5] Similar barriers have been identified elsewhere in the literature.[6,7]

Prior studies on treatment barriers in college populations have relied on samples consisting primarily of white students. As a result, they offer little information related to variations due to racial and ethnic minority status. Consequently, the present study aimed to identify differences in often-cited barriers to treatment between racial/ethnic minority and white college students seen for intake at a college counseling center and followed up 6 months later.

Racial/Ethnic Disparity in Treatment Utilization

Rates of mental health service use among community samples of racial/ethnic minorities at risk for psychiatric symptoms are relatively low,[8,9] with similar trends among adolescents engaging in suicidal behavior.[10,11] One study of a community sample of teenagers who reported having made a suicide attempt in the previous 12 months found that white teens (31%) were more likely than black (16%) and Hispanic teens (17%) to have used outpatient mental health services.[11] This trend extends to college students; recently, a national survey of over 14,000 college students found that black, Latino, and Asian individuals were less likely to seek mental health counseling.[4] Therefore, although the mental health needs of college students, in general, are not being met, the issue is more pronounced for racial/ethnic minority students.

Factors Impacting Mental Health Treatment Utilization

Not perceiving a need for care is a well-documented barrier to seeking mental health treatment in the general population. Notably, one study of low-income women with major depression found that US-born black women, non–US-born black women, and non–US-born Latinas were less likely to perceive a need for and to seek mental health treatment than US-born Latinas and white women.[12] Similarly, this disparity is evident among college students. Eisenberg and colleagues found that 51% of students with a mental health problem (ie, screened positive for major depression, an anxiety disorder, suicidal ideation, or nonsuicidal self-injury) who thought they needed help sought treatment, compared with 11% of students with a mental health problem who reported that they did not need help.[4] For college students with a history of suicidal ideation, the most commonly cited reasons for not seeking treatment included a preference for dealing with problems on their own, perceiving stress as normal, receiving support from other sources, and not having enough time to seek formal treatment.[5,6]

Stigma-related concerns also deter mental health help seeking.[8,12–15] A study of low-income women found that non–US-born Latinas and non–US-born black women identified more stigmas for seeking mental health treatment than US-born Latina and black women. Non–US-born black women were also less likely to express interest in seeking treatment than were US-born white women.[12] Another study of a sample of depressed women from community health clinics who met screening criteria for major depression found that stigma-related concerns were negatively correlated with perceived need for mental health treatment.[14]

Another possible explanation for lower utilization of traditional mental health services may involve seeking alternatives to traditional mental health treatment.[16,17] Gong and colleagues found that Filipino Americans were more likely to seek help for mental health concerns from family, friends, a priest or minister, a spiritualist, herbalist, or a fortune teller than from a mental health professional.[16] An aforementioned national survey of college students found that 78% of students who screened positive for major depression and 81% of students who reported suicidal ideation in the previous 12 months sought help from nonclinical sources—primarily family and friends.[4] Thus, college students, especially racial and ethnic minorities, who do not seek mental health treatment may, instead, seek help from other sources.

The present study examined racial/ethnic differences in previously identified barriers to seeking treatment among college students seen for an intake at a college counseling center and followed up 6 months later. It also examined whether mental health treatment barriers would moderate the relation between racial/ethnic minority status and risk for depression and suicidal ideation. We expected that, compared with white students, racial/ethnic minority students would report more barriers to seeking treatment, as well as lower mental health utilization rates, in the 6-month follow-up. Additionally, we expected that the number of reported barriers would be associated with whether or not individuals followed through with counselor recommendations made at intake, along with reported symptoms of depression and suicidal ideation at the follow-up.

METHODS

Participants

A sample of 122 college students (86 female), aged 17–34 ($M = 21.4$, $SD = 3.6$), who completed intake assessments at a college counseling center in an urban public university in the northeastern United States between May 2012 and November 2013 were recruited to take part in an online survey approximately 6 months following their initial assessment. Initially, 582 students (65% female; 62% racial/ethnic minority), aged 17–34 ($M = 21.9$, $SD = 3.3$) were invited to complete the survey, selected randomly from data available from 1,943 students who visited the counseling center approximately 6 months earlier. Of those invited, 124 students (21%) completed the study, and 122 students provided complete data. Racial/ethnic distribution of the final sample was as follows: 36% white, 28% Asian, 16% Latino, 3% black, 13% multiracial, and 4% other races. Forty-three percent ($n = 52$) reported a lifetime history of suicidal ideation at intake, and 15% ($n = 18$) reported a lifetime suicide attempt history, proportions that were representative of the rates of suicidal ideation and attempt history among students invited to take part in the study.

Measures

Intake Assessment

Clinicians (licensed clinical psychologist, licensed clinical social worker, or MA-level social work and psychology interns, under the supervision of a licensed clinician)

completed an Initial Assessment Form that included information about the students' reasons for seeking treatment, reported areas of difficulty, treatment history, substance use, and risk of self-harm (ie, suicide attempt history or ideation). Students also completed the Standardized Dataset (SDS), a self-report questionnaire—developed based on information derived from more than 100 counseling centers—that collects demographic information, symptom information, and information about treatment history. The SDS includes questions about suicidal ideation and attempt history (ie, students are asked to indicate if they have ever "seriously considered attempting suicide" (ideation) and if they ever "made a suicide attempt," either *never*, *before college*, *after college*, or *both*).[18] History of suicidal ideation and attempts were determined by the clinician interview and SDS. Responses of *before college*, *after college*, or *both* to SDS questions about suicidal ideation or attempts, respectively, were considered an endorsement of lifetime suicidal ideation or attempt history.

Counseling Center Assessment of Psychological Symptoms-62

Depressive symptoms were assessed using the 13-item depression subscale ($\alpha = .91$) of the Counseling Center Assessment of Psychological Symptoms-62[19] (CCAPS-62), administered at intake and follow-up. The CCAPS is a 62-item self-report questionnaire designed to assess college-student mental health. Items are rated on a Likert scale ranging from 0 (*not at all like me*) to 4 (*extremely like me*) and are averaged to obtain raw scores. Scores above 1.70 on the depression subscale indicate clinically significant symptoms above the 56% percentile, based on norms developed using a sample of 59,606 treatment-seeking students from 97 college counseling centers in the United States.[19] In the present sample, internal consistency reliability of the CCAPS depression subscale was .91 at follow-up.

Suicidal Ideation and Suicide Attempts (Lifetime and at 6-Month Follow-Up)

Lifetime suicidal ideation and attempts were reassessed at follow-up using the SDS (see above), and suicidal ideation and attempts made during the 6-month follow-up period were assessed using modified questions from the Youth Risk Behavior Survey.[20] Suicidal ideation was assessed using the question, "During the past 6 months, did you ever seriously consider attempting suicide?" Suicide attempt in the previous 6 months was examined using the question, "During the past 6 months, how many times did you actually attempt suicide?"

Experiences With Mental Health Treatment Questionnaire (EMHT)

The EMHT, a new measure developed for the present study, inquires about individuals' experience with and current interest in mental health treatment (excluding the treatment they received at the counseling center), along with reasons that kept them from seeking mental health treatment in the previous 6 months and reasons that might keep them from seeking treatment in the future—including the following: fear of reactions from family or friends, not knowing if a problem warrants treatment, too little time to dedicate to treatment, preferring to deal with problems on their own, preferring to seek help from other sources, and financial concerns (eg, not having insurance). The EMHT assesses a total of 11 possible barriers to treatment. Internal consistency reliability for the 11 options comprising the past barriers scale was .67, and reliability for the 11 options constituting the anticipated barriers scale was .68. An "other" option allowed students to fill in any additional reasons for not seeking treatment.

Additionally, the measure inquired about students' history of mental health treatment since they were seen at the counseling center and whether they remembered the recommendations given to them by the counseling center (if so, they were asked to write them down). The EMHT also assessed whether students agreed with the treatment recommendations provided by the counseling center ("Did you agree with the recommendations provided to you by your counselor at [the counseling center]"), whether they followed through with them ("Did you follow through with the recommendations from your counselor at [the counseling center]"), and whether they received adequate assistance in following through ("Were you provided with adequate assistance in following through with the treatment recommendations?").

Procedure

Students seen for intake at a college counseling center were contacted by electronic mail by an administrator at the counseling center approximately 6 months after their intake to complete a 30-minute online survey for $20 in compensation (Amazon gift card or cash).* The e-mail sent to each participant contained a link and a code that was assigned to the participant. The participant was instructed to use that code when completing the survey. This code

*The process at the counseling center from which participants were recruited typically involves seeing each client for a comprehensive assessment, during which a decision is made as to whether the client would benefit from short-term therapy at the counseling center, or would be better served by a referral to a community agency that either offers more comprehensive services, more specialized services, or less-time-limited therapy. Each client is assigned to work with a counselor following the initial assessment, and this counselor begins working with the student approximately 1 week following the initial assessment, either to begin short-term therapy or to assist the client with the referral recommendation. Depending on the needs of the client, the counselor either helps the student make an appointment during a counseling session, or plans a follow-up with the client over the phone after the referral recommendation is made to assess progress towards pursuing the referral and whether additional help from the counselor is indicated.

was the only identifier attached to the participant's responses, so that the research team would not have access to the student's name. Participants provided informed consent online prior to study participation. Students with CCAPS-Depression scores above the 70th percentile or who reported that they had seriously considered making a suicide attempt in the previous 6 months or had made a suicide attempt were contacted by counseling center staff to return for an intake. When such students were identified by the research team as being in need of follow-up, their codes were provided to the counseling center, so that counseling center staff could match the codes to the participants' names and make contact. However, only the research team (and not the counseling center staff) had access to the student's de-identified survey responses.

Forty-seven students (39%) received follow-up calls by counseling center staff after completing the study. Of these 47 individuals, 34 students responded to follow-up attempts either by telephone, e-mail, or by returning to the counseling center for an evaluation, and 13 students did not respond to follow-up attempts. The procedures used in this study received institutional review board approval.

Data Analyses

Chi-square analyses were conducted to examine whether endorsement of suicidal ideation, mental health treatment history, follow-through with treatment recommendations, and treatment barriers varied by racial/ethnic minority status. Differences between racial/ethnic minority versus white college students in average depressive symptoms and total number of reasons reported for not seeking treatment were examined via independent-samples t tests (note that these variables were approximately normally distributed). Predictors of depressive symptoms at follow-up were examined via multiple linear regression, and predictors of follow-through with counseling center treatment recommendations and of suicidal ideation at follow-up were examined via logistic regression.

RESULTS

Symptoms, Treatment, and Barriers by Racial/Ethnic Minority Status

There were no statistically significant differences in depressive symptoms (at baseline and follow-up), lifetime suicide attempt, and suicidal ideation history and in suicidal ideation during the follow-up period between racial/ethnic minority and white college students (see Table 1). However, racial/ethnic minority students less often reported having sought treatment in the past (53% vs 89%), $\chi^2(1) = 16.22$, $p = .000$, and also treatment after they were seen at the counseling center (31% vs 52%), compared with white students, $\chi^2(1) = 5.49$, $p = .02$. In addition, they endorsed a greater number of barriers to treatment in the previous 6 months ($M = 4.06$, $SD = 2.34$ vs $M = 3.14$, $SD = 1.97$), $t(120) = 2.22$,

TABLE 1. Sample Characteristics

	All ($N = 122$)				Minority ($N = 78$)				White ($N = 44$)			
Characteristic	*n*	%	*M*	*SD*	*n*	%	*M*	*SD*	*n*	%	*M*	*SD*
Gender												
Male	34	28			23	29			11	26		
Female	86	71			55	71			31	72		
Transgender	1	1			0	0			1	2		
Age			21.5	3.6			21.4	3.6			24.7	3.7
Past mental health treatment (besides counseling center)[b]	80	66			41**	53			39	89		
Mental health treatment during follow-up[b]	47	39			24*	31			23	52		
Agree with recommendations	105	86			67	88			38	86		
Follow-through with recommendations	54	44			32	41			22	50		
Adequate assistance in following through with recommendations	90	74			59	76			31	71		
Suicide attempt, lifetime[+++]	18	15			12	15			6	14		
Suicidal ideation, lifetime[a]	52	42			30	40			22	50		
Suicidal ideation, past 6 months[b]	22	18			14	18			8	18		
CCAPS Depression												
Baseline[a]			2.04	0.82			2.00	0.75			2.13	0.95
6-month follow-up[b]			1.78	0.91			1.78	0.86			1.79	0.99
Total barriers to mental health treatment[b]			3.73	2.25			4.06*	2.34			3.14	1.97
Total anticipated barriers to mental health treatment[b]			3.17	2.22			3.50*	2.33			2.59	1.90

Note: CCAPS = Counseling Center Assessment of Psychological Symptoms-62.
[a]Assessed at baseline.
[b]Assessed at 6-month follow-up.
[+++]Based on combined information from clinician intake interview at baseline and Standardized Dataset at follow-up.
*$p < .05$; **$p < .01$

TABLE 2. Reasons That Kept Participants From Seeking Help From a Mental Health Practitioner in the Previous 6 Months and That Would Keep Them From Seeking Help in the Future

	Past barriers								Anticipated barriers							
	Minority		White		Total				Minority		White		Total			
Reasons	*n*	%	*n*	%	*n*	%	χ^2	*p*	*n*	%	*n*	%	*n*	%	χ^2	*p*
Too little time to dedicate to seeking a mental health professional	48	62	14	32	62	51	9.94	<.01	41	53	18	41	59	48	1.53	.22
Fear of what parents or other family members would think	22	28	6	14	28	23	3.38	.07	21	27	4	9	25	21	5.49	.02
Fear of what others (besides family) would think	22	28	4	9	26	21	6.13	.01	17	22	2	5	19	16	6.37	.01
Not knowing if problem important enough	38	45	19	43	57	47	0.35	.56	26	33	13	30	39	32	0.19	.67
Not knowing how to get in touch with a mental health professional	17	22	8	18	25	21	0.23	.64	13	17	7	16	20	16	0.01	.91
Preferring to deal with problems on own	38	49	20	46	58	48	012	.73	28	36	11	25	39	32	1.54	.22
Preferring to seek help from family or friends	11	14	3	7	14	12	1.47	.23	10	13	3	7	13	11	1.07	.30
Not believing that a mental health professional would be able to help	23	30	13	30	36	30	0.00	1.00	21	27	11	25	32	26	0.05	.82
Had a bad experience with a mental health professional in the past	10	13	8	18	18	15	0.64	.42	9	12	11	25	20	16	3.72	.05
Not comfortable sharing problems with a mental health professional	27	35	12	27	39	32	0.70	.40	28	36	9	21	37	30	3.18	.08
Financial concerns (eg, no insurance, not enough money to pay for it)	50	64	24	55	74	61	1.08	.30	52	67	22	50	74	61	3.27	.07

Note. Percentages may not add to 100% due to rounding.

$p = .03$, and anticipated future barriers ($M = 3.50$, $SD = 2.33$ vs $M = 2.59$, $SD = 1.90$) than did white students, $t(120) = 2.21$, $p = .03$.

Most students agreed with the recommendations provided by counseling center staff (86%) and reported that they were provided with adequate assistance in following through with them (74%). However, less than half of students actually followed through with recommendations (44%), regardless of race.

Most Commonly Endorsed Barriers to Mental Health Treatment

The most commonly cited barriers to mental treatment during the follow-up period, across racial group, included financial concerns (61%), too little time (51%), preference for dealing with problems on their own (48%), and not knowing if a problem warranted treatment (47%). Most of these barriers were distributed in approximately equal proportions across racial category (see Table 2). However, racial/ethnic minority students more often cited lack of time as a barrier to past mental health treatment (62%), relative to white students (32%). Although only about one-fifth of students cited fear of stigma from family, friends, or other people as a barrier, racial/ethnic minority students more often cited fear of what others (besides family and friends) would think of them (28%) as a barrier than did white students (9%).

Follow-Through With Treatment Recommendations, Depressive Symptoms, and Suicidal Ideation at Follow-Up

To examine predictors of follow-through with treatment recommendations, racial/ethnic minority status, baseline depressive symptoms, and number of past treatment barriers endorsed were entered into a logistic regression, adjusting for agreement with recommendations and whether students received assistance in following through. Total treatment barriers were associated with lower odds (odds ratio [OR] = 0.78, 95% confidence interval [CI] [0.65, 0.95], $p = .01$) of following through with recommendations, whereas being provided with adequate assistance was statistically associated with over 5 times higher odds of following through with recommendations (OR = 5.14, 95% CI [1.75, 15.11], $p = .003$). Racial/ethnic minority status (OR = 0.78, 95% CI [0.33, 1.82], $p = .56$), depressive symptoms (OR = 1.40, 95% CI [0.84, 2.34], $p = .19$), and agreeing with recommendations (OR = 4.45, 95% CI [0.87, 22.87], $p = .07$) were not statistically associated with following through with recommendations (overall model Cox and Snell $R^2 = .19$; Nagelkerke $R^2 = .26$).

We also examined predictors of depressive symptoms at 6-month follow-up. A multiple linear regression examining score on the CCAPS-Depression subscale at follow-up revealed that total number of barriers to mental health treatment predicted CCAPS score at follow-up ($\beta = 0.35$, $p = .01$), adjusting for baseline CCAPS-Depression score (which also predicted follow-up scores). Neither racial/

TABLE 3. Predictors of Depressive Symptoms at 6-Month Follow-Up

Predictor	*b*	*SE*	95% CI	*β*	*t*	*p*
Racial/ethnic minority	−0.01	0.13	−0.27, 0.24	−0.01	−0.11	.91
Depressive symptoms[a]	0.65	0.08	0.50, 0.80	0.59	8.69	.000
Treatment in past 6 months[b]	0.18	0.13	−0.08, 0.43	0.10	1.37	.17
Past treatment barriers[b]	0.14	0.05	0.04, 0.24	0.35	2.75	.01
Treatment Barriers × Minority	−0.03	0.06	−0.11, 0.09	−0.05	−0.41	.68

Note. Adjusted $R^2 = .49$; $F(5,116) = 24.38$, $p < .01$. CI = confidence interval.
[a]Assessed at baseline.
[b]Assessed at 6-month follow-up.

TABLE 4. Predictors of Suicidal Ideation at 6-Month Follow-Up

Predictor	OR	95% CI	*p*
Racial/ethnic minority	1.76	0.53, 5.76	.35
Depressive symptoms[a]	2.87	1.12, 7.33	.03
Lifetime suicide attempt[+++]	4.07	1.18, 14.04	.03
Lifetime suicidal ideation[a]	3.14	0.80, 12.29	.10
Treatment in past 6 months[b]	1.58	0.52, 4.78	.42
Past treatment barriers[b]	1.03	0.68, 1.59	.88
Treatment Barriers × Minority	0.88	0.52, 1.48	.63

Note. Cox and Snell $R^2 = .21$; Nagelkerke $R^2 = .34$. OR = odds ratio; CI = confidence interval.
[a]Assessed at baseline.
[b]Assessed at 6-month follow-up.
[+++]Based on combined information from clinician intake interview at baseline and Standardized Dataset at follow-up.

ethnic minority status nor treatment received in the previous 6 months predicted depressive symptoms at follow-up. Furthermore, there was no statistically significant interaction between racial/ethnic minority status and total number of treatment barriers endorsed (see Table 3).[†]

A binary logistic regression analysis examining racial/ethnic minority status, baseline depressive symptoms, lifetime suicide attempt history, lifetime suicidal ideation, and total treatment barriers, along with the interaction between treatment barriers and racial/ethnic minority status, as predictors of whether participants reported having experienced suicidal ideation during the 6-month follow-up period revealed that only baseline depressive symptoms and lifetime suicide attempt history predicted suicidal ideation at follow-up (see Table 4).

†We also conducted an exploratory regression analysis to examine which specific treatment barriers were associated with depressive symptoms at follow-up. Thus, endorsement of each of the 11 possible treatment barriers was entered as a predictor of depressive symptoms at follow-up, adjusting for baseline depressive symptoms. "Not [being] comfortable sharing problems with a mental health professional" was the only barrier significantly associated with depressive symptoms at follow-up, $b = 0.30$, $\beta = 0.16$, $p = .04$.

COMMENT

The present study aimed to identify racial/ethnic differences in mental health treatment utilization and in self-reported mental health treatment barriers among college students seen for intake at a counseling center. At 6-month follow-up, 39% of students had sought treatment since their intake, with racial/ethnic minority students having lower rates of past mental health treatment seeking (53% vs 89%, respectively) and also lower rates of mental health service use during the follow-up (31% vs 52%, respectively), relative to white students, despite having equal levels of depressive symptoms and rates of suicidal ideation and attempt history. Results of this study support findings that racial/ethnic minorities are less likely to receive mental health treatment than white individuals,[2,10,11] and that these trends extend to college populations.[4]

The most-often cited barrier to treatment seeking, across race, was financial concerns (eg, not being able to afford treatment), with 61% of respondents endorsing this as both a past barrier and an anticipated future barrier. Among racial/ethnic minority students, the next most-often cited barrier was lack of time, and they more

often endorsed this barrier than did white respondents (62% vs 32%). Close to half of students—across race—also endorsed a preference for dealing with problems on their own and not knowing if a problem they were experiencing was important enough to warrant treatment as other reasons they did not seek treatment in the past. Although fear of what family, friends, and others would think was not among the most commonly endorsed treatment barriers, it was more often endorsed as a potential future barrier by racial/ethnic minority college students than it was by white students. Finally, total number of treatment barriers endorsed was associated with not following through with treatment recommendations and with higher depressive symptoms at follow-up, even after taking into account depressive symptoms at intake. More comprehensively and directly addressing total barriers to treatment may improve mental health outcomes among college students who are seen at counseling centers. At the same time, further research is necessary to establish the clinical significance of the findings, given that an increase in 1 treatment barrier was only associated with a small increase in average depressive symptoms.

Although, as stated, stigma was not the primary barrier to treatment, it warrants attention. Some reasonable suggestions for decreasing mental health treatment stigma can be found in the literature. This includes providing universal messages about mental health problems in order to minimize "us/them" thinking, disseminating accurate information about the relatively low levels of public stigma towards treatment on college campuses, and using school- and Internet-based initiatives to promote treatment initiation.[6,21] In order to address the higher stigma perceived by racial/ethnic minority students, these interventions must actively engage this population. One way to achieve this is by increasing the visibility of racial/ethnic minorities in the process through the appropriate incorporation of these populations in any informational or educational initiatives as well as the use of racial/ethnic minority mental health workers and representatives.

To address time concerns, interventions that work well on a time-limited basis should be utilized and flexible-scheduling options should be offered. For example, online or at-home skills-based interventions may be effective for particular mental health issues and offer the added benefit of affordability. As college counseling centers are simultaneously faced with addressing increased severity of students' psychiatric needs and an emphasis on short-term treatment, with oftentimes limited staffing, appreciating ways to proactively engage at-risk students is also vital.[21] These results can also inform feedback sessions with racial and ethnic minority students, to ensure that they not only understand and appreciate the rationale for the treatment recommendations, but that they also receive adequate assistance in following through with recommendations.

Limitations

Several study limitations are noteworthy. First, the sample was primarily female and may not be reflective of mental health care use for male college students. Second, although suicidal ideation was assessed at both baseline and follow-up, we relied on a single-item measure of suicidal ideation as an outcome and did not confirm ideation at 6-month follow-up via interview. Thus, caution is warranted in interpreting findings that examine suicidal ideation as an outcome. Third, separate analyses by different racial/ethnic minority groups were not conducted due to insufficient participants of each racial/ethnic group in the sample. Finally, within-group heterogeneity (eg, country of origin, socioeconomic status, language proficiency, acculturation) was not taken into account. Future studies should examine within-group differences that may also account for mental health treatment disparities.

Conclusions

This research points to the importance of examining racial/ethnic differences in possible reasons behind treatment-seeking disparities among college students who are seen for intake at a college counseling center. Identifying factors such as lack of time, financial concerns, and fear of stigma is a first step in designing interventions to increase mental health treatment utilization among at-risk college students from diverse backgrounds. Efforts to increase mental health treatment seeking among college students might include offering access to time-limited treatments with flexible scheduling options. In addition, outreach efforts should focus on decreasing the fear of stigma, specifically incorporating racial and ethnic minority students in the process. Such efforts may increase treatment outcomes among racial and ethnic minority students and perhaps decrease risk for depression and future suicidal behavior.

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CONFLICT OF INTEREST DISCLOSURE

The authors have no conflicts of interest to report. The authors confirm that the research presented in this article met the ethical guidelines, including adherence to the legal requirements, of the United States and received approval from the Institutional Review Board of City University of New York.

NOTE

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