

Access to Conventional Mental Health and Medical Care Among Users of Complementary and Alternative Medicine With Bipolar Disorder

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Abstract: This research examined the role of perceived barriers to treatment as a potential contributor to the increasing use of complementary and alternative medicine (CAM) among mentally ill populations. The study examined a sample of 435 patients receiving care through the Veterans Administration Health System and having a current diagnosis of bipolar disorder (I, II, NOS), cyclothymia, or schizoaffective disorder-bipolar subtype. Access to care and use of any of 14 CAM therapies within the past year were studied. Physical CAM users reported slightly better mental health service access related to getting to mental health services and obtaining emergency mental health services when needed. Effect sizes for these differences were small ($r_{pb} = 0.09$ and 0.13 , respectively). Similarly, oral and cognitive CAM users indicated that they were slightly more likely to go without medical services when needed because they were too expensive. These effect sizes were also very small ($r_{pb} = 0.12$ and 0.10 , respectively), suggesting no clinical significance. Patients who reported use of oral and/or cognitive CAM therapies were slightly more likely than nonusers to go without medical care because of excessive costs. Patients having non-Veterans Affairs insurance reported no differences in rates of CAM use. Overall, no discernable trends were observed to suggest that CAM use among this sample was associated with service access.

Key Words: Complementary and alternative medicine, bipolar disorder, service access, barriers to treatment, health care delivery

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The prevalence of complementary and alternative medicine (CAM) as an adjunct or replacement for conventional medical care is both high and on the rise in the United States and abroad (Eisenberg et al., 1998; Eisenberg et al., 2001). Between 1990 and 1997, use of CAM among adults in the United States increased by 25%, although total out-of-pocket expenditures on CAM were estimated at \$27 billion in 1997 alone (Eisenberg et al., 1998). A recent national survey (Eisenberg et al., 2001) of adults, which reported the use of both conventional and CAM therapies indicated that approximately 45% of adults who reported seeing a medical doctor in the past year had also used CAM therapy (Eisenberg et al., 1998). Additionally, 23% of respondents reported at least one visit to a CAM provider within the past year.

Although the growing popularity of CAM can be attributed to a variety of factors, paramount among these is the patient's desire to reduce the suffering associated with chronic medical conditions, particularly chronic illnesses (Unutzer et al., 2000). Research on factors associated with utilization of CAM is growing, which yields added understanding of how CAM fits within the larger system of care, and how systems might be modified to reflect patient preferences.

CAM appears to play a particularly important role in the treatment of mental disorders. A recent national survey revealed that approximately 1 in 5 CAM users met diagnostic criteria for at least 1 mental disorder, with the highest rates of CAM use for major depression or panic disorder (Unutzer, 2000). Earlier research also showed a high rate of CAM use for anxiety and depression (Eisenberg et al., 1998). However research on CAM use among adults suffering from bipolar disorders and the schizophrenia spectrum disorders is sparse, despite considerable evidence of their chronic natures and high rates of comorbidity. Recent research has also revealed CAM use to be popular among persons with serious mental illnesses (e.g., bipolar disorder and schizophrenia) (Kilbourne et al., 2007).

Although there is a growing body of research regarding the prevalence of CAM among persons with mental disorders, very little is known about whether CAM use may be driven by barriers to conventional health care within this population. Unutzer et al. (2000) argued that more research is needed to determine whether individuals with mental disorders use CAM because the conventional system of care is not meeting their needs. Therefore, the purpose of this study is to examine perceptions of access to conventional mental health and medical services among a large sample of CAM users with bipolar disorder. Bipolar disorder is an ideal condition for this study. Specifically, it is a chronic condition that is associated with high rates of medical comorbidities and psychiatric symptoms that can potentially be ameliorated with CAM therapies. As noted, medications for this disorder can have serious side effects. Bipolar disorder is also associated with many barriers to conventional services, and services typically provided to this population are poor. Thus, it is hypothesized that CAM users with bipolar disorder would be more likely to report poorer access to conventional mental health or medical services.

METHODS

Study Population and Sample

Participants were recruited from the Continuous Improvement for Veterans in Care - Mood Disorders (CIVIC-MD) (Kilbourne et al., 2007). The CIVIC-MD is a naturalistic cohort study of 435 patients diagnosed with bipolar disorder recruited from a large urban Veterans Affairs (VA) mental health facility in the mid-Atlantic region. Details regarding the CIVIC-MD study are available elsewhere (Kilbourne et al., 2008). In brief, the aim of CIVIC-MD was to examine patient and provider factors associated with treatment quality and outcomes, along with important mediators of these outcomes. Eligible patients were currently receiving inpatient or

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outpatient treatment for bipolar disorder from July 2004 through July 2006. Inclusion criteria included a current diagnosis of bipolar disorder (I, II, NOS), cyclothymia, or schizoaffective disorder-bipolar subtype based upon chart review and provider confirmation. Patients self-completed a survey that included questions regarding demographics and other patient characteristics, symptomatology, substance use, behavioral factors, access issues, and treatment adherence. The study was reviewed and approved by the medical center Institutional Review Board. The effective sample size for the current study was $N = 429$.

Measurement Description

Service Access

Access to mental health and medical services was assessed using items derived from a prior study of access (see Cunningham, 1995). Six items addressed mental health service access, and 6 parallel items addressed medical service access. All items were measured using a 5-point Likert-type scale (strongly agree to strongly disagree).

CAM Use

CAM utilization was based on a previously established questionnaire by Kessler et al. (2001). This survey was selected because it included a wide range of CAM practices observed in patients with bipolar disorder in prior studies, in addition to the broader population (Unutzer et al., 2000). Patients were asked if they used any of 14 therapies within the past year (responding “yes or no”). Four different groups of CAM practices were considered based on previously established definitions by Kessler et al. (2001): physical, oral medications, cognitive, and dietary. Physical CAM included use of acupuncture/acupressure, chiropractor, or massage therapies. Oral-based CAM included herbal medications, homeopathy, St. John’s wort, or vitamins/minerals. Cognitive-based CAM included relaxation/breathing exercises, imagery, or meditation. Diet-oriented CAM included dietary/weight loss supplements or any special dietary modifications. It should be noted that spirituality and self-help practices were among the 14 therapies assessed but not included in this study.

Analytic Plan

Data were summarized using descriptive statistics. Persons who did and did not use each CAM group were compared on their perceptions of mental health and service access, using *t*-tests. Given the exploratory nature of this study and the use of a full range of items measuring service access, adjustments for multiple comparisons would be overly restrictive. Thus, all significant effects were interpreted in the context of effect sizes (Rosenthal, 1991). Effect sizes were based on point biserial correlations (r_{pb}), interpreted in the same manner as Pearson-*r*. As suggested by Cohen (1988), 0.10 was considered a small effect, 0.30 a medium effect, and 0.50 and greater a large effect. An effect size of at least 0.20 was interpreted as clinically meaningful. Associations between service access and type of CAM therapy that were statistically significant at the bivariate level were subsequently examined using multivariate logistic regression analyses.

RESULTS

Sample Characteristics

Table 1 provides a summary of the study sample characteristics. The mean age of the study population was 49.4 years ($SD = 10.6$), with 14% women and 23% ethnic minorities (including 13% African-Americans), a profile well representative of all veterans diagnosed with bipolar disorder (Blow et al., 2005). Approximately,

TABLE 1. Socio-Demographic, Psychosocial, and Clinical Characteristics of Study Sample at Baseline

Variable	N (%)
Gender	
Male	371 (86)
Female	62 (14)
Educational level	
<College	146 (34)
≥College	287 (66)
Race	
White	334 (77)
African American	58 (13)
Other	41 (9)
Age (in years)	Range = 21–78 Mean = 49.4 $SD = 10.6$
Annual income	
<\$10,000	133 (31)
\$10,000–19,000	119 (28)
\$20,000–29,000	74 (17)
\$30,000–39,000	52 (12)
≥\$40,000	44 (10)
Non VA insurance	
No	257 (59)
Yes	176 (41)
Marital status	
No	301 (30)
Yes	131 (70)
Employed	
No	314 (27)
Yes	119 (73)
Homeless	
No	381 (88)
Yes	52 (12)
Bipolar diagnosis	
Type-I	311 (72)
Type-II	40 (9)
NOS	73 (17)

66% attended at least some college. Substance use problems were highly prevalent, with 28% reporting some past-year drug use and 21% reporting past-year hazardous drinking. About 30% of this sample had a recent manic episode, and 12% reported being homeless. A detailed description of all CAM therapies used among this sample is reported by Kilbourne et al. (2007).

Service Access Summary

Table 2 provides a summary of service access, with comparisons made for persons who did and did not use each of the 4 types of CAM services. Overall, it appeared that subjects had reasonable access to both mental health and psychiatric services. Two significant differences were observed among physical CAM users. Specifically, physical CAM users reported slightly better mental health service access related to getting to mental health services and obtaining emergency mental health services when needed. Effect sizes for these differences were small ($r_{pb} = 0.09$ and 0.13 , respectively), indicating that they were not clinically significant. Oral CAM users and cognitive CAM users indicated that they were slightly more likely to go without medical services when

TABLE 2. Comparison of Perceptions of Access to Conventional Mental Health and Medical Services Among Patients With Bipolar Who Did and Did Not Use Complementary and Alternative Medicine (CAM)

Variable	Physical CAM			Oral CAM			Cognitive CAM			Diet CAM		
	Yes M (SD)	No M (SD)	p	Yes M (SD)	No M (SD)	p	Yes M (SD)	No M (SD)	p	Yes M (SD)	No M (SD)	p
Access to mental health care												
If I need mental health care, I can get admitted to the hospital without any trouble	1.96 (1.1)	2.05 (1.0)	0.491	2.07 (1.1)	2.00 (1.0)	0.547	1.99 (1.1)	2.09 (1.0)	0.353	2.12 (1.2)	2.01 (1.0)	0.426
It is hard for me to get mental health care in an emergency	4.95 (1.1)	4.66 (1.2)	0.029	4.76 (1.2)	4.67 (1.2)	0.388	4.73 (1.2)	4.70 (1.2)	0.760	4.80 (1.2)	4.69 (1.2)	0.439
Sometimes I go without the mental health care I need because it is too expensive	4.20 (1.0)	4.00 (1.2)	0.114	3.98 (1.3)	4.10 (1.10)	0.310	4.00 (1.2)	4.09 (1.1)	0.456	4.14 (1.2)	4.01 (1.2)	0.361
I have easy access to mental health specialists that I need	2.80 (0.8)	3.05 (1.0)	0.025	2.96 (1.0)	3.04 (1.0)	0.414	2.97 (1.0)	3.03 (1.0)	0.599	3.05 (1.0)	2.98 (1.0)	0.544
Places where I can get mental health care are easy to get	3.03 (1.1)	3.43 (1.2)	0.006	3.36 (1.2)	3.33 (1.2)	0.833	3.31 (1.2)	3.40 (1.2)	0.449	3.32 (1.2)	3.35 (1.2)	0.828
I am able to get mental health care whenever I need it	2.93 (0.9)	3.15 (1.1)	0.059	3.11 (1.1)	3.10 (1.0)	0.922	3.07 (1.1)	3.15 (1.0)	0.480	3.15 (1.1)	3.10 (1.0)	0.658
Access to medical care												
If I need medical care, I can get admitted to the hospital without any trouble	3.28 (1.2)	3.21 (1.0)	0.691	3.22 (1.1)	3.23 (1.1)	0.972	3.21 (1.1)	3.25 (1.1)	0.731	3.25 (1.1)	3.22 (1.1)	0.831
It is hard for me to get medical care in an emergency	4.64 (1.2)	4.61 (1.2)	0.847	4.52 (1.2)	4.71 (1.1)	0.100	4.56 (1.2)	4.68 (1.2)	0.309	4.54 (1.3)	4.64 (1.2)	0.493
Sometimes I go without the medical care I need because it is too expensive	4.91 (1.1)	4.73 (1.3)	0.207	4.62 (1.4)	4.91 (1.2)	0.016	4.65 (1.4)	4.9 (1.1)	0.037	4.78 (1.3)	4.76 (1.3)	0.866
I have easy access to medical specialists that I need	3.4 (1.1)	3.37 (1.2)	0.853	3.42 (1.2)	3.33 (1.1)	0.467	3.39 (1.2)	3.36 (1.1)	0.733	3.38 (1.2)	3.38 (1.1)	0.992
Places where I can get medical care are easy to get	3.31 (1.1)	3.41 (1.1)	0.489	3.39 (1.1)	3.39 (1.2)	0.979	3.40 (1.2)	3.38 (1.1)	0.809	3.38 (1.2)	3.39 (1.1)	0.905
I am able to get medical care whenever I need it	3.35 (1.2)	3.30 (1.1)	0.764	3.34 (1.1)	3.28 (1.1)	0.565	3.28 (1.1)	3.35 (1.1)	0.544	3.34 (1.2)	3.30 (1.1)	0.756

All items measured on a 5-point Likert-type response scale (1 = Strongly agree, 5 = Strongly disagree). All differences in scores were compared using *t*-tests.

needed because they were too expensive. Again, these effect sizes were very small ($r_{pb} = 0.12$ and 0.10 , respectively), suggesting no clinical significance. No differences in perceptions to service access were observed when comparing users and nonusers of diet CAM.

Non-VA Insurance

A series of χ^2 tests were conducted to test whether having non-VA insurance was associated with differences in CAM use. Approximately 41% of the study sample reported having non-VA insurance. However, having this additional coverage was not associated with higher or lower rates of any type of CAM therapy use.

Multivariate Analyses

The statistically significant associations observed in Table 2 were examined using multivariate logistic regression. The CAM therapy was used as an outcome variable. The association between service access and the outcome variable was examined after controlling for the other potentially confounding variables (as listed in Table 1). Specifically, of the 4 significant associations presented in Table 2, only 2 associations remained statistically significant in the multivariate logistic regression. Specifically, respondents who disagreed with the statement, “Places where I can get mental health care are easy to get,” were less likely to use physical CAM therapy (OR = 0.74, 95% CI = 0.59–0.94). And, persons who agreed with the statement, “Sometimes I go without the medical care I need

because it is too expensive,” were less likely to use oral CAM therapy (OR = 0.84, 95% CI = 0.71–0.99).

DISCUSSION

To date, very little research has examined the use of CAM as it relates to access to mental health and medical treatment among persons with serious mental illness. Prior research has emphasized the need to further understand how service access is related to CAM use, particularly for mental disorders (see Unutzer et al., 2000). The current study fills this gap by examining the associations between CAM use and access to mental health and medical services, among a large sample of persons with bipolar disorders.

Prior research has suggested that CAM use may be driven, in part, by poor access to conventional medical services. For example, Sturm and Sherbourne (2001) found that CAM use among persons seeking mental health care was higher among those reporting lack of insurance or delays in conventional treatment. In this study, we found patients who reported use of oral and/or cognitive CAM therapies to be slightly more likely than nonusers to go without medical care because of excessive costs. Although the differences were statistically significant, the effect size was small. Moreover, CAM users did not report financial burdens or problems with insurance to be factors in their decisions to use other types of CAM therapies for either mental health or medical services. Overall, no discernable trends were observed to suggest that CAM use among this sample was associated with service access.

A few explanations are possible for these nonsignificant findings. Foremost, the factors motivating the use of CAM among this sample may be fundamentally different than samples drawn from the general population or other outpatient clinics. More specifically, bipolar disorder is a chronic condition that is associated with severe symptom impairment and medical comorbidities. Patients with bipolar disorder may be exploring the various uses of CAM therapies for symptom relief but not relying on them exclusively when facing service barriers because of their perceived lack of effectiveness. However, in the general population, where conditions and symptoms may be significantly less debilitating, CAM therapies may be more actively pursued when barriers are confronted. This unresolved issue underscores the need to better understanding the motivations for CAM therapy use among persons with serious mental illness, especially in light of the high rate of use. Survey methods are a common strategy for investigating use, but qualitative methods provide the opportunity to achieve a more in-depth understanding of the reasons for use. These results can then be used to inform the development of new hypotheses to be tested using quantitative methods.

Another explanation for the negative findings in the current study may be because of measurement error. In particular, this study examined CAM use across 3 different categories, reflecting the presence or absence of any CAM use. Thus, the effects may be diluted among patients who are exploring or experimenting with CAM therapies versus patients who use CAM therapies regularly. Future research can help understand this issue through a more detailed analysis of CAM therapy use through further inquiry into the type of use, frequency, and timeframes.

It is important to consider the results of this study in the context of its limitations. One limitation is that the sample is a

comparison of patients within the VA health system. Patients in this system of care receive low-cost health benefits. Thus it is likely that the subjects in this study were less likely to perceive financial barriers to treatment in comparison to other insured-or under-insured patients with bipolar disorder. However, it is important to note that limiting the sample to VA patients also reduces the heterogeneity of factors influencing service access. We also examined the role of having private insurance, which presumably increases service access, and no association with CAM use was identified.

Although service access was not found to be associated with CAM use among patients with bipolar disorder, the high rate of use underscores the need for providers to assess for and monitor its use. This is particularly important given the potential for drug interactions, including St. John's wort-induced mania (Andreescu et al., 2008; Izzo, 2004). The high rates of use among this sample also suggest that they are an important part of the treatment process and may be a key to improving overall treatment adherence through greater recognition of patient preferences.

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