Perceptions of Need and Help Received for Substance Dependence in a National Probability Survey

Christine E. Grella, Ph.D. Mitchell P. Karno, Ph.D. Umme S. Warda, M.S. Alison A. Moore, M.D., M.P.H. Noosha Niv, Ph.D.

Objective: Most individuals with alcohol or other substance use disorders do not seek help for these problems. This study examined the factors associated with perceptions of need for help and receipt of help among individuals with alcohol or other substance dependence disorders in the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). Methods: The 2001-2002 NESARC surveyed a representative sample of the noninstitutionalized population in the United States. Individuals with a past-year substance dependence diagnosis (N=1,602) were classified into one of three groups: received help in the past year (14.7%), perceived a need for help but did not receive it (8.5%), or perceived no need and received no help (76.8%). Multinomial logistic regression with population weights was used to examine the influence of predisposing, enabling, and need-related factors on help seeking in the past year. Results: Factors that increased the receipt of help included older age, drug dependence (versus alcohol dependence only), longer time since the onset of dependence, co-occurring mood disorder, and more problems associated with substance use. Nonwhites were about twice as likely as whites (odds ratio=2.2) to perceive a need for help but not receive it. Similarly, more problems associated with substance use increased the odds of both receiving help and perceiving a need for help but not receiving it. None of the enabling characteristics were associated with help seeking or perceived need, after analyses controlled for predisposing and need-related factors. Conclusions: Increasing the recognition of problems associated with substance dependence, particularly alcohol, may facilitate help seeking, although barriers persist in regard to age and race-ethnicity. (Psychiatric Services 60:1068–1074, 2009)

ost individuals with alcohol or drug use disorders do not L seek help or receive treatment for these problems. National surveys suggest that fewer than half of

Division of Geriatric Medicine, UCLA.

those with past-year psychiatric disorders (including substance use disorders) receive any treatment (1,2). Research from the National Epidemiologic Survey on Alcohol and Related

Dr. Grella, Dr. Karno, Ms. Warda, and Dr. Niv are affiliated with the University of California-Los Angeles (UCLA) Integrated Substance Abuse Programs, Semel Institute for Neuroscience and Human Behavior, 1640 S. Sepulveda Blvd., Suite 200, Los Angeles, CA 90025 (e-mail: grella@ucla.edu). Dr. Moore is with the David Geffen School of Medicine,

Conditions (NESARC) indicated that 24% of individuals with alcohol dependence during their lifetime ever received treatment and that only 12% of individuals with past-year alcohol dependence received treatment in that year (3). Although treatment is generally higher among individuals with drug dependence, it is still far from comprehensive; current estimates suggest that 38% of those with lifetime drug dependence and 31% of those with the disorder in the past year receive treatment within those time frames (4).

Health services research has identified several factors associated with treatment. Treatment utilization is higher among individuals who have multiple types of substance use problems as well as co-occurring mental disorders (5–7). In addition to the nature and severity of disorders, the perception of need and the willingness to seek help vary by several sociodemographic characteristics (8). Unmet need for treatment appears to be highest among the elderly population, persons from racial-ethnic minority groups, those with low incomes, those without insurance, and residents of rural areas (1).

Furthermore, factors that improve access to care, such as health insurance coverage, employment, and geographic locale, may influence the perceived need for and ability to seek help (9). Notably, a significant proportion of individuals in the general population who do not meet criteria for a psychiatric disorder nonetheless reported having received treatment in the past year (10). Thus the perceived need for help and the actual receipt of help for a substance use disorder are not simply a function of meeting diagnostic criteria for a disorder.

The broader health services literature has identified sociodemographic and need-related factors that are associated with health services utilization and barriers that impede access to these services. This study contributed to this body of work by examining individual characteristics that are related not only to the receipt of help but also to the perception of the need for help among individuals with alcohol or drug dependence. We applied the Andersen behavioral model of health services utilization (11,12) to understand the perception of need for help and help seeking among individuals with past-year substance dependence. The model included predisposing characteristics that were fixed characteristics of the individuals; enabling resources that facilitated or impeded health services utilization; and need-related variables that pertained to the number, type, and severity of disorders and associated problems. On the basis of prior research, we hypothesized that the following types of characteristics would contribute to both the perceived need for and the receipt of help for substance dependence: predisposing characteristics, such as sociodemographic characteristics; enabling characteristics, such as health insurance status, marital status, and employment; and need-related characteristics that referred to the severity of the disorder and problems related to substance use. In particular, we hypothesized that a greater number of problems related to substance use would increase both the perception of need and help received for substance dependence.

Methods

Sample

The 2001–2002 NESARC used a representative sample from the United States. The study methodology has been described in detail elsewhere (13). The target population of

the NESARC was the civilian, noninstitutional population of the United States residing in households as well as in group quarters (such as group homes and halfway houses). Face-to-face interviews were conducted with 43,093 respondents. The overall survey response rate was 81%. African Americans, Hispanics, and young adults (ages 18–24 years) were oversampled, with data adjusted for oversampling and householdand person-level nonresponse. The weighted data were then adjusted to represent the U.S. civilian population as of the 2000 census.

The sample for this study (N= 1,602) included all individuals in the 2001-2002 NESARC who met criteria for past-year dependence on alcohol or any drug. This sample represented approximately 4.1% of the total (weighted) NESARC general population sample (approximately 8.5 million individuals). All interviewed participants provided voluntary consent for their participation after having received detailed information about the nature of the survey, statistical uses of the survey data, the voluntary aspect of their participation, and the federal laws that protect their confidentiality.

Diagnostic assessment

Diagnosis of past-year dependence on alcohol or drugs was based on the Alcohol Use Disorder and Associated Disabilities Interview Schedule— DSM-IV Version (AUDADIS-IV). The AUDADIS-IV includes an extensive list of symptom questions that separately operationalize DSM-IV criteria for abuse of and dependence on alcohol and ten classes of illicit or prescription drugs (referred to as "medicines" in the interview). Consistent with the DSM-IV, AUDADIS-IV past-year dependence diagnoses require at least three of the seven DSM-IV criteria for dependence to be met during the past year.

The AUDADIS-IV was also used to generate diagnoses of past-year mood disorders, including major depression, dysthymia, mania, and hypomania; past-year anxiety disorders, including panic disorder with and without agoraphobia, social phobia, specific phobia, and generalized anxiety

disorder; and personality disorders, including schizoid, paranoid, avoidant, dependent, obsessive-compulsive, histrionic, and antisocial. Mood and anxiety diagnoses in NESARC are consistent with DSM-IV criteria for primary or independent diagnosis, meaning that mental disorders that are substance induced, a result of a general medical condition, or entirely accounted for by bereavement were excluded (14). Numerous studies conducted with clinical and general population samples have demonstrated good to excellent reliability and validity of the AU-DADIS-IV diagnoses (13-16).

Variables

Dependent variable. Respondents were asked, "Have you ever gone anywhere or seen anyone for a reason that was related in any way to your drinking or use of medicine or drugs?" Responses included Alcoholics Anonymous or any other type of 12-step meeting; family services or another social service agency; alcohol or drug detoxification program; inpatient ward of a psychiatric or general hospital or community mental health program; outpatient clinic, including outreach programs and day or partial hospital programs; alcohol or drug rehabilitation program, including methadone maintenance; emergency service; halfway house or therapeutic community; crisis center; employee assistance program; clergyman, priest, rabbi, or any type of religious counselor; private physician, psychiatrist, psychologist, social worker, or any other medical or social services professional or agency.

Respondents who indicated that they had sought help from any of the options within the past 12 months were coded as 1, for having received help, on the dependent variable. Those who indicated they had not received help were asked, "Was there ever a time when you thought you should see a doctor, counselor, or other health professional or seek any other help for your drinking or medicine or drug use?" Respondents who indicated yes with reference to the past 12 months were coded as 2, for perceived a need for help but did not receive it. All others were coded as 3,

for no perceived need for help and no help received in the past year.

Predictor variables. These variables were selected on the basis of the conceptual model of health services utilization and organized into three groups, as described below.

Predisposing variables referred to fixed characteristics of the individual and included gender, ethnicity (dichotomized into nonwhite and white because of small cell sizes for some of the categories), age, and educational status (categorized into less than high school, high school graduate, and some college or higher).

Enabling variables represented factors that may facilitate or impede help-seeking behavior. These were marital status (categorized into married or living with someone; widowed, separated, or divorced; and never married), household income, place of residence (urban or rural), U.S. region of residence (Northeast, Midwest, South, or West), and health insurance status (yes or no).

Need-related variables pertained to the type, history, and severity of substance dependence and associated problems. These included whether the individual had ever sought help for an alcohol or drug problem prior to the past year and the type of substance dependence (alcohol only, drug only, or alcohol and drug). The average number of years since the onset of dependence was calculated on the basis of earliest age of onset of alcohol or any drug dependence for cases in which there was dependence on more than one type of substance. Mean imputation was used for 56 cases with missing values, with imputation based on both age category and type of substance. A square-root transformation was performed on this variable because of data skewness. Past-year mood or anxiety disorder or lifetime personality disorder were coded as separate dichotomous variables. Having a family member with alcohol or drug problems comprised "natural or blood relatives," including parents, siblings, children, aunts or uncles, or grandparents who had physical, emotional, legal, familial, work, or health problems related to their use of alcohol or drugs.

Problems related to substance use

were determined by asking respondents whether they had had problems in the past year stemming from their use of alcohol or drugs with regard to job or school, driving, risk of getting hurt, trouble with family or friends, physical fights, taking care of home or family, or legal issues. Positive responses to each item (responses taken separately for alcohol and drugs) that had occurred in the past year were coded as 1 and summed for an aggregate measure that ranged from 0 to 14 and was entered as a continuous variable in the multivariate models. Current health status was assessed by an item that asked respondents to classify their health as poor, fair, good, very good, or excellent; this variable was dichotomized as good to excellent, coded 1, or fair to poor, coded 0.

Statistical methods

Descriptive statistics were used to compare the predisposing, enabling, and need-related characteristics of individuals who had received help for substance dependence in the past year, those who perceived a need for help but did not receive any, and those who neither perceived a need for nor received help. Next, a multinomial logistic regression model was constructed in which having received help or perceiving a need for help but not receiving it were compared with the referent category of neither perceiving a need for help nor receiving it. Variables from the three domains that were significantly associated with the outcome variable were entered into the multivariate model, with one exception. We dropped the variable indicating treatment received before the past year because it was strongly correlated with the dependent variable and was thus endogenous. In addition, having a family history of alcohol problems and having a family history of drug problems were combined into one variable because they were highly correlated.

Variables were considered statistically significant at p<.05. Odds ratios (ORs) and 95% confidence intervals are reported. Analyses were conducted with SUDAAN, version 9.0, a software program that uses Taylor-series linearization to adjust for NESARC's sample design characteristics (17).

Unweighted sample sizes are reported in the tables; all statistics were weighted.

Results

Bivariate relationships of characteristics and help status

Overall, 14.7% of the weighted sample had received help in the past year, 8.5% perceived a need for help but did not receive it, and 76.8% had no perceived need for help and received no help. There were no significant differences among the three help status groups by gender (Table 1). There were proportionately more nonwhites than whites who perceived a need for help but did not receive it (45%), relative to their proportions in the other help status groups (31% who received help and 27% who did not perceive a need for it). Similarly, there were proportionately more individuals in the youngest age group (18–29 years) who did not perceive a need for help (58%) compared with the other help status groups (33% who received help and 43% who perceived a need for help but did not receive it). In contrast, proportionately more persons in the older age groups (30-44 and 45 and older) had either received help or had perceived a need for help but not received it compared with the proportions in the other help status groups. Proportionately more individuals who had not graduated from high school (25%) or who were high school graduates (38%) perceived a need for help but had not received it, whereas proportionately fewer individuals with some college education were in this category (37%) relative to their proportions in the other help status groups.

Among the enabling characteristics, proportionately more individuals who were widowed, separated, or divorced had received help; proportionately more married individuals had perceived a need for help but had not received it; and proportionately more of those who had never been married had no perceived need for help, relative to their proportions in the other help status groups. There were no significant differences in help status associated with household income, place of residence, or region.

Among the need-related character-

Table 1 Characteristics of a 2001–2002 NESARC sample with past-year substance dependence, by help-seeking status^a

Characteristic	Received any help (N=236)		Perceived need, but no help received (N=150)		No perceived need, no helpTotal received (N=1,216)		(N=1,602)	
	N	%	N	%	N	%	N	%
Predisposing								
Gender								
Male	158	70	92	65	779	68	1,029	68
Female	78	30	58	35	437	32	573	32
Race-ethnicity ^b								
White	145	69	66	55	726	73	937	71
Nonwhite	91	31	84	45	490	27	665	29
$ m Age^c$								
18–29	75	33	60	43	645	58	780	52
30–44	102	47	57	34	362	27	521	31
≥45	59	20	33	23	209	15	301	17
Education ^d								
Less than high school	50	17	42	25	205	16	297	17
High school graduate	70	32	45	38	361	28	476	29
Some college or higher	116	51	63	37	650	56	829	54
Enabling								
Marital status ^c	5 0	0.0	~1	40	0.00	00	405	0.4
Married or living with someone	73	36	51	43	363	33	487	34
Widowed, separated, or divorced	71	26	39	21	230	15	340	17
Never married	92	38	60	36	623	52	775	49
Household income	104	07		25	40.4	0.0	500	0.4
\$1-\$19,999	104	37	55 25	35	404	33	563	34
\$20,000-\$34,999	52 51	26 24	35 41	19 29	275 334	20 27	362 426	21 26
\$35,000–\$69,999 ≥\$70,000	29	13	19	29 18	203	20	426 251	19
Place of residence	29	13	19	10	203	20	231	19
Urban	185	76	117	78	1,008	80	310	79
Rural	51	24	33	22	208	20	292	21
Region	01	24	00	22	200	20	292	21
Northeast	41	14	17	16	213	20	271	19
Midwest	59	27	34	24	322	28	415	27
South	70	32	59	37	361	27	490	29
West	66	27	40	23	320	25	426	25
Has health insurance	00		10		3 _ 0		1_0	
Yes	161	70	93	58	842	68	1,096	68
No	75	30	57	42	374	32	506	32
Need related								
Treatment received prior to past year ^c								
Yes	156	62	39	26	165	13	360	22
No	80	38	111	74	1,051	87	1,242	78
Type of dependence ^c								
Alcohol only	118	50	105	67	980	80	1,203	74
Drug only	32	13	8	5	47	4	87	5
Alcohol and drug	86	38	37	28	189	17	312	21
Years since onset of disorder (M±SD) ^{c,e}	$10.1 \pm .7$		7.9 ± 1.0		$5.1 \pm .3$		$6.1 \pm .2$	
Past-year mood disorder ^c	122	52	63	45	339	25	524	31
Past-year anxiety disorder ^c	85	41	50	33	243	21	378	25
Personality disorder ^c	133	57	75	52	432	35	640	40
Family history of alcohol problems ^c	201	85	127	86	842	69	1,170	73
Family history of drug problems ^d	111	48	63	43	421	35	595	37
Problems from substance use in								
the past year (range 0–14) ^c	4.4		40	22	Foo	= 0	= 0 :	
0–1	44	17	40	23	700	53	784	45
≥2	192	83	110	77	516	47	818	55
Current health status ^c	167	74	100	70	1.044	07	1 017	0.4
Good to excellent	167 69	$74 \\ 27$	106	70 30	1,044	87 13	1,317	84
Fair to poor	09	41	44	30	172	19	285	16

^a NESARC, National Epidemiologic Survey on Alcohol and Related Conditions. Sample Ns are unweighted; percentages and means are weighted.

NESARC, National Epidemiologic Survey on Alcohol and Related Conditions. Sample N
 p<.05 for comparisons among help status groups
 p<.001 for comparisons among help status groups
 p<.01 for comparisons among help status groups
 Earliest age of onset was used when there was dependence on more than one substance.

Table 2Results of multinomial logistic regression model to predict help seeking among a 2001–2002 NESARC sample of 1,602 persons with past-year substance

dependence^a

		elp received, no help	Perceived need but no help received, versus no help		
Variable	OR	95% CI	OR	95% CI	
Predisposing characteristic					
Nonwhite (reference: white) ^b	1.25	.78 - 1.99	2.16	1.30-3.58	
Age (reference: 18–29 years) ^c					
30–44	3.22	1.87 - 5.55	1.60	.83-3.09	
≥45	2.40	1.16 - 4.95	1.69	.79-3.62	
Education (reference: college)					
Less than high school	.75	.38-1.48	1.49	.84 - 2.62	
High school graduate	.91	.57 - 1.48	1.55	.95 - 2.53	
Enabling characteristic					
Marital status (reference: married					
or living with someone)					
Widowed, separated, or divorced	.95	.54 - 1.68	.74	.43 - 1.27	
Never married	.82	.47 - 1.43	.56	.31-1.03	
Need-related characteristic					
Type of dependence (reference: alcohol only) ^b					
Drug only	3.84	1.87-7.88	.99	.34-2.88	
Alcohol and drug	.84	.44–1.61	.70	.37–1.34	
Years since onset of disorder ^{c,d}	1.27	1.12–1.44	1.10	.94–1.28	
Past-year mood disorder ^c	1.90	1.29-2.81	1.90	1.12-3.21	
Past-year anxiety disorder	1.57	1.00-2.46	1.14	.66-1.95	
Personality disorder	1.02	.64-1.63	1.09	.66-1.80	
Family history of drug or alcohol					
problems	1.22	.69-2.18	1.53	.83-2.83	
Number of problems related to drug					
or alcohol use ^c	1.94	1.68 - 2.23	1.60	1.39 - 1.85	
Health status good to excellent					
(reference: fair to poor)	.81	.47–1.39	.62	.37–1.05	

 $[^]a$ NESARC, National Epidemiologic Survey on Alcohol and Related Conditions. Wald $\chi^2 = 1{,}146, \, df = 38, \, p{<.}001$

istics, a history of having received prior help was strongly associated with receipt of help in the past year. Overall 62% of those who had received help in the past year had a history of help seeking prior to the past year, compared with 26% of those who perceived a need for help but did not receive help and 13% of those who did not perceive a need for help.

Help status was strongly associated with the type of substance dependence. About 80% of those who had no perceived need for help were alcohol dependent, compared with about half of those who had received any help and two-thirds who perceived a need for help but did not receive it. In con-

trast, a greater proportion of those who had received help were dependent on both alcohol and other substances (38%), compared with 28% of those who perceived a need for help but did not receive it and 17% of those who did not perceive a need for help. Greater proportions of those who had received help or who perceived a need for it also had mood, anxiety, or personality disorders. Greater proportions of those who either had received help or perceived a need for it had a family history of alcohol or drug problems compared with those who had no perceived need for help. Individuals who reported two or more problems in the

past year from their substance use were proportionately more likely to have received help (83%) or to have perceived a need for it but not receive it (77%), whereas a greater proportion of those with one or no problems did not perceive a need for treatment and did not receive it (53%) compared with the other help status groups. Individuals who had received help or who perceived a need for it were more likely to describe their health status as fair to poor, rather than as good to excellent, compared with those who had no perceived need for help.

Results from multinomial logistic regression model

With regard to predisposing factors, nonwhites had over twice the odds of whites (OR=2.2) of perceiving a need for help but not receiving it (Table 2). Compared with individuals aged 18–29 years, individuals aged 30–44 years were over three times as likely (OR=3.2) to have received help, and those aged 45 and older were over two times as likely (OR=2.4) to have received help. Educational status was not significantly associated with help status.

After analyses controlled for the other variables in the model, the only enabling characteristic entered into the model, marital status, was not significantly associated with help status.

Several need-related characteristics were significantly associated with help status. Individuals with only drug dependence had almost four times the odds (OR=3.8) of seeking help compared with those with only alcohol dependence. A longer duration since onset of dependence increased the odds of both perceiving a need for help and receiving it in the past year. Similarly, individuals with a past-year mood disorder were approximately twice as likely as those without to receive help as well as to perceive a need for help but not receive it. Having a greater number of problems associated with substance use significantly increased the likelihood of both perceiving a need for help and receiving it. After analyses controlled for the other variables in the model, we found that family history of alcohol or drug problems, per-

^b p<.01 for comparisons among help status groups

c p<.001 for comparisons among help status groups

^d Earliest age of onset was used when there was dependence on more than one substance. The variable was square-root transformed.

ceived health status, past-year anxiety disorder, and personality disorder were not associated with help status.

Discussion

Consistent with other national surveys (1,2,5–9), this study showed that most individuals with substance dependence did not receive any treatment or services related to these disorders, although individuals who had a co-occurring mood disorder were more likely to receive help. The study extended these prior findings by identifying individual characteristics that were associated with both the perception of need for help and the receipt of help. Both predisposing and need-related variables were associated with help status, but contrary to prior research (1) and our hypothesis, none of the enabling factors were associated.

Of note is that those who were drug dependent were approximately four times as likely as those who were dependent only on alcohol to receive help. The illegal versus legal status of drugs and alcohol, respectively, may underlie this distinction, where misuse of alcohol is more socially normative and drug dependence is more easily identified as problematic. Further, some have suggested that the low rate of treatment seeking among those with alcohol-related problems stems from the abstinence orientation of most alcohol treatment, which creates a barrier for those who cannot envision total abstinence from alcohol or who do not consider themselves to be alcoholics (18). Others have suggested that the stigma associated with substance use problems, as well as low levels of motivation and dissatisfaction stemming from prior treatment, are barriers to seeking help (19).

Several variables that were significantly associated with help status at the bivariate level were not significant in the multivariate analyses; these included marital and educational status, having a family history of alcohol or drug problems, past-year anxiety disorder, personality disorder, and current health status. Although these factors may be associated with the recognition of a need for help, their influence on help seeking may have been mitigated by other factors.

As hypothesized, this study demonstrated that having more problems related to alcohol or other substance use was associated with help status, after analyses controlled for predisposing factors (race-ethnicity, age, and education), enabling factors (marital status), and severity of disorder (co-occurring disorders, duration of dependence, and health status). Because more problems associated with substance use may be indicative of greater severity, this finding was expected. However, the causal direction of this relationship could not be discerned; that is, individuals who had received help may have been better able to identify problems related to their substance use, perhaps because of the help they had received. Nevertheless, the findings suggest that greater awareness of problems stemming from one's substance use may help to leverage treatment participation and other help-seeking behaviors, consistent with the premise of motivational enhancement interventions (20).

Findings about the relatively low levels of help seeking among those with substance use disorders have prompted a debate regarding the extent to which clinical diagnosis is an accurate indicator of need for treatment. Some have argued that "clinical significance," as indicated by symptom severity, psychological distress, or impairments in functioning, may more accurately represent need for treatment than DSM-based diagnostic categories (10,21,22). Moreover, this debate has relevance to criteria that should be used to determine a threshold for "unmet need for treatment," which may be the basis for determining the adequacy of the treatment system in providing treatment to those who "need" it (23). Our findings on the lower level of problem severity among those who did not receive help suggest that meaningful distinctions can be made between the diagnosis of a substance use disorder and need for care. Clearly, more research is warranted to specify the indicators of need for treatment, apart from reliance solely on diagnostic criteria.

The findings with regard to the effects of race-ethnicity on help status

were mixed, as has been shown in other studies (24,25). Although raceethnicity was not significantly associated with having received help, nonwhites were more likely than whites to perceive a need for help but not receive it. Other research conducted with NESARC showed no difference between African Americans and whites in lifetime help received for alcohol problems, although whites were less likely to receive help for drug problems (26). Other studies have shown that attitudinal and perceptual factors account for some of the underutilization of mental health services among ethnic minority groups; these may include perceived discrimination, prior negative experiences associated with services utilization, and limited knowledge regarding available treatment and services (27-30). Our findings suggest that such factors should be explored to better understand the reasons why individuals from racial-ethnic minority groups who perceive a need for help with substance use problems do not receive it.

Interpretation of the study findings should include consideration of limitations that are inherent in the use of retrospective surveys, in which recall of specific symptoms over time may be inaccurate and influenced by the respondent's current mental and general medical health status (31). Moreover, substance use and mental disorders were assessed by nonclinical personnel and diagnosed in the absence of evaluations of clinical severity. However, the validity of such data can be enhanced by use of standardized procedures and rigorous staff training and oversight (32), all of which were implemented in the NESARC study. Moreover, recall error may have been minimized by the discrete time period examined (the past year), rather than over the lifetime.

Conclusions

Help seeking for substance use disorders has been shown to enhance the likelihood of recovery (33). A better understanding of the factors that facilitate or inhibit help seeking can help to improve the organization and delivery of treatment services to those who need them (34). This study

showed that a wide range of factors influenced the perception of need for help and the receipt of help for alcohol or drug dependence. Longer duration of the disorder, specifically drug dependence, and more severe problems in functioning were key factors that promoted the receipt of treatment or other forms of assistance. Increasing the recognition of problems associated with substance dependence, particularly alcohol dependence, may facilitate help seeking, although barriers persist, especially among racial-ethnic minority groups and younger individuals.

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