

Racial Disparities in Mental Health Service Use by Adolescents Who Thought About or Attempted Suicide

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Differences in rates and predictors of mental health service use among 2,226 Black, Hispanic, and White adolescents (aged 12–17) who reported recent suicidal thoughts or an attempt were examined. Black adolescents were 65% ($OR = .65, p < .05$), and Hispanic adolescents were 55% ($OR = .55, p < .001$), as likely as White adolescents to report service use, even when controlling for need for care and ability to secure services. Suicide attempt and psychiatric symptoms each interacted with race to increase the odds of service use uniquely for White adolescents. Results indicate that racial disparities characterize adolescents' mental health service use even when suicide risk increases.

Mental health services are regarded as an important means of suicide prevention (U.S. Public Health Service, 1999); however, research indicates that most suicidal youth avoid mental health services. Only one third (Marttunen, Aro, & Lönnqvist, 1992) to one half (Shaffer et al., 1996) of youth who die by suicide ever consulted a mental health professional. Among adolescents and young adults hospitalized for a suicide attempt, only 37% to 52% received mental health services in the month before their attempt (Barnes, Ikeda, & Kresnow, 2001; Suominen, Isometsä,

Marttunen, Ostamo, & Lönnqvist, 2004). In general, only 20% to 50% of youth in need of mental health services receive professional help (Angold et al., 2002; Cuffe et al., 2001; Leaf et al., 1996; Stiffman, Elze, Hadley-Ives, & Johnson, 1999).

Research has consistently demonstrated that youth's mental health service use differs by race. In particular, studies show that Black youth are less likely and White youth are more likely than youth of other races to receive mental health services (Angold et al., 2002; Snowden & Thomas, 2000; Wu et al., 2001; Yeh, McCabe, Hough, Dupuis, & Hazen, 2003). Hispanic adolescents also use specialty mental health services less frequently than White youth (Hough et al., 2002; Kataoka, Zhang, & Wells, 2002). In a study of youth who needed mental health care, 47% of Black and Hispanic youth had unmet need, compared to 30% of White youth (Yeh et al., 2003).

Relative to research on adolescent mental health service use in general, far less is known about suicidal youth's mental health service use, and research about potential racial disparities is even scarcer. The topic is of

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keen importance. Suicidal ideation and attempted suicide each substantially increase the odds for future suicide (Harris & Barraclough, 1997). Inadequate use of mental health services among suicidal youth represents a lost opportunity to intervene and possibly prevent suicides. Several psychosocial and pharmacological interventions have been associated with reductions in suicidal thoughts and attempts, including cognitive therapy (Brown et al., 2005), dialectical behavior therapy (Linehan, 2000), brief psychotherapy (Guthrie et al., 2001), lithium (Baldessarini, Tondo, & Hennen, 2003), and antidepressants (March et al., 2004), although antidepressants may trigger suicidal thoughts in a small number of youth (Fergusson et al., 2005).

Given the potential outcomes of suicidal ideation and attempts, suicidal adolescents ideally would receive mental health care at proportionately equal rates regardless of race. It is unknown whether this is true. O'Donnell, Stueve, Wardlaw, and O'Donnell (2003) determined that 25% of urban Black and Hispanic adolescents who were suicidal consulted a mental health professional, but this study lacked information about White youth. In the only nationally representative study to date that examined mental health service use among adolescents reporting recent suicidal thoughts or attempts, race was not a significant predictor of service use among Black, Hispanic, and White adolescents (Pirkis et al., 2003). That study, however, which analyzed data from 2,482 recently suicidal youth in the National Longitudinal Study of Adolescent Health (Add Health), had limited data about suicidal youth's need for care, and it did not delve into racial differences in the predictors of suicidal youth's mental health service use.

The current study compares rates and predictors of mental health service use among Black, Hispanic, and White youth who reported seriously thinking about or attempting suicide in the prior year. The study's conceptual framework draws from the behavioral model of health care utilization (Andersen, 1968, 1995), which posits that differences in

health service utilization rates go beyond possible differences in need for care. Instead, inequities also relate to demographic characteristics (e.g., race) and factors enabling access to care (e.g., income). Based on this model of differential access to care, two hypotheses guided the current study: (a) Black and Hispanic youth were less likely than White youth to have used mental health services in the year they were suicidal, even when controlling for factors related to the youth's need for care and ability to secure services; and (b) need for mental health care predicted service use less strongly in Black and Hispanic youth than White youth.

METHOD

This study used secondary data from the 2000 National Household Survey on Drug Abuse (NHSDA; Substance Abuse and Mental Health Services Administration [SAMHSA], 2004a). Public-use data were obtained from the Inter-university Consortium for Political and Social Research (www.icpsr.umich.edu). The public-use data set contains responses from a nationally representative, community-based sample of 19,430 youth aged 12 to 17 (Bowman, Chromy, Odom, & Penne, 2004). The sample drew from all 50 states and the District of Columbia in multiple stages (Bowman et al., 2004). Methods for the NHSDA are explained extensively elsewhere (Bowman et al., 2004).

Sample

The current study analyzed data only from Black, Hispanic, and White youth who indicated that they had seriously thought about or attempted suicide in the previous year. Of these 2,226 youth, 13.52% reported their race as Black, 15.00% as Hispanic, and 71.47% as White. Youth from other racial and ethnic groups were omitted from the study because of extremely low numbers. Sample characteristics are shown in Table 1.

TABLE 1
Characteristics of Black, Hispanic, and White Youth Reporting Past-Year Suicidal Thoughts or Suicide Attempt in 2000 National Household Survey on Drug Abuse (N = 2,226)⁺

Variable	% or Mean(SD)			
	All (N = 2,226)	Black (n = 301)	Hispanic (n = 334)	White (n = 1,591)
Age	14.70 (1.57)	14.53 (1.71)	14.58 (1.54)	14.75 (1.54)
Gender				
Female	64.33%	67.77%	67.07%	63.10%
Male	35.67%	32.23%	32.93%	36.90%
Family income				
Low	19.95%	30.23% ^W	32.34% ^W	15.40% ^{B,H}
Medium low	27.13%	36.54% ^W	35.33% ^W	23.63% ^{B,H}
Medium high	33.74%	23.92% ^W	23.35% ^W	37.77% ^{B,H}
High	19.18%	9.30% ^W	8.98% ^W	23.19% ^{B,H}
Insurance				
Private	70.13%	54.82% ^W	53.59% ^W	76.49% ^{B,H}
Medicaid/Other	20.58%	36.22% ^W	25.75% ^W	16.53% ^{B,H}
None	9.30%	8.97% ^H	20.66% ^{B,W}	6.98% ^H
Urban status				
Large city	36.88%	53.49% ^W	50.60% ^W	30.86% ^{B,H}
Small city	35.22%	30.90%	35.03%	36.08%
Rural	27.90%	15.61% ^W	14.37% ^W	33.06% ^{B,H}
Suicidality				
Ideation only	63.54%	67.79%	59.52%	63.58%
Attempt	36.46%	32.21%	40.48%	36.42%
Psychiatric symptoms (0–26)	12.66 (6.02)	12.88 (6.15)	13.08 (5.97)	12.53 (6.0)
Conduct symptoms (0–8)	1.20 (1.64)	1.15 (1.51)	1.40 (1.70) ^W	1.17 (1.63) ^H
Substance use				
No alcohol or drug use	38.81%	58.14% ^{H,W}	40.42% ^B	34.82% ^B
Use only	39.58%	26.25% ^{H,W}	38.02% ^B	42.43% ^B
Abuse or dependence	21.61%	15.61% ^W	21.56%	22.75% ^B

⁺Statistically significant differences all have *p* values < .005.

^BResult significantly different from those for Black youth.

^HResult significantly different from those for Hispanic youth.

^WResult significantly different from those for White youth.

VARIABLE CONSTRUCTION AND MEASUREMENT

Suicidality

To assess suicidal ideation, the NHSDA asked all youth, “During the past 12 months, has there been a time when you thought seriously about killing yourself?” Of those who replied “yes” or who endorsed any other depression symptom, the survey asked, “During the past 12 months, have you tried to kill

yourself?” Although the cross-sectional data do not reveal whether the youth were suicidal at the time of their mental health service use, this paper refers to youth reporting any serious suicidal thoughts or suicide attempt in the prior 12 months as “recently suicidal youth” for the sake of parsimony.

Mental Health Services

In separate questions, the NHSDA asked adolescents to report whether they had

received any of the following types of services within the prior year for problems related to behavior, emotions, or use of alcohol or illicit drug use:

- *Specialty mental health*: Inpatient hospital; residential treatment; partial hospital; mental health clinic; private therapist, psychologist, social worker or counselor;
- *Substance use*: Hospital inpatient; residential treatment; drug treatment facility (outpatient); mental health clinic; emergency room; private doctor's office; jail; self-help groups; or
- *General medical*: Pediatrician or other family doctor.

For descriptive statistics, the study categorized mental health services by sector of care. Otherwise, service use was measured dichotomously as any service use (*yes/no*).

Factors Affecting Ability to Secure Services

Income and Insurance. Measures of family income and insurance coverage were included as enabling variables because each can affect access to health care (e.g., Burns et al., 1997; Busch & Horwitz, 2004; Newacheck, Hung, Park, Brindis, & Irwin, 2003). To assess income, the NHSDA categorized annual family income in \$10,000 increments to \$50,000, then as \$50,000 to \$75,000, and then as more than \$75,000. This study collapsed adolescents' family income into four categories: (a) low income (under \$20,000), (b) medium low income (\$20,000–\$39,999), (c) medium high income (\$40,000–\$75,000) and (d) high income (>\$75,000). The NHSDA statistically imputed data for family income for 3,540 (18.2%) adolescents in the overall sample of 19,430 adolescents (SAMHSA, 2004b). The current study used the NHSDA imputations.

To assess insurance status, interviewers asked whether youth were covered by private insurance, Medicaid, or some other type of health coverage (e.g., Children's Health In-

urance Plan). For approximately 2% of the sample, the NHSDA statistically imputed insurance data (SAMHSA, 2004b). The current study categorized youth according to whether at the time of interview they had (a) no insurance, (b) private insurance only, or (c) Medicaid or other insurance. Insurance was moderately correlated with family income (Cramer's $V = .37$).

For most participants (73.65%), an adult proxy joined the interview and provided information about the family's income and insurance coverage. Otherwise, adolescents provided the information themselves. Participants with and without a proxy respondent did not differ significantly according to history of suicidal ideation or attempt, rates of mental health service use, number of psychiatric or behavioral symptoms, or urban status.

Urban Status. Urban status is included as an enabling factor because many rural areas lack adequate mental health services (Bushy, 1997). Using 1990 U.S. Census data and the respondents' addresses, the NHSDA created codes for youth living in a metropolitan statistical area (MSA) with more than 1 million people, in an MSA with fewer than 1 million people, or in a non-urban area. Using the NHSDA coding, this study categorized youth as living in a large city, smaller city, or rural area.

Need for Services

Psychiatric Symptoms. The NHSDA used 34 questions from the DISC Predictive Scales (DPS-4; Lucas et al., 2001) to assess symptoms of the following disorders: depression, mania, generalized anxiety, panic, obsessive-compulsive, attention-deficit, and conduct. This study summed youth's continuous count of symptoms for each separate disorder. Questions about suicidal thoughts and attempted suicide, as well as medication received for attention deficit disorder, were omitted from the symptom counts to avoid confounding.

For multivariate analyses, high correlations among symptom categories required combining symptom counts for separate di-

agnostic clusters. Exploratory factor analysis with varimax rotation derived two minimally correlated psychiatric factors. The first factor includes 26 symptoms of disorders treatable with psychiatric medication: depression, mania, panic, generalized anxiety, obsessive compulsive, and attention deficit. Cronbach's alpha for this factor is .90. The eight conduct disorder symptoms ($\alpha = .71$) make up the second factor. The correlation between the psychiatric and conduct factors is .30 ($p < .0001$).

Substance Use. The NHSDA included numerous questions about the use of alcohol and nine illicit drugs (e.g., marijuana and cocaine). The diagnostic and rule-out questions correspond to criteria in the *DSM-IV* (American Psychiatric Association, 1994). The NHSDA public-use data set assigned 20 separate substance use diagnoses (abuse or dependence) to respondents. The current study collapsed NHSDA substance use coding into three categories: (a) no use of alcohol or other drugs, (b) use of alcohol or other drugs but no abuse or dependence, and (c) abuse or dependence of alcohol or other drugs.

Data Analysis Strategy

Univariate and bivariate analyses report the sample as a whole and compare characteristics by race. In comparisons among the three groups, adjustments in significance testing for multiple comparisons were not employed because these comparisons were used to describe the sample, not to test hypotheses. For multivariate analyses, a series of logistic regression analyses was performed. The first logistic regression analysis examined race/ethnicity as a predictor of mental health service use, while also controlling for ability to secure services, need for care, and age and gender as control variables. Next, logistic regression analyses were performed separately for Black youth, Hispanic youth, and White youth to examine possible variations in predictors of mental health service use. For each predictor with substantially different point estimates across groups, a separate logistic regression analysis con-

taining the two main effects and interaction term (e.g., White race, attempt, and White race*attempt) were tested for a significant interaction in predicting mental health service use.

Analyses were performed with the Stata statistical software package (version 9). To account for oversampling and nonresponse in the study's design, population weights, strata, and analysis replicates provided in the public-use data set were retained in all multivariate analyses. Use of analytic weights produced unbiased estimates for the general, non-institutionalized U.S. population. Univariate and bivariate statistics reflect unweighted data to ease interpretation of results, because these figures are largely descriptive and accurately reflect the subsample of recent suicidal youth in the overall NHSDA study.

RESULTS

Race, Ethnicity, and Mental Health Service Use

Of the 2,226 youth endorsing suicidality in the prior year, 647 (29.07%) reported the use of a mental health service during the previous 12 months for problems related to emotions, behavior, or substance use. As shown in Table 2, White youth had the highest rates of mental health service use for all sectors of care; however, differences were not statistically significant in the alcohol and drug treatment sector, and they were statistically significant in the general medical sector only when comparing Black youth to White youth. Service use rates for Black and Hispanic youth did not significantly differ from each other in any sector. As shown in Table 3, even in multivariate analyses controlling for indicators of ability to secure services, need for care, and potential confounders, Black youth were 65% as likely, and Hispanic youth were 55% as likely, as White youth to have used mental health services in the same year during which they thought about or attempted suicide (Table 3).

TABLE 2
Comparison, by Race, of Mental Health Service Use Rates among Youth with Any Recent Suicidality (N = 2,226)^a

	<i>n</i>	ANY	Specialty MH	Alcohol/ Drug	Medical
ALL YOUTH	2,226	29.07%	25.32%	4.49%	5.62%
Race					
Black	301	23.59%**	21.43%*	4.32%	2.71%*
Hispanic	334	23.05%**	19.52%**	4.19%	4.50%
White	1,591	31.36%	27.26%	4.59%	6.40%

^aWhite youth are the referent group for all significance tests. No significant differences existed between Black and Hispanic youth.

p* < .05; *p* < .01

TABLE 3
Logistic Regression Model Predicting Mental Health Service Use in Prior Year among Youth with Suicidality (n = 2,226)

Predictor	OR	95% CI	<i>t</i>	<i>p</i>
Age	0.97	0.90–1.05	–0.71	.479
Gender				
Female (referent group)	—	—	—	—
Male	1.14	0.89–1.45	1.14	.311
Race				
White (ref.)	—	—	—	—
Black	0.65	0.45–0.95	–2.24	.025
Hispanic	0.55	0.39–0.77	–3.43	.001
Income				
Low (ref.)	—	—	—	—
Medium low	1.00	0.71–1.42	0.04	.965
Medium high	0.90	0.63–1.27	–0.62	.533
High	0.89	0.60–1.33	–0.55	.583
Insurance				
None (ref.)	—	—	—	—
Private	1.38	0.95–2.02	1.68	.093
Medicaid/Other	2.05	1.36–3.08	3.43	.001
Location				
Large city (ref.)	—	—	—	—
Small city	0.81	0.64–1.03	–1.70	.090
Rural	0.72	0.52–0.98	–2.07	.039
Psychiatric symptoms	1.03	1.01–1.05	3.22	.001
Conduct disorder symptoms	1.16	1.09–1.25	4.25	.001
Substance Use				
None (ref.)	—	—	—	—
Use only	1.31	0.99–1.75	1.86	.063
Abuse or Dependence	2.41	1.74–3.33	5.34	.001
Suicidality				
Only ideation (ref.)	—	—	—	—
Attempt	1.99	1.59–2.50	5.99	.001

Model *F*(16, 763) = 10.94, *p* < .0001

Factors Predicting Mental Health Service Use, By Race and Ethnicity

Separate logistic regression models for Black, Hispanic, and White adolescents revealed differences, by race and ethnicity, in predictors of mental health service use among recently suicidal youth (Table 4). Despite numerous differences across models in point estimates of odds ratios, only two prod-

uct terms for the interactions attained statistical significance: White race*suicide attempt ($p < .004$) and White race*psychiatric symptoms ($p < .011$). Figures 1 and 2 illustrate separately the two interaction effects. As shown, the proportion of White suicide attempters who used mental health services markedly exceeded that of youth who only thought about suicide (44.76% and 19.94%, respectively). In contrast, mental health ser-

TABLE 4

Separate Logistic Regression Models, by Race and Ethnicity, Predicting Mental Health Service Use in Prior Year among Youth with Suicidality[†]

Variable	Black Youth (<i>n</i> = 292)		Hispanic Youth (<i>n</i> = 330)		White Youth (<i>n</i> = 1,563)	
	OR	95%CI	OR	95%CI	OR	95%CI
Age	0.98	0.80– 1.21	1.00	0.78–1.29	0.96	0.87–1.05
Gender						
Female (referent group)	—	—	—	—	—	—
Male	1.76	0.84– 3.70	0.96	0.48–1.91	1.05	0.79–1.40
Income						
Low (ref.)	—	—	—	—	—	—
Medium low	1.16	0.49– 2.75	0.83	0.38–1.82	1.00	0.99–1.56
Medium high	0.68	0.26– 1.79	0.63	0.24–1.58	0.94	0.61–1.43
High	0.90	0.21– 3.74	2.01	0.64–6.27	0.83	0.51–1.35
Insurance						
None (ref.)	—	—	—	—	—	—
Private	0.71	0.24– 2.07	1.70	0.76–3.81	1.65	0.99–2.76
Medicaid/Other	0.86	0.32– 2.34	1.48	0.61–3.61	2.91***	1.68–5.03
Urban Status						
Large city (ref.)	—	—	—	—	—	—
Small city	1.18	0.56– 2.47	0.89	0.46–1.74	0.74*	0.56–0.99
Rural	1.16	0.41– 3.24	1.46	0.61–3.47	0.59**	0.42–0.83
Psychiatric symptoms (no CD)	1.00	0.94– 1.06	1.02	0.97–1.07	1.04***	1.02–1.07
Conduct disorder symptoms	1.29*	1.02– 1.62	1.20	1.00–1.45	1.15***	1.07–1.25
Substance Use						
None (ref.)	—	—	—	—	—	—
Use only	1.41	0.68– 2.91	0.96	0.43–2.15	1.35	0.96–1.89
Abuse or Dependence	5.84***	2.32–14.73	2.47	0.98–6.21	2.17***	1.47–3.19
Suicidality						
Only ideation (ref.)	—	—	—	—	—	—
Attempt	0.98	0.46– 2.10	1.01	0.51–2.00	2.42***	1.86–3.15
Model	$F(14, 181) = 1.99,$ $p < .021$		$F(14, 190) = 1.85,$ $p < .034$		$F(14, 658) = 10.44,$ $p < .001$	

[†]The referent group for categorically measured variables within each race or ethnic model is those within the same racial or ethnic group who are coded *no* for the variable in question.

* $p < .05$; ** $p < .01$; *** $p < .001$

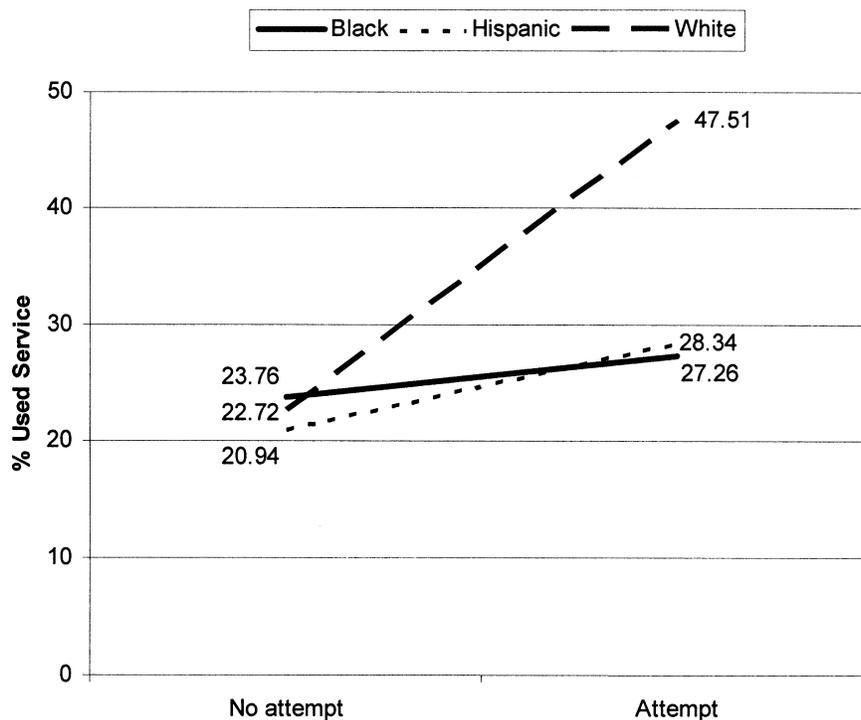


Figure 1. Interaction of race and suicide attempt in predicting mental health service use among recently suicidal youth.

vice use rates among Black and Hispanic youth were only slightly higher among attempters than ideators. Similarly, although psychiatric symptoms did not significantly differentiate service users from non-users among Black or Hispanic youth, White youth who used a mental health service had a higher number of psychiatric symptoms than those who reported no service use.

DISCUSSION

This study identified racial disparities in adolescents' use of mental health services during the same year that they seriously thought about or attempted suicide. Analyses supported the hypothesis that both Black and Hispanic adolescents were less likely than White youth to have received professional help for mental health problems in the year they were suicidal. These differences cannot be explained by different levels of need for

mental health care or ability to secure services, because multivariate analyses controlled for these variables. Results also supported the study's hypothesis that need for care predicted mental health service use less for Black and Hispanic adolescents than White adolescents. The racial disparities found in this study align with Andersen's model of access to care (Andersen, 1995), which allows that multiple factors besides need for care influence health service use.

A potentially disturbing finding is that a suicide attempt did not predict service use for Black or Hispanic youth. This finding is troubling if, in fact, a suicide attempt signifies a greater need for mental health care, making Black and Hispanic youth more likely to have unmet need. Similarly, psychiatric symptoms predicted mental health service only for White youth, suggesting that Black and Hispanic youth with higher levels of psychiatric disturbance are no more likely to use mental health services than less disturbed youth in

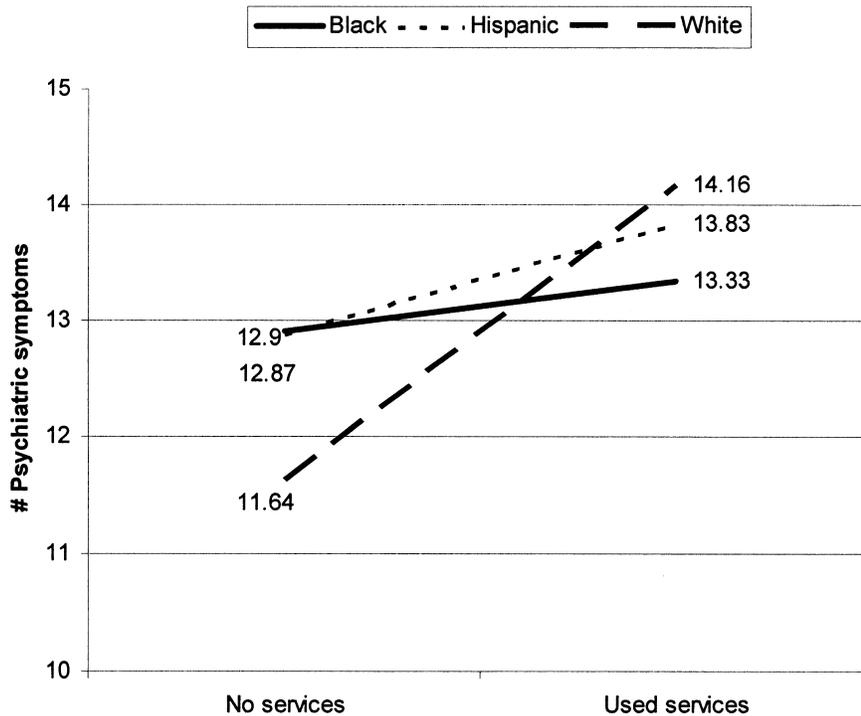


Figure 2. Mean number of psychiatric symptoms in recently suicidal youth, by race and mental health service use.

their racial or ethnic group. Alternatively, it is possible that the NHSDA measures of psychiatric symptoms, behavioral problems, substance use disorders, and suicide attempts did not adequately capture youth's need for mental health care. For example, youth were not queried about the severity of suicidal episodes, and rule-out questions were not included with the psychiatric symptoms.

As another possible explanation, Black and Hispanic youth who think about or attempt suicide may simply turn elsewhere for help with mental health problems. Black adolescents in one study reported more frequently than White adolescents that they cope with problems by relying on themselves, calling on friends, and seeking spiritual support (Chapman & Mullis, 2000). Similarly, in a study by Copeland and Hess (1995), Hispanic youth were more likely than White youth to turn to social activities and seek spiritual support. However, in a study of 16,430 Black and White adults, Snowden

(1998) found that African Americans were actually less likely than White individuals to use informal supports for mental health problems.

Various cultural factors may also account for racial differences in youth's mental health service use. Kouyoumdjian, Zambonga, and Hansen (2003) report that many Latinos adhere to a belief that fate or luck prevails, so they may believe seeking help is futile. The authors also note that families play a more profound role in Latinos' lives than in mainstream culture and, as such, may preempt mental health professionals as sources of help. Snowden (2001) reviewed barriers to mental health services among African Americans and cited cultural issues, including mistrust of mental health professionals; denial of problems; and profound stigma around mental illness. In general, members of oppressed populations frequently fear biased or culturally insensitive clinicians (U.S. Dept. of Health and Human Services, 2001).

In addition to Black and Hispanic adolescents' lower rates of service use in the current study, their lower number of statistically significant predictors of service use also is notable. No variable in the Hispanic adolescents' model, and only two variables in the Black adolescents' model, significantly predicted service use. In contrast, seven predictors were identified for White adolescents. Differences in statistical power partly account for the higher number of significant predictors among White adolescents. Power analyses using Power Analysis and Sample Size (PASS) software (Hintze, 2005) showed that the White sample of 1,591 youth had 95% power to detect an odds ratio of 1.2 in the logistic regression model predicting service use while achieving statistical significance ($p < .05$), yet the Black and Hispanic samples of roughly 300 youth each had only 33% power to detect the same odds ratio. It is likely that conduct disorder symptoms and abuse or dependence of alcohol or other drugs would have attained statistical significance in the Hispanic model had statistical power been stronger, given that the odds ratio of 1.0 just barely fell within the 95% confidence intervals in that group's model. Nevertheless, not all the racial differences can be attributed to power. The Black and Hispanic youth's samples each contained 99.9% power to detect a statistically significant odds ratio of 1.8. The significant interaction effects of race with suicide attempt and psychiatric symptoms further reflect systematic differences.

The dearth of significant predictors identified for the Black and Hispanic adolescents suggests that access and need variables commonly included in mental health services research do not capture key aspects of recently suicidal Black and Hispanic youth's use of mental health services. Other factors to consider include acculturation; cultural bias and oppression; cultural variations in attitudes toward mental health care; and social networks, particularly those involving parents, teachers, and other adults in the youth's life (Cauce et al., 2002; Stiffman, Pescosolido, & Cabassa, 2004). Pescosolido (1996)

has criticized survey research that focuses only on *who* receives mental health care without also considering *how*. She notes that help-seeking is a dynamic process inherently embedded in one's community and culture.

The current study's findings of racial disparities conflict with the only other study examining a nationally representative sample of adolescents' mental health service use during the same year that they thought about or attempted suicide. In that study, using Add Health data, Black and Hispanic adolescents' lower rates of service use relative to White youth's rates were not statistically significant (Pirkis et al., 2003). Although the Add Health study bears some similarities to the current study, important differences exist. The earlier study included only depression and suicide attempts as need-related factors and inquired about only five types of mental health services. In contrast, the current study assessed need for care by measuring 34 symptoms of psychiatric problems in addition to suicide attempt, and it included 18 types of mental health services. As a result, conclusions of the two studies may not be comparable.

Limitations

This study is limited by several factors. The cross-sectional data preclude a determination of whether youth obtained mental health services before, during, or after their suicidal episode. It also is unknown whether correlates of service use actually predated service use. In addition, measurement issues limit the study findings. The NHSDA used only one question each to assess suicidal ideation and attempted suicide and included no additional questions about frequency, duration, severity, intent, or timing of suicidal thoughts or attempts. In the measurement of psychiatric and behavioral symptoms, youth were not questioned about duration, level of impairment, or alternative explanations for their symptoms. Measurement of youth's mental health service use data relied solely on their self-reports, and children and adolescents often underreport their use of men-

tal health services (Leaf et al., 1996). Cultural variations in stigma, self-reliance, and attitudes toward mental health care may have resulted in different rates of underreporting for the Black, Hispanic, and White youth. Other limitations concern the omission of school-based mental health services, as well as data regarding the roles of teachers, parents, and other adult gatekeepers in the adolescents' lives.

Summary and Implications

Whatever the study's limitations, the findings illustrate that in a large, nationally representative sample of adolescents, Black and Hispanic youth were substantially less likely than White youth to have used a mental health service in the year they seriously thought about or attempted suicide. This finding, combined with the irrelevance of suicide attempt as a predictor of mental health service use only for Black and Hispanic adolescents, affirms previous research detailing racial disparities in mental health service use. The current study establishes

that these disparities persist among adolescents who were suicidal, even though suicidal thoughts and attempts frequently signify an elevated need for mental health care.

The findings have important implications for practice and research. Although the causes of racial disparities in adolescents' mental health service use are unknown, research documenting racial bias in the health professions (van Ryn, 2002) suggests that mental health professionals need to take special care to incorporate culturally sensitive services, outreach programs, and treatment environments. Studies of suicidal adolescents' mental health service utilization need to include variables salient to culture and social networks, including attitudes and beliefs about mental health services. Additional areas of suggested research include investigations into racial differences in informal help-seeking, self-reliance, spiritual support, and other means of coping that do not rely on mental health professionals. Perhaps most importantly, researchers need to discern how adolescents of all colors and cultures can best be reached when they are suicidal and especially need professional help.

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