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Self-Reported Reasons for Not Receiving Mental Health Treatment in Adults With Serious Suicidal Thoughts

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ABSTRACT

Objective: This study examined self-reported reasons for not receiving mental health treatment among adults with past-year serious suicidal thoughts and their sociodemographic characteristics associated with these reasons.

Methods: Using the 2008–2013 National Surveys on Drug Use and Health, we examined 8,400 respondents aged 18 years or older who had past-year serious thoughts of suicide and did not receive mental health treatment that year. Logistic regression analyses were conducted to estimate the associations between sociodemographic characteristics and self-reported reasons for not receiving mental health treatment among these suicidal adults.

Results: Among adults with serious suicidal thoughts who did not receive mental health treatment in the past year, three-fourths did not feel the need for treatment. Of the one-fourth of those who felt the need for treatment, the main reason for not receiving treatment was financial (58.4%), followed by logistical reasons such as not knowing where to go (36.1%). A greater proportion of suicidal adults than nonsuicidal adults perceived more than 1 barrier to treatment (43.8% vs 34.3%). Among suicidal adults who did not receive mental health treatment that year, the odds of not feeling the need for mental health treatment were higher in men (adjusted odds ratio [AOR] = 1.68; 95% CI, 1.42–1.99), adults aged 50 years or older (AOR = 3.02; 95% CI, 2.02–4.51), racial and ethnic minorities (AORs = 1.59–2.13), publicly insured (AOR = 1.54; 95% CI, 1.14–2.07), and nonmetropolitan residents (AOR = 1.50; 95% CI, 1.20–1.88).

Conclusions: Most suicidal adults did not feel the need for mental health treatment. Of those who felt the need, multiple barriers were identified. A multifaceted approach to address these barriers is needed to promote receipt of mental health treatment among this vulnerable population.

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Suicide continues to be the tenth leading cause of death in the United States, reaching over 40,000 deaths in 2012.¹ Since over 90% of individuals who die from suicide were known to have mental disorders, treatments for mental disorders are a critical part of suicide prevention.^{2,3} Receiving mental health treatment (ie, receipt of inpatient or outpatient mental health services or receipt of prescription medication for a mental health problem) for individuals with suicidal thoughts has been shown to reduce suicidal thoughts and attempts, especially in high-risk groups.⁴ However, studies have shown that many individuals with mental disorders do not receive mental health treatment,⁵ and this finding extends to individuals with suicidal thoughts⁶ and attempts.⁷ Thus, in the National Action Alliance for Suicide Prevention's first prioritized research agenda for suicide prevention, understanding and improving help-seeking in suicidal individuals has been identified as one of the top research priorities to reduce suicide in the United States.⁸

In 2012, an estimated 9.0 million adults aged 18 years or older in the United States reported having serious thoughts of suicide in the past 12 months.⁹ Suicidal thoughts are an important risk factor for future attempts and deaths by suicide.¹⁰ Research has shown that approximately half of suicidal individuals do not receive mental health treatment.^{7,11,12} Also, research has shown that suicidal adults who do not receive mental health treatment are likely to be men, the uninsured, and nonwhite race or ethnicity.¹¹

In addition to understanding the sociodemographic characteristics of suicidal adults who do not receive mental health treatment, an understanding of self-reported reasons for not receiving mental health treatment among suicidal individuals will help inform efforts to improve mental health services utilization among this population. One nationally representative study⁷ found that among adults who attempted suicide and did not receive treatment, approximately half (43.7%) perceived a need for treatment but did not receive treatment for a variety of reasons. Further understanding of barriers to mental health treatment in suicidal adults is essential to increase receipt of mental health services in this population.

By using recent nationally representative data of community-dwelling adults in the United States, this study aimed to examine the self-reported reasons for not receiving mental health treatment among suicidal adults and to examine sociodemographic characteristics and health insurance status associated with these self-reported reasons for not receiving mental health treatment.

METHODS

We examined adults aged 18 years and older who participated in the 2008–2013 National Surveys on Drug Use and Health (NSDUH).¹³ The NSDUH is an annual cross-sectional survey

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- Adults with serious suicidal ideation have been known to not seek mental health treatment, but the reasons for not seeking treatment have not been extensively examined.
- Individuals with serious suicidal thoughts who might require treatment might not even perceive the need in the first place. It is important to help them recognize the severity of their problem and inform the benefits of receiving professional mental health treatment.

conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), providing nationally representative data on suicidal ideation, suicide attempt, and mental health treatment among the civilian, noninstitutionalized population aged 18 years or older in the United States since 2008. The NSDUH employed a state-based design with an independent, multistage area probability sample within each state and the District of Columbia. The overall weighted response rate for 2008 through 2013 ranged from 60.2% to 66.8%. Data were collected by using audio computer-assisted self-administered interviewing methods at the respondent's home. Because the survey designs and questionnaires were the same, we pooled the data from multiple years to increase the precision of the estimates. Description of the NSDUH is available on the SAMHSA website.¹³ After individuals with missing information on suicidal ideation (less than 1% of the sample) were excluded, the final unweighted sample size comprised 8,400 adults with past-year serious suicidal ideation who did not receive mental health treatment in the past year.

Serious Suicidal Thoughts and Attempt

All adults aged 18 years and older were asked whether they had "seriously thought about killing yourself" at any time in the past 12 months before taking the survey interview. If the respondents said yes, a follow-up question asked if they "have tried to kill yourself" within the past 12 months.

Reasons for Not Receiving Mental Health Treatment

All adults aged 18 years or older were also asked if "during the past 12 months, was there any time when you needed mental health treatment or counseling for yourself but didn't get it?" If the respondents said yes, they selected from a list of statements those that were applicable to their reasons why they did not receive mental health treatment. On the basis of their statements, we categorized the following reasons:

1. *Low perceived need* for mental health treatment to reflect these 2 statements: "You didn't think you needed treatment at the time," and "You thought you could handle the problem without treatment."
2. *Logistical* to reflect 3 statements: "You did not know where to go to get services"; "You had no transportation, or treatment was too far away, or the hours were not convenient"; and "You didn't have time (because of job, childcare, or other commitments)."

3. *Financial* to reflect these 3 statements: "You couldn't afford the cost," "Your health insurance does not cover any mental health treatment or counseling," and "Your health insurance does not pay enough for mental health treatment or counseling." (Due to similarity in the statements, the latter 2 statements regarding insurance were combined as, "Your health insurance does not cover any or does not pay enough for mental health treatment or counseling.")
4. *Stigma*¹⁴ to reflect these 3 statements: "You were concerned that getting mental health treatment or counseling might cause your neighbors or community to have a negative opinion of you," "You were concerned that getting mental health treatment or counseling might have a negative effect on your job," and "You didn't want others to find out that you needed treatment."
5. *Reasons related to mental health system* to reflect these 3 statements: "You didn't think treatment would help," "You were concerned that the information you gave the counselor might not be kept confidential," and "You were concerned that you might be committed to a psychiatric hospital or might have to take medicine."

Respondents were allowed to select more than 1 reason.

Sociodemographic and Other Covariates

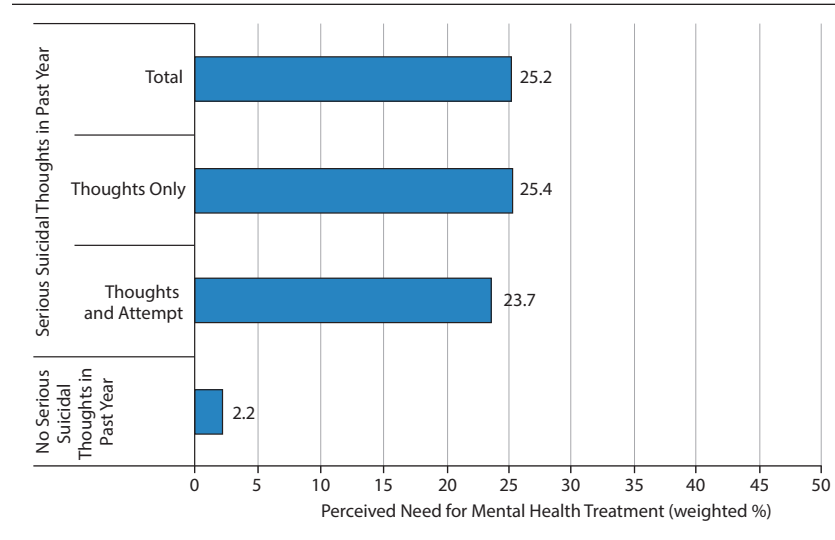
Sociodemographic variables included in the analyses were sex, age at the time of the survey interview, race or ethnicity (non-Hispanic whites, non-Hispanic blacks, Hispanics, or non-Hispanic other), education (less than high school, high school, some college, or college graduate or higher), marital status (married, never married, or no longer married), employment status (full time, part time, unemployed, or other), family income as a percentage of the federal poverty level defined by the 2008–2013 US Census Bureau¹⁵ (< 100%, 100%–199%, 200% or over, or unknown for adults aged 18–22 years living in a college dorm), and health insurance status (private only, public [Medicaid or Medicare], other miscellaneous types, or uninsured). Region was categorized as Northeast, Midwest, South, and West based on the US Census region code. Metropolitan statistical area was defined based on the US Department of Agriculture rural-urban continuum codes and further categorized as (1) large metropolis consisting of counties with a population of 1 million or over, (2) small metropolis consisting of counties with less than a million population, and (3) nonmetropolis consisting of urban and rural population outside of the metropolitan area.

Statistical Analysis

The annual average weighted percentages of perceived need for mental health treatment among suicidal adults who did not receive mental health treatment (n = 8,400) were estimated and were compared with nonsuicidal adults who did not receive mental health treatment (n = 240,000). Among suicidal adults who perceived need for mental health treatment but did not receive it, we further estimated the

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Figure 1. Perceived Need for Mental Health Treatment Among Adults Who Did Not Receive Mental Health Treatment in the Past Year by the Presence of Past-Year Serious Suicidal Thoughts: 2008–2013 National Surveys on Drug Use and Health



annual average weighted percentages on reasons for not receiving mental health treatment across the 5 categories (low perceived need, structural, financial, stigma, and reasons related to the mental health system). We compared these percentages to percentages of reasons for not receiving mental health treatment in adults without serious suicidal thoughts who perceived a need for mental health treatment ($n=7,000$). Furthermore, the reasons for not receiving mental health treatment were compared between suicidal adults with and without attempts who perceived a need for mental health treatment in the past 12 months.

Logistic regressions were performed to identify sociodemographic characteristics associated with not perceiving need for mental health treatment among suicidal adults who did not receive mental health treatment ($n=8,400$) and with each of the 5 broad categories of reasons reported for not receiving mental health treatment among suicidal adults who perceived need for mental health treatment ($n=2,400$). Multicollinearity was assessed during multivariate modeling using the variance inflation factors,¹⁶ and the independent variables were deemed not collinear in the final multivariate models. Survey year was not included in the final models because no significant trend differences over time were noted.

All analyses were conducted using Stata version 13¹⁷ to account for NSDUH's complex sample design and sampling weights. According to NSDUH guidelines for using restricted-use data, any description of the sample size was rounded to the nearest 100 to minimize potential disclosure risk.

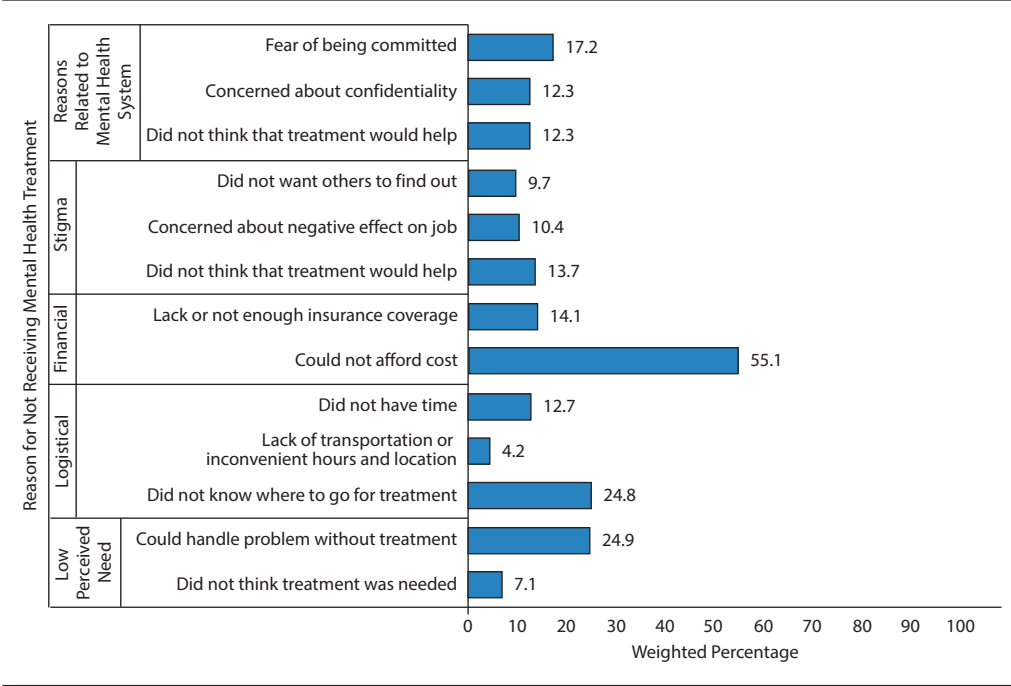
RESULTS

Among adults who had serious thoughts of suicide in the past year and did not receive mental health treatment

that year, approximately one-fourth (25%, annual average weighted percentage) felt a need for mental health treatment. A majority (75%, annual average weighted percentage) of adults who reported serious suicidal thoughts did not feel the need for mental health treatment in the past year. In comparison, 2% of adults without past-year serious thoughts of suicide felt a need for mental health treatment but did not receive mental health treatment (Figure 1). Among suicidal adults who perceived need but did not receive mental health treatment, not being able to afford the cost was cited by over half (55.1%) and was the most frequently cited reason for not receiving mental health treatment (Figure 2). This was followed by thinking that the problem could be handled without treatment (24.9%) and not knowing where to go for mental health treatment (24.8%).

Table 1 details the self-reported reasons for not receiving mental health treatment among suicidal adults ($n=2,400$) and nonsuicidal adults ($n=7,000$) who perceived need but did not receive mental health treatment within that year. Differences between the 2 groups existed for most reasons except on reasons related to health insurance coverage. Furthermore, suicidal adults reported more reasons for not receiving mental health treatment than nonsuicidal adults. However, the directionality differed by the reason. For example, on the one hand, low perceived need was reported more frequently in nonsuicidal adults than suicidal adults. On the other hand, 2 logistical reasons, not knowing where to go for treatment and lack of transportation or inconvenient hours; stigma; and reasons related to the mental health system were reported more frequently in suicidal adults than in nonsuicidal adults. Adults who attempted suicide and those who reported suicidal thoughts only did not differ in the reasons for not receiving mental health treatment.

Figure 2. Self-Reported Reasons for Not Receiving Mental Health Treatment in the Past Year Among Adults With Serious Thoughts of Suicide Who Perceived Need but Did Not Receive Mental Health Treatment in the Past Year: 2008–2013 National Surveys on Drug Use and Health



Several sociodemographic correlates were significantly associated with reporting no perceived need for mental health treatment and reporting specific perceived barriers among suicidal adults who felt the need for mental health treatment but did not receive treatment (Table 2). Among suicidal adults, the following characteristics were associated with higher risk of perceiving no need for mental health treatment: men, those aged 50 years or older, a minority, being publicly insured, and residing in rural areas. Financial barriers were more likely to be cited as reasons for not receiving mental health treatment in adults aged 26–34 years than in adults aged 18–25 years, those with some college education than in adults with less than a high school diploma, uninsured than in privately insured, and those residing in the Midwest region than in those in the Northeast. Males were less likely to report financial reason as a barrier than females. Adults aged 35–49 years compared to 18–25 years were less likely to report logistical barriers to receiving mental health treatment. Adults who were employed part time were more likely to report low perceived need as a reason for not receiving mental health treatment than adults who are employed full time. Adults aged 35–49 years and uninsured adults were less likely to report reasons related to mental health system as a barrier to mental health treatment. Lastly, being male, having more education, and residing in nonmetropolitan urban or rural areas were characteristics associated with stigma as the reason for not receiving mental health treatment. Adults aged 35 years and older were less likely to report stigma as barriers to receiving mental health treatment than adults aged 18–25 years, as well as those who were publicly insured or uninsured than those who were privately insured.

DISCUSSION

Using nationally representative data of adults aged 18 years or older, this study found that about 3 of 4 seriously suicidal individuals who did not receive mental health treatment in the past year did not feel the need for mental health treatment. Among the one-fourth who felt the need for mental health treatment, affordability was the most frequently cited reason for not receiving mental health treatment. Adults with serious suicidal thoughts reported more barriers than adults without suicidal thoughts. Among suicidal adults, the following characteristics were associated with not feeling the need for mental health treatment: men, those aged 50 years or older, racial and ethnic minorities, being publicly insured, and residing in rural areas. Women and the uninsured tended to perceive financial barriers to mental health treatment, whereas men, highly educated adults, and adults in a rural setting were more likely to report stigma as the reason for not receiving mental health treatment.

Although a significantly greater proportion of suicidal adults reported a need for mental health treatment than nonsuicidal adults, the majority of suicidal adults did not feel the need for mental health treatment. Furthermore, even among adults who felt the need for mental health treatment, approximately 1 in 4 appear to recognize the problem but further reported that they thought they could handle the problem without treatment. Our finding was consistent with one study¹² in Canada that identified that 76% of individuals with suicidal ideation did not feel the need for treatment. Another study¹⁸ from Australia has

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Table 1. Self-Reported Reasons for Not Receiving Mental Health Treatment Among Adults Who Perceived Need but Did Not Receive Mental Health Treatment in the Past Year: 2008–2013 National Surveys on Drug Use and Health^{a,b}

Variable	Nonsuicidal (n = 7,000)		Serious Suicidal Thoughts (n = 2,400)		P	Among Adults With Serious Suicidal Thoughts (n = 2,400)				P
	n	% (SE)	n	% (SE)		Without Attempt (n = 2,100)		With Attempt (n = 300)		
						n	% (SE)	n	% (SE)	
Perceived need but did not receive mental health treatment because										
1. Low perceived need	2,500	34.0 (1.0)	700	26.5 (1.5)	<.001	600	27.0 (1.6)	100	22.2 (3.8)	.27
You didn't think you needed treatment at the time	800	9.6 (0.6)	200	7.1 (0.8)	.02	200	7.0 (0.8)	<100	8.0 (2.4)	.70
You thought you could handle the problem without treatment	2,200	30.7 (1.0)	700	24.9 (1.5)	.002	600	25.6 (1.6)	100	19.3 (3.4)	.12
2. Logistical	2,500	33.0 (1.0)	900	36.1 (1.6)	.09	800	36.4 (1.7)	100	33.0 (5.2)	.53
You did not know where to go to get services	1,500	19.2 (0.9)	600	24.8 (1.5)	<.001	500	24.3 (1.5)	100	28.2 (5.2)	.45
You had no transportation, or treatment was too far away, or the hours were not convenient	200	1.9 (0.2)	100	4.2 (0.7)	<.001	100	3.8 (0.6)	<100	6.9 (3.2)	.23
You didn't have time (because of job, childcare, or other commitments)	1,200	15.7 (0.7)	300	12.7 (1.1)	.03	300	13.3 (1.2)	<100	8.5 (2.3)	.11
3. Financial	3,300	48.0 (1.1)	1,300	58.4 (1.6)	<.001	1,100	59.5 (1.7)	200	48.9 (5.4)	.06
You couldn't afford the cost	3,000	42.6 (1.0)	1,200	55.1 (1.7)	<.001	1,100	56.0 (1.7)	100	46.9 (5.4)	.10
Your health insurance does not cover or does not pay enough for any mental health treatment or counseling	900	13.6 (0.7)	300	14.1 (1.3)	.73	300	14.8 (1.4)	<100	8.3 (2.4)	.05
4. Stigma	1,400	17.5 (0.8)	700	26.6 (1.5)	<.001	600	26.7 (1.6)	100	25.8 (4.4)	.86
You were concerned that getting mental health treatment or counseling might cause your neighbors or community to have a negative opinion of you	700	7.8 (0.5)	400	13.7 (1.1)	<.001	300	13.7 (1.2)	100	13.0 (2.7)	.80
You were concerned that getting mental health treatment or counseling might have a negative effect on your job	400	6.7 (0.5)	300	10.4 (1.0)	<.001	200	10.6 (1.1)	<100	9.4 (3.2)	.74
You didn't want others to find out that you needed treatment	600	7.0 (0.5)	300	9.7 (0.9)	.007	300	9.9 (1.0)	<100	8.1 (2.4)	.51
5. Reasons related to mental health system	1,500	19.6 (0.8)	900	31.9 (1.6)	<.001	800	32.0 (1.7)	100	31.2 (4.3)	.85
You didn't think treatment would help	700	8.8 (0.6)	300	12.3 (1.2)	.005	300	12.4 (1.2)	<100	11.2 (2.7)	.69
You were concerned that the information you gave the counselor might not be kept confidential	600	7.8 (0.6)	300	12.3 (1.0)	<.001	300	12.2 (1.1)	100	13.6 (2.8)	.64
You were concerned that you might be committed to a psychiatric hospital or might have to take medicine	500	6.3 (0.5)	500	17.2 (1.2)	<.001	400	17.2 (1.2)	100	18.2 (3.0)	.73
Number of reason categories reported										
None from the list	200	3.1 (0.4)	100	2.2 (0.5)	<.001	<100	2.1 (0.5)	<100	3.2 (1.4)	.08
1	4,100	62.6 (1.0)	1,200	54.0 (1.7)		1,000	52.9 (1.9)	200	63.4 (4.7)	
2	1,500	19.6 (0.8)	500	20.2 (1.4)		500	20.8 (1.5)	100	15.2 (3.0)	
≥3	1,200	14.7 (0.7)	700	23.6 (1.4)		600	24.3 (1.5)	100	18.2 (3.1)	

^aThe Substance Abuse and Mental Health Services Administration requires that any description of overall sample sizes based on the restricted-use data files has to be rounded to the nearest 100, which intends to minimize potential disclosure risk.

^bAll percentages are weighted.

shown that those who did not seek help following a suicide attempt were more likely to be men and were less likely to communicate their intent. Even among crisis callers, lack of problem recognition was the most prominent reason to not seek mental health treatment.¹⁹ There might be varying severity of distress even within those who reported serious suicidal ideation, as NSDUH did not use measurement scales of suicidal ideation. It is not clear whether the results suggest that lack of perceived need is due to denial or lack of problem recognition and whether this varies by chronicity and severity of distress. This lack of perceived need for mental health treatment has been pervasive in adults with mental disorders in general,²⁰ and our finding underscores the need to better understand the process of perceiving the need for mental health treatment among suicidal adults and to guide efforts to increase mental health treatment-seeking among this group.

Addressing other barriers in receiving mental health treatment is also of great importance. In addition, many suicidal individuals may first contact their primary care

providers, suggesting the increasing importance of suicide prevention in the primary care setting.¹² Additionally, some evidence suggests that young adults are more likely to seek nonprofessional help from family and peers than professional help,⁶ suggesting the importance of interventions that target help-seeking also involve peers and family members to facilitate professional help-seeking. Goal 8 of the Action Alliance's research prioritization effort focuses on access to affordable care among people at risk for suicidal behavior.⁸ Our finding provides further support for this effort, as financial reasons, and in particular, affordability of care, were identified as the number one barrier among suicidal adults and nonsuicidal adults who felt a need for mental health care. At least one study²¹ has shown that the Mental Health Parity and Addiction Equity Act implemented in 2010 decreased out-of-pocket spending for certain mental disorders. Safety net systems such as the crisis center and suicide prevention lifeline are also available, in addition to payment assistance for mental health care for those who cannot afford to pay.²² However, the extent of awareness in the general public of

Table 2. Sociodemographic Correlates of Reporting No Perceived Need for Mental Health Treatment and of Reporting Specific Perceived Barrier to Mental Health Treatment Among Adults With Serious Thoughts of Suicide in the Past Year Who Did Not Receive Mental Health Treatment: 2008–2013 National Surveys on Drug Use and Health

Variable	No Perceived Need (n=6,000), AOR (95% CI)	Perceived Barrier to Mental Health Treatment (n=2,400), AOR (95% CI)				
		Financial	Logistical	Low Perceived Need	Related to Mental Health System	Stigma
Male sex	1.68 (1.42–1.99)***	0.68 (0.50–0.93)*	0.78 (0.59–1.04)	0.80 (0.58–1.10)	1.19 (0.90–1.59)	1.45 (1.10–1.92)**
Age, y (reference: 18–25)						
26–34	0.96 (0.77–1.21)	1.92 (1.21–3.04)**	0.88 (0.60–1.29)	0.69 (0.45–1.05)	0.71 (0.48–1.06)	1.27 (0.85–1.91)
35–49	1.15 (0.90–1.49)	1.41 (0.90–2.20)	0.65 (0.42–0.99)*	0.76 (0.47–1.23)	0.51 (0.33–0.79)**	0.57 (0.35–0.91)*
≥ 50	3.02 (2.02–4.51)***	1.92 (0.95–3.87)	0.77 (0.37–1.59)	0.80 (0.36–1.81)	0.49 (0.22–1.11)	0.21 (0.06–0.82)*
Race/ethnicity (reference: non-Hispanic white)						
Non-Hispanic black	1.87 (1.41–2.48)***	1.20 (0.70–2.03)	1.23 (0.75–2.01)	0.59 (0.37–0.95)*	0.88 (0.54–1.45)	0.84 (0.52–1.38)
Hispanic	1.59 (1.26–2.01)***	0.71 (0.45–1.12)	1.16 (0.75–1.80)	1.23 (0.79–1.91)	1.05 (0.69–1.61)	1.46 (0.94–2.28)
Non-Hispanic other	2.13 (1.58–2.87)***	0.86 (0.48–1.55)	1.27 (0.78–2.07)	1.19 (0.69–2.03)	0.93 (0.56–1.57)	0.92 (0.49–1.72)
Education (reference: less than high school)						
High school	1.01 (0.80–1.28)	1.37 (0.86–2.19)	1.05 (0.69–1.59)	0.97 (0.63–1.50)	1.17 (0.80–1.73)	1.42 (0.94–2.14)
Some college	0.76 (0.59–0.97)*	1.66 (1.01–2.71)*	0.97 (0.62–1.51)	1.05 (0.66–1.68)	0.92 (0.61–1.40)	1.74 (1.11–2.72)**
College or higher	0.72 (0.52–0.99)*	1.35 (0.80–2.26)	1.29 (0.77–2.16)	1.40 (0.79–2.49)	1.10 (0.64–1.90)	2.16 (1.27–3.67)**
Marital status (reference: never been married)						
Married	1.02 (0.80–1.31)	1.13 (0.73–1.76)	1.17 (0.76–1.79)	0.85 (0.52–1.39)	1.09 (0.71–1.67)	1.13 (0.71–1.82)
No longer married	0.82 (0.61–1.12)	1.33 (0.78–2.27)	0.86 (0.52–1.40)	0.93 (0.53–1.64)	0.89 (0.51–1.55)	0.86 (0.48–1.56)
Employment status (reference: employed full time)						
Employed part time	1.06 (0.86–1.31)	0.91 (0.63–1.30)	0.76 (0.53–1.08)	1.74 (1.18–2.57)**	1.18 (0.85–1.63)	1.11 (0.78–1.59)
Unemployed	0.73 (0.56–0.95)*	0.75 (0.46–1.21)	0.68 (0.45–1.02)	1.26 (0.74–2.16)	1.08 (0.67–1.74)	0.98 (0.56–1.70)
Other (including not in labor force)	0.80 (0.62–1.02)	0.77 (0.50–1.18)	1.38 (0.92–2.06)	1.54 (1.00–2.36)	1.13 (0.75–1.71)	1.13 (0.74–1.75)
Family income (reference: ≥200% federal poverty level)						
100%–199%	1.03 (0.83–1.28)	1.41 (0.97–2.05)	1.19 (0.83–1.71)	0.97 (0.66–1.43)	1.40 (0.98–2.01)	0.97 (0.65–1.46)
< 100% or less	0.86 (0.70–1.07)	1.31 (0.86–1.97)	1.11 (0.78–1.60)	0.97 (0.66–1.43)	1.07 (0.75–1.54)	1.01 (0.69–1.48)
Aged 18–22 y in college dorm	0.86 (0.59–1.25)	0.74 (0.39–1.41)	0.60 (0.29–1.26)	0.64 (0.28–1.44)	1.29 (0.63–2.65)	1.43 (0.75–2.75)
Health insurance status (reference: private only)						
Public	1.54 (1.14–2.07)**	0.82 (0.48–1.38)	0.90 (0.55–1.48)	0.87 (0.52–1.46)	0.90 (0.57–1.41)	0.56 (0.34–0.91)*
Other	0.92 (0.59–1.44)	2.64 (1.30–5.36)**	0.73 (0.35–1.54)	0.76 (0.38–1.52)	0.70 (0.36–1.36)	0.52 (0.25–1.07)
Uninsured	0.71 (0.57–0.87)**	5.97 (4.21–8.46)***	0.87 (0.63–1.20)	0.47 (0.33–0.67)***	0.53 (0.37–0.75)***	0.41 (0.29–0.58)***
Region (reference: northeast)						
Midwest	0.78 (0.62–0.98)*	1.59 (1.05–2.42)*	0.90 (0.58–1.39)	1.07 (0.65–1.74)	1.01 (0.63–1.62)	1.09 (0.65–1.81)
South	0.93 (0.72–1.19)	1.22 (0.80–1.86)	0.77 (0.50–1.19)	1.18 (0.72–1.92)	0.86 (0.55–1.35)	1.42 (0.87–2.32)
West	1.05 (0.82–1.35)	1.43 (0.92–2.24)	0.96 (0.61–1.52)	0.87 (0.53–1.43)	1.00 (0.61–1.61)	0.80 (0.46–1.39)
Metropolitan level (reference: large)						
Small	0.97 (0.80–1.17)	1.05 (0.75–1.46)	0.74 (0.55–1.01)	0.81 (0.59–1.11)	1.08 (0.79–1.48)	0.86 (0.63–1.18)
Nonmetropolitan urban/rural	1.50 (1.20–1.88)***	1.08 (0.72–1.62)	0.80 (0.57–1.14)	1.16 (0.77–1.76)	1.09 (0.74–1.61)	1.54 (1.07–2.21)*

*Significant at $P < .05$ using a 2-sided test. **Significant at $P < .01$ using a 2-sided test. ***Significant at $P < .001$ using a 2-sided test.

Abbreviation: AOR = adjusted odds ratio.

these affordable services is currently unclear. Given that not knowing where to go for treatment was identified as the third most common reason for not receiving mental health treatment, it appears more effort is needed to improve such literacy among suicidal adults. Mental health literacy, which is defined as knowledge and beliefs about mental disorders, has been suggested as an important factor to improve mental health help-seeking.²³

Since close to half of suicidal adults reported multiple treatment barriers, the finding suggests that interventions to improve help-seeking in suicidal adults need to be multifaceted. Reducing stigma has been identified as one of the promising mechanisms to improve help-seeking in the Action Alliance efforts.²⁴ One study²⁵ on suicide literacy and stigma suggests that older adults have lower suicide literacy but have less stigma toward suicide than younger adults, and

men have lower suicide literacy and higher stigma toward suicide than women. Another study²⁶ noted that individuals in regions with low suicide rates were more likely to have positive attitudes toward treatment and low perceived stigma. The media may play a prominent role in improving suicide prevention literacy and reducing stigma in the public, although much research is still needed in this area.²⁴

The study has several limitations. First, the NSDUH is a cross-sectional survey that limits drawing causal inference from the data. Second, the NSDUH did not sample homeless persons not living in a shelter and the institutionalized population who may need mental health care. Therefore, results are not generalizable to these populations. Third, the NSDUH does not assess prior treatment history or mental health service use specifically for suicidal thoughts, and the self-reported survey is prone to recall biases.

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This study used nationally representative data with a large sample size to examine self-reported reasons for not receiving mental health treatment among suicidal adults in the United States. This study identified a large proportion of suicidal adults who did not feel the need for mental health treatment. Of those who felt the need, the most common reason reported was not being able to afford the cost; however, nearly half of these adults reported multiple barriers. Continued monitoring

of trends in receipt of mental health treatment among suicidal adults is needed to better understand how the health care reform and availability of insurance coverage will potentially change the dynamic of the barriers reported by suicidal adults. Given that the majority of suicidal adults did not even perceive a need for mental health treatment, however, a multifaceted approach to address barriers to mental health treatment is critical to improve their receipt of mental health treatment.

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REFERENCES

1. Injury Prevention & Control: Data & Statistics (WISQARS). Centers for Disease Control and Prevention. website. Updated January 12, 2017. <https://www.cdc.gov/injury/wisqars/>.
2. Mann JJ, Apter A, Bertolote J, et al. Suicide prevention strategies: a systematic review. *JAMA*. 2005;294(16):2064–2074.
3. Cavanagh JT, Carson AJ, Sharpe M, et al. Psychological autopsy studies of suicide: a systematic review. *Psychol Med*. 2003;33(3):395–405.
4. O'Connor E, Gaynes BN, Burda BU, et al. Screening for and treatment of suicide risk relevant to primary care: a systematic review for the US Preventive Services Task Force. *Ann Intern Med*. 2013;158(10):741–754.
5. The NSDUH Report: More than One Third of Adults with Major Depressive Episode Did Not Talk to a Professional. Substance Abuse and Mental Health Services Administration website. <https://www.samhsa.gov/data/sites/default/files/spot133-major-depressive-episode-2014.pdf>. Published February 20, 2014.
6. Micheltore L, Hindley P. Help-seeking for suicidal thoughts and self-harm in young people: a systematic review. *Suicide Life Threat Behav*. 2012;42(5):507–524.
7. Han B, Compton WM, Gfroerer J, et al. Mental health treatment patterns among adults with recent suicide attempts in the United States. *Am J Public Health*. 2014;104(12):2359–2368.
8. A Prioritized Research Agenda for Suicide Prevention: An Action Plan to Save Lives. Research Prioritization Task Force. National Action Alliance for Suicide Prevention website. <http://actionallianceforsuicideprevention.org/sites/actionallianceforsuicideprevention.org/files/Agenda.pdf>. Published 2014.
9. Substance Abuse and Mental Health Services Administration. *Results from the 2012 National Survey on Drug Use and Health: Mental Health Findings*. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2013.
10. Han B, McKeon R, Gfroerer J. Suicidal ideation among community-dwelling adults in the United States. *Am J Public Health*. 2014;104(3):488–497.
11. Ahmedani BK, Perron B, Ilgen M, et al. Suicide thoughts and attempts and psychiatric treatment utilization: informing prevention strategies. *Psychiatr Serv*. 2012;63(2):186–189.
12. Pagura J, Fottit S, Katz LY, et al; Swampy Cree Suicide Prevention Team. Help seeking and perceived need for mental health care among individuals in Canada with suicidal behaviors. *Psychiatr Serv*. 2009;60(7):943–949.
13. Substance Abuse and Mental Health Services Administration. National Survey on Drug Use and Health. <https://www.samhsa.gov/data/population-data-nsduh/about>. 2012.
14. Corrigan PW, Watson AC. Understanding the impact of stigma on people with mental illness. *World Psychiatry*. 2002;1(1):16–20.
15. Poverty Thresholds. US Census Bureau website. <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>. Revised February 13, 2017.
16. Correlation and Regression tools: Collinearity diagnostics (collin). UCLA Institute for Digital Research and Education website. <http://www.ats.ucla.edu/stat/stata/ado/analysis/>. 2010.
17. Stata Statistical Software: Release 13 [computer program]. College Station, TX: StataCorp LP; 2013.
18. Milner A, De Leo D. Who seeks treatment where? suicidal behaviors and health care: evidence from a community survey. *J Nerv Ment Dis*. 2010;198(6):412–419.
19. Gould MS, Munfakh JL, Kleinman M, et al. National suicide prevention lifeline: enhancing mental health care for suicidal individuals and other people in crisis. *Suicide Life Threat Behav*. 2012;42(1):22–35.
20. Mojtabai R, Olfson M, Sampson NA, et al. Barriers to mental health treatment: results from the National Comorbidity Survey Replication. *Psychol Med*. 2011;41(8):1751–1761.
21. Busch AB, Yoon F, Barry CL, et al. The effects of mental health parity on spending and utilization for bipolar, major depression, and adjustment disorders. *Am J Psychiatry*. 2013;170(2):180–187.
22. Substance Abuse and Mental Health Services Administration. *National Mental Health Services Survey (N-MHSS): 2010. Data on Mental Health Treatment Facilities*. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2014.
23. Jorm AF. Mental health literacy: public knowledge and beliefs about mental disorders. *Br J Psychiatry*. 2000;177:396–401.
24. Niederkrotenthaler T, Reidenberg DJ, Till B, et al. Increasing help-seeking and referrals for individuals at risk for suicide by decreasing stigma: the role of mass media. *Am J Prev Med*. 2014;47(3 suppl 2):S235–S243.
25. Batterham PJ, Calear AL, Christensen H. Correlates of suicide stigma and suicide literacy in the community. *Suicide Life Threat Behav*. 2013;43(4):406–417.
26. Reynders A, Kerkhof AJ, Molenberghs G, et al. Attitudes and stigma in relation to help-seeking intentions for psychological problems in low and high suicide rate regions. *Soc Psychiatry Psychiatr Epidemiol*. 2014;49(2):231–239.

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