Service Use and Barriers to Mental Health Care Among Adults With Major Depression and Comorbid Substance Dependence

Lian-Yu Chen, M.D.
Rosa M. Crum, M.D., M.H.S.
Silvia S. Martins, M.D., Ph.D.
Christopher N. Kaufmann, M.H.S.
Eric C. Strain, M.D.
Ramin Mojtabai, M.D., Ph.D.

Objective: **The study explored mental health service use patterns and barriers to care among individuals with comorbid mental and substance use disorders.** ***Methods:*** **Using data from the National Survey on Drug Use and Health (2005–2010) for 18,972 adults with past-year major depressive episodes, the study compared mental health service use and perceived barriers to care among participants with and without co-occurring alcohol dependence, nonalcohol drug dependence, and both alcohol and drug dependence.** ***Results:*** **Compared with participants without comorbid substance dependence, participants with alcohol dependence or both alcohol and nonalcohol drug dependence used more mental health services of all types, and participants with only comorbid alcohol dependence used more medication treatments. Participants with comorbid substance dependence were significantly more likely than those without comorbid substance dependence to report unmet mental health treatment need. However, barriers to mental health care were remarkably similar across groups, with financial barriers being the most common in all groups.** ***Conclusions:*** **Participants with major depression comorbid with substance dependence used more mental health services but also perceived more unmet need for such care than individuals without such comorbidity. However, barriers to mental health care were similar across groups with and without comorbidity. Policies aimed at expanding insurance coverage and mental health parity would likely benefit individuals with major depression and substance dependence comorbidity even more than those without such comorbidity. (*Psychiatric Services* 64:863–870, 2013; doi: 10.1176/appi.ps.201200289)**

Substance use disorders commonly occur among individuals with mental disorders (1–6). Co-occurring disorders have significant social and clinical implications (7–13). Yet research on mental health treatment seeking among individuals with co-occurring disorders has produced mixed results (10,11,13–17). Whereas some studies found that individuals with co-occurring disorders seek professional treatment at significantly higher rates than individuals without co-occurring disorders (13,14,17), other studies have found less consistent results (10,15).

However, most previous studies that examined the impact of comorbid substance use disorders on mental health service use did not distinguish between substance dependence and substance abuse (14,17). Substance abuse and dependence have different courses, outcomes, and clinical correlates (12,18–20). Past studies also often combined comorbid disorders that involved alcohol use and comorbid disorders that did not involve alcohol (10,21), which are associated with different sociodemographic characteristics (3,18,20,22), comorbid mental illness (18,20,23,24), and service use profiles (15,16,25). Finally, past research often combined different services and care settings (13,14,16,17).

Some prior research has found that among individuals with mental disorders, those with comorbid substance use disorders are more likely to report an unmet need for mental health care (23,26,27). A number of studies also examined barriers to mental health care, but many failed to distinguish between perceived mental health treatment need and perceived substance use disorder treatment need

With the exception of Dr. Martins and Dr. Strain, all of the authors are affiliated with the Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, 624 North Broadway, HH784, Baltimore, MD 21205 (e-mail: liachen@jhsph.edu). Dr. Martins is with the Department of Epidemiology, Columbia University Mailman School of Public Health, New York City. Dr. Strain is with the Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine, Baltimore.

(10,21,26), and little is known regarding differences in barriers to mental health services among individuals with or without substance use disorders.

To address these limitations, we analyzed data from the National Survey on Drug Use and Health (NSDUH), a representative survey of the U.S. population, to address the following questions: Do individuals with major depressive episodes and alcohol or nonalcohol drug dependence use different modalities of mental health services, such as inpatient or outpatient treatment and medications, or use outpatient services in different settings, such as a private office or outpatient medical clinic, compared with individuals with major depression and no such comorbidity? Do individuals with comorbid substance dependence experience greater unmet treatment need and different types of barriers to mental health treatments?

The analyses focused on major depression, the only mental health condition fully assessed by the NSDUH. It is also a prevalent disorder that frequently co-occurs with a substance use disorder. We limited our analyses to substance dependence, a more severe substance use disorder with more serious implications for health outcomes and service use (22,28). The study built upon a previous study that used 2005–2006 NSDUH data to examine access to care and barriers among individuals with major depressive episodes, irrespective of substance use disorder comorbidity (29).

Methods

Sample

The NSDUH is sponsored by the Substance Abuse and Mental Health Services Administration and is designed to provide estimates of the prevalence of nonmedical use of legal and illegal substances in the U.S. household population ages 12 and older (30–35). The institutional review board (IRB) of Research Triangle Institute approved the study procedures prior to data collection. The analyses of deidentified data for this paper were deemed exempt from IRB review. Detailed information about the sampling and survey methodology of NSDUH is found elsewhere (30–35).

We analyzed combined data from the NSDUH public use data files for 2005 to 2010 (N=336,003). We restricted our sample to adult participants ages 18 or older (N=227,123) who met the criteria for 12-month major depressive episodes (N=18,972). We excluded participants under age 18 because NSDUH assesses service use by adults and adolescents differently and does not assess barriers to care among adolescents.

Assessment

Major depressive episodes were ascertained by using a structured interview based on *DSM-IV* criteria (36). The diagnostic assessment was modeled after the Composite International Diagnostic Interview (CIDI) as implemented in the National Comorbidity Survey Replication (37,38).

Functional impairment associated with depressive symptoms was assessed by using the Sheehan Disability Scale (39). Participants were asked to recall the time in the past 12 months when problems with mood were the worst and to rate the degree of impairment in performance of household chores, ability to do well at school or work, ability to get along with family, and social life on a scale from 0 to 10, with 0 indicating no impairment; 1–3, mild impairment; 4–6, moderate impairment; 7–9, severe impairment; and 10, very severe impairment. An overall role impairment score is defined as the highest rating in any of the four domains.

Substance dependence in the past 12 months was also assessed by using structured interviews based on *DSM-IV* criteria (36). We further divided substance dependence into alcohol dependence and nonalcohol drug dependence (marijuana, crack or cocaine, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, and sedatives).

Mental health service use was assessed by a series of questions regarding treatment or counseling specifically for problems with emotions, "nerves," or mental health in outpatient or inpatient settings in the past 12 months. Outpatient care settings included an outpatient mental health clinic or center; the office of a private therapist, psychologist, psychiatrist, social worker, or counselor; a doctor's office; a medical clinic; and a partial-day hospital or day treatment program. A question was also asked regarding use of medications prescribed to treat a mental or emotional condition. To further limit assessment of mental health service use to treatment seeking for mental health reasons, each question ended with the following statement: "Please do not include treatment for alcohol or drug use." In addition, the questions were preceded by the following preamble: "These next questions are about treatment and counseling for problems with emotions, nerves, or mental health. Please do not include treatment for alcohol or drug use."

Perceived unmet need for mental health treatment was assessed as a positive response to the question, "During the past 12 months, was there any time when you needed mental health treatment or counseling for yourself but didn't get it?" This question was asked after the series of questions about treatment seeking for problems with emotions, nerves, or mental health.

Barriers to mental health treatment were assessed by asking participants who reported unmet mental health treatment need in the past 12 months to choose from a list of reasons for not receiving the needed care. We categorized these reasons into four groups: financial reasons, perceived stigma, attitudinal reasons, and structural reasons. [The list of reasons is available online as a data supplement to this article.]

Sociodemographic characteristics included gender, age group (18–25, 26–34, 35–50, or >50), race-ethnicity (white, black, Hispanic, or other), marital status (married; divorced, separated, or widowed; or never married), employment status (partial or full employment, unemployed, or not in labor force), education (less than high school, high school, or college and above), annual household income (≤$19,999, $20,000–$34,999, $35,000–$69,999, or ≥$70,000), health insurance status (none, private insurance, Medicare, Medicaid or state program, CHAMPUS or military insurance, or

other), and population density of the area of residence (metropolitan, suburban, or rural).

Data analysis

Analyses focused on comparing four groups of participants, all of whom met criteria for major depressive episodes. These groups included participants without substance dependence comorbidity and those with comorbid alcohol dependence, nonalcohol drug dependence, or both. We used a series of multivariate logistic regression models to compare the groups with regard to use of mental health services in different modalities and settings, perceived unmet need for mental health treatment, and reasons for not seeking needed mental health services. The group without substance dependence comorbidity was the reference group. In addition, comparisons among comorbid groups were conducted. The multivariate models adjusted for age, gender, race-ethnicity, education, marital status, employment status, household income, type of health insurance, functional impairment, and population density of area of residence.

We used Taylor series linearization to take into account the complex survey design of NSDUH. Stata 11 was used for all analyses. All percentages reported are weighted.

Results

Characteristics of groups

A total of 15,089 (84.5%) of the 18,972 NSDUH participants did not meet the criteria for any substance dependence comorbidity, 1,932 (8.5%) met the criteria for alcohol dependence comorbidity, 1,266 (4.8%) for nonalcohol drug dependence comorbidity, and 685 (2.2%) for both alcohol and nonalcohol drug dependence comorbidity (Table 1). Compared with participants with major depressive episodes only, those with substance dependence comorbidity were more likely to be male; to be younger; to be single or divorced, separated, or widowed; to be unemployed or not in the labor force; to be uninsured; to have a family income less than $20,000; and to have greater functional impairment. Participants with nonalcohol drug dependence and those with both alcohol and nonalcohol drug dependence comorbidities were more likely to be African American and to have less education than participants without such comorbidities.

Use of services and unmet treatment need

Slightly more than half of the participants, irrespective of comorbidity status, reported having received mental health care in the past year (Table 2). After adjustment for sociodemographic characteristics, the likelihood of mental health service use was clearly higher among those with comorbid substance dependence than among participants without such comorbidity. Participants with comorbid nonalcohol drug dependence and with both alcohol and nonalcohol drug dependence were more likely to report using inpatient care. In addition, participants with both alcohol and nonalcohol drug dependence were more likely than those without a comorbid substance use disorder to report outpatient care.

In comparisons among groups with comorbid disorders, participants with both alcohol and nonalcohol drug dependence comorbidity were more likely than those with either comorbidity alone to report using inpatient care (adjusted risk ratio [ARR]=2.31, 95% confidence interval [CI]=1.34–3.99, $p<.01$, and ARR=1.55, CI=1.00–2.39, $p<.05$, respectively) and were more likely than those with comorbid alcohol dependence alone to report outpatient care (ARR=1.53, CI=1.15–2.05, $p<.01$). None of the other comparisons among groups with comorbid disorders were statistically significant. However, all comparisons of service use between participants with both alcohol and nonalcohol drug dependence and participants with either comorbidity produced risk ratios greater than one, indicating greater likelihood of using services among participants with both comorbidities. [A table for comparing the likelihood of using mental health services by comorbid substance use disorder is available online as a data supplement to this article.]

The groups also differed with regard to outpatient settings where they received care. Participants with nonalcohol drug dependence and those with both alcohol and nonalcohol drug dependence were more likely than participants without a comorbid disorder to seek outpatient treatment from a mental health clinic or center (Table 2).

Participants with comorbid substance dependence were more likely than those without a comorbidity to report an unmet need for mental health treatment. Whereas only 28.6% of participants without comorbid substance dependence perceived an unmet need for mental health care, 43.0% of participants with comorbid alcohol dependence, 53.6% of participants with comorbid nonalcohol drug dependence, and 54.8% of participants with both alcohol and nonalcohol drug dependence comorbidity experienced unmet treatment need. Among groups with comorbid disorders, participants with both alcohol and nonalcohol drug dependence comorbidity were more likely than participants with alcohol dependence alone to perceive an unmet need (ARR=1.48, CI=1.09–2.07, $p<.05$). [The likelihood of perceived unmet need for mental health treatment by comorbid substance use disorder is summarized in the table available online as a data supplement to this article.]

Treatment barriers

Reasons for not seeking mental health treatment were remarkably similar among groups (Table 3). The most common category of treatment barrier across the four groups was financial. Not being able to afford treatment was reported by approximately half of all participants who reported an unmet need for mental health treatment. The second leading category of treatment barrier was attitudinal—specifically, the belief that the participant could handle the problem without help.

In the context of these overall similarities, there were a few differences among comorbidity groups. Compared with participants without comorbid substance dependence, those with alcohol dependence were less likely to report lack of insurance as a barrier, and participants with nonalcohol drug dependence and both alcohol and nonalcohol drug

Table 1

Sociodemographic characteristics of 18,972 adults with past-year major depressive episodes and association with comorbid substance use disorders[a]

Characteristic	No comorbidity (N=15,089)		Alcohol dependence (N=1,932)				Nonalcohol drug dependence (N=1,266)				Alcohol and nonalcohol drug dependence (N=685)			
	N	%	N	%	OR	95% CI	N	%	OR	95% CI	N	%	OR	95% CI
Gender														
Male	4,376	32.2	827	50.4	1.00	—	463	41.9	1.00	—	318	57.5	1.00	—
Female	10,713	67.9	1,105	49.7	.47	.41–.53***	803	58.1	.66	.55–.78***	367	42.6	.35	.27–.45***
Age														
18–25	7,477	16.3	1,161	25.8	1.00	—	866	33.5	1.00	—	506	42.4	1.00	—
26–34	2,406	17.6	307	22.8	.82	.69–.98*	169	21.4	.59	.45–.78***	85	22.7	.50	.36–.68***
35–50	3,513	33.0	365	32.9	.63	.53–.74***	194	31.2	.46	.38–.57***	80	25.7	.30	.22–.42***
>50	1,693	33.1	99	18.5	.35	.26–.48***	37	13.9	.20	.13–.32***	14	9.3	.11	.06–.20***
Race-ethnicity														
White	10,467	74.6	1,301	71.9	1.00	—	880	74.2	1.00	—	461	68.6	1.00	—
Black	1,545	9.4	178	11.3	1.24	.92–1.66	154	13.5	1.44	1.04–2.00*	84	17.2	1.98	1.35–2.91**
Hispanic	1,864	11.0	288	12.4	1.17	.88–1.57	129	9.2	.84	.55–1.29	90	11.4	1.13	.76–1.68
Other	1,213	5.0	165	4.4	.90	.63–1.29	103	3.1	.62	.41–.92*	50	2.8	.60	.33–1.08
Marital status														
Married	4,648	43.4	308	25.6	1.00	—	180	20.9	1.00	—	58	13.8	1.00	—
Divorced, separated, or widowed	2,596	27.1	325	28.5	1.78	1.39–2.27***	161	2.6	1.97	1.39–2.79***	89	23.2	2.69	1.59–4.56***
Never married	7,845	29.5	1,299	45.9	2.64	2.14–3.25***	925	53.4	3.76	2.85–4.96***	538	63.1	6.74	4.59–9.90***
Education														
Less than high school	2,513	15.1	323	16.4	1.00	—	286	20.2	1.00	—	186	24.8	1.00	—
High school	4,773	30.1	629	31.9	.98	.75–1.28	446	36.1	.90	.68–1.17	259	39.6	.80	.58–1.10
College and above	7,803	54.8	980	51.8	.87	.69–1.10	534	43.7	.60	.45–.79***	240	35.6	.39	.29–.54***
Household income														
≤$19,999	4,632	24.6	695	32.2	1.00	—	508	37.1	1.00	—	253	37.3	1.00	—
$20,000–$34,999	5,429	35.3	651	31.5	.68	.54–.85**	425	36.9	.69	.55–.87**	239	35.9	.67	.50–.90*
$35,000–$69,999	2,274	17.4	240	13.7	.60	.45–.79**	161	12.4	.47	.34–.65***	78	10.2	.39	.25–.59***
≥$70,000	2,754	22.7	346	22.6	.76	.59–.97*	172	13.7	.40	.28–.57***	115	16.7	.48	.34–.68***
Health insurance														
None	3,332	17.8	538	25.5	1.00	—	368	29.3	1.00	—	255	37.2	1.00	—
Private	7,620	51.4	929	47.2	.64	.53–.77***	491	34.3	.41	.31–.53***	254	33.1	.31	.23–.41***
Medicare	602	9.5	28	3.4	.25	.15–.42***	20	3.2	.20	.12–.34***	8	2.0	.10	.04–.26***
Medicaid or state	2,540	14.4	274	14.0	.68	.53–.87**	303	24.6	1.04	.76–1.42	117	18.8	.63	.44–.89**
CHAMPUS or military	576	5.1	83	6.8	.93	.60–1.40	32	4.8	.57	.29–1.12*	24	6.6	.62	.32–1.22
Other	391	1.9	74	3.1	1.17	.78–1.75	47	3.9	1.27	.76–2.13	25	2.2	.57	.28–1.16
Employment														
Part- or full-time	9,579	60.3	1,316	66.2	1.00	—	729	50.8	1.00	—	411	56.4	1.00	—
Unemployed	1,318	6.7	211	9.9	1.36	1.02–1.81*	173	12.8	2.27	1.65–.14***	118	15.2	2.43	1.78–3.32***
Not in labor force	4,192	33.0	405	23.9	.66	.54–.81***	364	36.4	1.31	1.07–.60*	156	28.5	.92	.70–1.22
Disability[b]														
None	92	.7	6	.4	1.00	—	2	.1	1.00	—	1	.1	1.00	—
Mild	1,048	7.5	88	4.5	.99	.24–4.13	49	4.2	5.41	1.08–6.97*	15	2.2	1.73	.20–15.27
Moderate	4,492	30.5	533	28.4	1.52	.39–5.96	258	16.2	5.16	1.11–23.89*	137	20.6	4.05	.52–31.54
Severe	6,682	42.3	950	48.2	1.87	.47–7.41***	625	50.6	11.60	2.45–54.82**	365	58.4	8.29	1.09–62.84*
Very severe	2,701	19.1	336	18.5	1.59	.39–6.53***	325	29.0	14.77	3.09–70.59**	163	18.8	5.93	.76–46.49
Population density of area of residence														
Metropolitan	5,964	49.1	774	53.4	1.00	—	552	49.7	1.00	—	300	53.9	1.00	—
Suburban	7,798	43.9	1,001	40.1	.84	.70–1.00	623	44.2	.99	.81–1.22	340	42.4	.88	.65–1.19
Rural	1327	7.0	157	6.5	.85	.60–1.21	91	6.2	.87	.56–1.35	45	3.8	.49	.27–.89*

[a] Adults with no comorbidity were the reference group.

[b] Based on self-ratings on the Sheehan Disability Scale for performing household chores, ability to do well at school or work and get along with family, and social life

*p<.05, **p<.01, ***p<.001

dependence were less likely to report a desire to handle the problem on their own as a barrier. Participants with nonalcohol drug dependence and those with both alcohol and nonalcohol drug dependence were also less likely than those without comorbid substance dependence to report structural barriers. Specifically, participants with substance dependence comorbidity were less likely than the group without it to report lack of time as a barrier to treatment.

Discussion

There were three main findings in this study. First, individuals with major depressive episodes and comorbid substance dependence (either alcohol or nonalcohol drug dependence or both) had higher rates of mental health service use than individuals without such comorbidity. Similar findings were shown in several national surveys from the late 1990s to early 2000s (13,14,25), although not all studies showed such a relationship (10,15). These mixed results could be due to the design of some past studies, which aggregated all substance use disorders without distinguishing between substance abuse and dependence or between alcohol and nonalcohol drug disorders. Furthermore, past research found significant variations between mood and anxiety disorders and comorbidity of substance use disorders (12,40,41). In this study, we focused on major depression and comorbid substance dependence. We also chose to examine alcohol and nonalcohol drug dependence comorbidities separately.

Whereas comorbid major depression and substance dependence was associated with increased likelihood of mental health service use across the board, there were also some variations in the modality and setting of services among groups. Individuals with nonalcohol drug dependence as well as those with both alcohol and nonalcohol drug dependence were more likely to have used both inpatient services and psychiatric medications and to have received outpatient care in mental health clinics or centers, partial-day hospitals, or day treatment programs. Individuals with comorbid alcohol dependence had only

Table 2

Mental health service use among 18,972 adults with past-year major depressive episodes and association with comorbid substance use disorders

Service	No comorbidity (N=15,089)		Alcohol dependence (N=1,932)				Nonalcohol drug dependence (N=1,266)				Alcohol and nonalcohol drug dependence (N=685)			
	N	%	N	%	ARR[a]	95% CI	N	%	ARR[a]	95% CI	N	%	ARR[a]	95% CI
Any mental health treatment	7,151	53.4	888	53.6	1.32	1.08–1.62**	675	60.5	1.54	1.22–1.93***	370	55.4	1.77	1.29–2.43***
Inpatient care	575	4.1	105	5.8	1.28	.88–1.85	125	10.7	1.91	1.40–2.60***	96	13.9	2.96	1.86–4.71***
Outpatient care	4,681	34.4	576	30.8	.95	.79–1.14	420	38.8	1.20	.93–1.54	239	36.1	1.46	1.10–1.93**
Medication	6,136	47.7	732	46.8	1.31	1.06–1.61*	598	56.1	1.70	1.38–2.08***	309	45.6	1.55	1.14–2.10**
Outpatient care setting														
Mental health clinic or center	1,311	9.0	200	9.6	1.07	.78–1.45	174	16.9	1.53	1.14–2.05**	112	19.3	2.37	1.67–3.36***
Private office of a mental health professional	2,613	19.0	319	17.2	1.00	.78–1.29	224	19.0	1.11	.82–1.50	104	13.5	.93	.69–1.27
Doctor's office	983	8.7	107	6.0	.82	.60–1.13	62	6.1	.79	.45–1.38	31	5.8	1.06	.54–2.07
Outpatient general medical clinic	404	3.1	58	3.9	1.24	.81–1.90	32	4.1	1.17	.73–1.91	23	2.5	.79	.42–1.47
Partial-day hospital or day treatment program	117	.7	19	1.3	1.48	.74–2.95	19	2.4	2.39	1.18–4.85*	14	3.0	3.30	1.20–9.04*
Perceived unmet need for mental health treatment	4,850	28.6	847	43.0	1.83	1.51–2.22***	661	53.6	2.31	1.88–2.85***	398	54.8	2.71	2.04–3.60***

[a] Adjusted risk ratios (ARRs) are from multivariate logistic models that controlled for the adults' age, sex, race-ethnicity, marital status, education, income, insurance, employment, functional impairment, and population density of the area of residence. Adults with no comorbidity were the reference group.

*p<.05, **p<.01, ***p<.001

Table 3

Barriers to mental health treatment among 6,756 adults with past-year major depressive episodes and with perceived unmet need for mental health treatment and association with comorbid substance use disorders

Barrier	No comorbidity (N=4,850)		Alcohol dependence (N=847)				Nonalcohol drug dependence (N=661)				Alcohol and nonalcohol drug dependence (N=398)			
	N	%	N	%	ARR[a]	95% CI	N	%	ARR[a]	95% CI	N	%	ARR[a]	95% CI
Financial	2,576	54.8	426	51.0	.85	.64–1.13	357	59.6	1.15	.85–1.56	206	56.9	1.05	.73–1.51
Cost	2,338	48.8	393	46.0	.85	.65–1.10	328	52.5	1.03	.77–1.38	185	51.8	1.00	.68–1.46
No insurance coverage	326	7.5	48	4.1	.51	.31–.82**	54	7.9	1.11	.64–1.91	24	6.6	.97	.52–1.76
Insufficient insurance contribution	567	15.0	78	12.4	.97	.59–1.60	89	10.0	1.08	.69–1.69	24	6.3	.67	.35–1.26
Stigma	1,299	23.6	275	29.0	1.24	.95–1.62	193	23.0	1.00	.71–1.43	112	28.8	1.23	.75–2.01
Fear of neighbors' opinion	524	8.6	108	12.1	1.32	.84–2.07	84	9.3	1.09	.68–1.75	51	9.4	.97	.58–1.61
Fear of negative effect on job	371	8.5	86	12.9	1.45	.94–2.25	48	6.0	1.09	.46–1.36	34	10.9	1.23	.69–2.18
Confidentiality concerns	514	9.9	99	10.5	.99	.66–1.48	92	11.7	1.21	.75–1.93	52	15.5	1.59	.87–2.89
Did not want others to find out	467	7.1	94	7.3	.91	.65–1.29	58	5.7	.76	.47–1.22	27	4.9	.64	.28–1.44
Attitudinal	2,157	39.8	380	40.6	.94	.67–1.30	273	34.8	.79	.57–1.08	158	36.1	.77	.55–1.09
Fear of being committed or forced to use medication	746	12.7	162	15.9	1.10	.79–1.53	136	16.8	1.11	.75–1.63	74	15.8	.96	.59–1.57
Treatment not necessary	418	6.7	83	6.8	.92	.58–1.47	46	6.6	.94	.48–1.85	35	9.1	1.22	.62–2.39
Treatment won't help	640	10.5	104	10.5	.93	.54–1.62	62	6.3	.57	.35–.92	38	10.1	.85	.46–1.57
Can handle the problem without treatment	1,350	25.9	218	23.6	.87	.58–1.30	134	16.1	.61	.42–.89*	70	15.2	.53	.37–.78**
Structural	1,630	31.1	260	28.2	.86	.65–1.14	188	23.2	.68	.51–.91*	86	20.4	.59	.41–.87**
Did not know where to go	908	16.9	162	17.1	.96	.69–1.32	121	14.5	.75	.52–1.07	57	14.2	.73	.45–1.21
Lack of time	785	14.8	111	10.0	.67	.46–.96*	66	8.5	.63	.40–.98*	32	4.8	.35	.21–.58***
Lack of transportation or other inconvenience	242	4.4	27	3.4	.78	.34–1.82	37	5.1	1.05	.61–1.81	23	6.4	1.54	.75–3.16
Other	438	9.3	62	6.5	.69	.44–1.09	62	10.4	1.17	.74–1.84	29	7.5	.85	.48–1.48

[a] Adjusted risk ratios (ARRs) are from multivariate logistic models that controlled for adults' age, sex, race-ethnicity, marital status, education, income, insurance, employment, functional impairment, and population density of the area of residence. Adults with no comorbidity were the reference group.

*p<.05, **p<.01, ***p<.001

increased use of only medication treatments. The greater use of inpatient and day treatment services likely reflects the greater severity of mental health problems among individuals with nonalcohol drug dependence. We also found a greater likelihood of use of inpatient services among participants with both alcohol and nonalcohol drug dependence compared with participants with either type of comorbidity, which may simply reflect the impact of the number of substances (23,25) or the synergistic effects of alcohol and nonalcohol drug dependence. Although the analyses adjusted for functional impairment, comorbid mental health disorders besides major depressive episodes were not captured in the NSDUH data.

Second, although participants with comorbid substance dependence had higher rates of mental health service utilization, they were also more likely to perceive unmet need for mental health treatment. Several studies from the United States and other countries have shown that individuals with co-occurring mental and substance use disorders are more likely to perceive an unmet need for mental health care compared with individuals with either type of disorder alone (23,26,27), although some of these studies did not distinguish between perceived need for mental health treatment and perceived need for substance use disorder treatment (10,21,26). Our analyses adjusted for the level of functional impairment and enabling factors such as insurance, income, and geographical access. Thus, the finding of greater perceived unmet need among the comorbid group suggests that individuals with comorbid disorders either experience a greater number of barriers to care or different types of barriers.

A third finding of the study was the similarity in the types of barriers to mental health treatment across groups. Substance dependence comorbidity was not associated with specific types of barriers to mental health care. This finding is somewhat surprising, given that comorbid substance dependence was associated with predictors of difficulty with access to care, such as lack of health care insurance

and lower income. Furthermore, comorbidity was associated with greater functional impairment, and past research has found an association between severity of mental health problems and types of barriers to mental health care (42). However, our analyses adjusted for these variables and were conditioned on perceived unmet need, given that only participants who reported unmet treatment need were asked about barriers.

Financial barriers were quite common in this sample, with 50% to 60% of participants across the four study groups reporting financial difficulties as a barrier. This finding was consistent with previous cross-national studies showing that financial barriers may be more pronounced in the United States than in other countries (27,43). A number of recent initiatives, including the Mental Health Parity Act of 2008 and the Affordable Care Act of 2010, have sought to address the financial barriers to mental health care. Given the uniformly high prevalence of these barriers across all groups and the higher level of perceived treatment need among individuals with comorbid mental health disorders and substance dependence, these initiatives would be expected to have a more pronounced impact on access to mental health care among persons with comorbid disorders.

Our findings should be interpreted in the context of the study's limitations. First, recall bias might have affected our results because of the retrospective assessment. Self-reports of service use generally underestimate actual use (44–46). Second, it is difficult to establish temporal order between substance use problems and major depression in the cross-sectional NSDUH data. This sequence may have implications for engagement and attitudes toward mental health treatment seeking. Third, the list of reasons for not seeking treatment was limited. It is possible that other reasons, such as lack of available integrated treatment programs, stopped individuals with comorbid disorders from seeking treatment. Fourth, information on whether the mental health treatment program was affiliated with or part of a substance use disorder treatment program was not available in NSDUH. Fifth, although NSDUH questions related to mental health services specifically ask about treatment for emotions, "nerves," or mental health, some participants with comorbid disorders might have difficulty in distinguishing treatment provided for mental health reasons from treatment for substance use disorders. Sixth, we combined all nonalcohol drug dependence disorders into one category. It is possible that dependence on particular drugs or specific combinations of drugs has significant implications for service use and barriers (42,47).

Conclusions

Notwithstanding these limitations, this study provides a broad overview of service use patterns and perceived barriers to mental health care among individuals with comorbid major depression and substance dependence. Despite a higher prevalence of perceived treatment need among individuals with comorbid major depressive episodes and substance dependence, the profiles of barriers to mental health care were remarkably similar between groups, with financial reasons being the most common type of barrier reported by all groups. In the context of unfolding health policy initiatives in the United States aimed at improving financial access to mental health care, it would be important to continue monitoring access to care and service use patterns among the sizeable group of individuals with comorbid disorders.

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