Service Use for Patients with Adjustment Disorder and Short Term Treatment: A Brief Report

F Azocar, G Greenwood

Citation

F Azocar, G Greenwood. Service Use for Patients with Adjustment Disorder and Short Term Treatment: A Brief Report. The Internet Journal of Mental Health. 2006 Volume 4 Number 2.

Abstract

Objective: To examine adjustment disorder by describing service utilization patterns for patients from a managed behavioral health organization (MBHO), and by comparing clinical outcomes for those who completed treatment within 6 months versus those who continued beyond 6 months.

Methods: Administrative claims data from 2001 through 2003 were merged with survey data (at baseline, 6 weeks, and 6 months post-intake) and retrospectively analyzed for 211 MHBO patients with an exclusive diagnosis of adjustment disorder.

Results: Fifty-four percent (n = 115) were in treatment for up to 6 months, 46% (n = 96) were in treatment up to 12 months or longer, with 20% (n = 19) treated continuously for two years. Despite similarities in demographics, clinician-types, and clinical symptoms at baseline, patients treated for 12 months or longer had significantly worse outcomes and higher costs.

Conclusions: Short-term outpatient services for adjustment disorder may not be the norm among MBHO-covered patients and some may necessitate further evaluation and clinical care.

INTRODUCTION

Adjustment disorder is a commonly-used diagnosis among mental health clinicians, yet overlooked by researchers and insurers (1). Adjustment disorder is among the top two most frequently coded diagnoses in specialty mental health claims, and commonly used by clinicians belonging to managed behavioral health organization panels for billing outpatient services related to interpersonal relationships, family, or workplace issues when the patient does not display a clear symptom picture that indicates another Axis I disorder (2). Managed behavioral health organization claim counts for adjustment disorder and treatment costs are comparable to depression (2,3).

According to the DSM-IV-TR and DSM-IV sourcebooks (4,5,6,7,8,9), patients with adjustment disorder must become symptomatic within 3 months of a precipitating event, and if acute, the reaction should last no longer than 6 months after the stressor or its effects have terminated (or if chronic, the reaction persists longer than 6 months). Yet when considered among other Axis I disorders, it is difficult to differentiate adjustment disorder from more severe psychopathologies

like depressive, anxiety, or substance abuse disorders ($_{10,11,12}$). This is particularly true for early cases of psychiatric illness that do not yet meet criteria for major syndromes ($_{13}$). Diagnostic accuracy is critical for appropriate treatment planning given associated medical co-morbid conditions (e.g., cancer and disabilities), higher service utilization ($_{14}$), as well as an increased risk of acute suicide attempts when compared to other disorders ($_{15,16,17}$).

This retrospective analysis examines adjustment disorder by describing service utilization patterns for patients from a managed behavioral health organization, and by comparing clinical outcomes for those who completed treatment within 6 months versus those who continued beyond 6 months.

METHODS

Using retrospective data from an NIMH-funded study conducted at a large national managed behavioral health organization – United Behavioral Health (UBH) – with external institutional review board approval, administrative claims data from 2001 through 2003 were merged with the Member Wellness Survey (MWS) data at baseline, 6 weeks,

and 6 months. The MWS was developed and validated in the parent study reported elsewhere (18). The parent study included a psychometric analysis of the MWS which was developed based on subscales from commonly used and validated instruments (e.g., Symptom Check List-90, SF-36, and the CAGE).

PARTICIPANTS

Patients (over age 18) were diagnosed and treated by managed behavioral health organization network clinicians (n = 1,562). Forty-six percent of the patients (n = 714)completed surveys and remained eligible for services within the following 2-year period. Fifty-one percent of these patients (n = 365) had at least one claim with an adjustment disorder diagnosis, of which 42% (n = 154) subsequently received another Axis I diagnosis. Patients with an additional Axis I diagnosis reported significantly higher levels of clinical symptoms at baseline and 6 month followup compared to those with only an adjustment disorder diagnosis (significance values ranging from p = 0.056 to p =0.0001). To ensure greater diagnostic accuracy and clinical homogeneity of the sample, the remaining analyses were limited to patients with an exclusive diagnosis of adjustment disorder (n = 211).

Service utilization patterns of adjustment disorder were examined in this cohort of 211 patients. The first episode of care was defined as the first 180-day period. A new episode of care was defined as the first episode after a 180-day period without claims. Patients with continuous claims within two 180-day periods or more were categorized as the extended treatment group (ET) (n = 96). Patients who had claims only within the initial 6 months were categorized as the normative treatment group (NT) (n = 115). Service utilization was measured by averaging per patient count of outpatient psychotherapy and medication visits. Costs in US dollars were measured by averaging per patient costs for managed behavioral health organization paid claims.

OUTCOME MEASURES

Clinical outcome scores for Total Symptoms, Functioning, Wellness, and Global Outcome were derived as mean sum scores from each 5-point Likert style item on the Member Wellness Survey (MWS). The range of possible scores for each item was 0 to 4, with higher scores indicative of more of this category. The Total Symptom score was computed using the mean of 11 items assessing depression and anxiety (Cronbach's alpha (I) = 0.91). The Functioning score was computed using the mean of 3 items assessing interference

with family, work, and social activities ($\mathbb{I} = 0.67$). Wellness consisted of three items that were reverse scored. It consisted of the mean of 3 items pertaining to feeling good about oneself, ability to cope, and maintain control ($\mathbb{I} = 0.83$). Higher scores are indicative of worse wellness. A Global Outcome score was computed across 17 items comprising the Total Symptoms, Functioning, and Wellness scores ($\mathbb{I} = 0.93$).

STATISTICAL ANALYSES

Chi Square tests of association examined the relationship between treatment group and nominal variables like type of licensed clinician, type of service, as well as demographic characteristics including region of the country, age group, gender, relation to insured, and race/ethnicity. Student's ttests were used to compare the NT group and the ET group on service utilization (i.e., number of sessions), costs (per patient outpatient costs), and on MWS clinical outcome differences at baseline. Student's t-tests were also used to compare mean change scores (from baseline to 6 months) on MWS clinical outcomes between the NT and the ET group. All analyses were conducted with SAS version 8.0.

RESULTS

SAMPLE CHARACTERISTICS

All patients authorized for outpatient treatment by the UBH intake counselors, regardless of presenting problems or diagnosis were eligible for the parent study. Overall, participants were primarily female (70 %), white (88 %), and between the ages of 30 and 55 (80 %).

SERVICE UTILIZATION PATTERN OF PATIENTS WITH AN EXCLUSIVE DIAGNOSIS OF ADJUSTMENT DISORDER

The NT group was comprised of 115 (54%) patients with outpatient care that concluded within the initial 6 months of their intake call. Only 10% of the NT group had a new episode of care in the following year. On the other hand, 46% (n = 96) received extended treatment (ET) or continuous outpatient services for a full year. In fact, 20% of the ET group went on to receive outpatient services for 2 years without a change in diagnosis.

Within the initial 6 months of treatment, the ET group had more than twice the number of sessions of the NT group at a significantly greater cost (see Table 1). There were no significant differences, however between the NT and ET groups in the number of clinicians (1.03 vs. 1.10, p = 0.104) or in the type of licensed treating clinician (1.74 vs. 6.25, p =

0.084 for psychiatrists; 54.5 vs. 45.0, p = 0.209 for masterslevel therapists; 39.1 vs. 38.5, p = 0.930 for psychologists), and neither group received substance abuse or inpatient care.

DIFFERENTIATING DEMOGRAPHIC AND CLINICAL CHARACTERISTICS

There were no demographic (i.e., age group, gender, geographic region of the country, or relation to insured) or MWS clinical outcome (e.g., Total Symptoms, Functioning, etc.) differences between the NT and the ET group at baseline (see Table 1). However, the NT group compared to the ET group showed significantly improved mean change scores (from baseline to 6 months) in Total Symptoms (m = -0.59 vs. -0.27, p < 0.05), Wellness (m = -0.60 vs. -0.35, p < 0.05) and Global Outcome (m = -0.58 vs. -0.31, p < 0.01). Negative mean change scores reflect decrements from baseline to 6 months on key scale indices. Results are reported in Table 1.

Figure 1

Table 1: Comparison Between Patients in the Normative Treatment (NT) Group versus the Extended Treatment (ET) Group

		Normative Treatment (n=115)		Extended Treatment (n=96)		
Baseline Demographics	(n=115)					
	И	%	N	%	Chi-sq	P
Gender					0.11	0.737
Female	79	68.7	68	70.8		
Male	36	31.3	28	29.2		
Age					4.16	0.245
<29	15	13.3	5	5.2		
30-45	60	53.1	54	56.2		
46-55	26	23.0	27	28.1		
56+	12	10.6	10	10.4		
Employee Status					1.71	0.425
Insured	87	75.6	73	76.0		
Spouse	26	22.6	23	24.0		
Region					5.26	0.072
West	27	23.9	20	21.1		
Midwest	53	46.9	33	34.7		
East	33	29.2	42	44.2		
Baseline Symptoms	M	SD	М	SD	t	p
MWS Total Symptoms	1.06	0.83	1.09	0.76	-0.23	0.822
MWS Functioning	2.10	0.84	2.16	0.96	-0.52	0.605
MWS Wellness	1.53	0.83	1.52	0.75	0.15	0.884
MWS Global score	1.56	0.71	1.59	0.68	-0.25	0.801
6 Months Service Outcomes	М	SD	М	SD	t	Р
Number of sessions	4.5	3.6	9.7	5.9	7.74	0.0004
Per patient costs	\$277	\$204	\$616	\$385	9.62	0.0002
Baseline to 6 Months	М	SD	М	SD	t	p
Mean Change Scores - Symptoms	Change	Change	Change	Change		
	Scores	Scores	Scores	Scores		
MWS Total Symptoms	-0.59	0.75	-0.27	0.67	-2.66	0.009
MWS Functioning	-0.54	1.20	-0.32	1.00	-1.16	0.248
MWS Wellness	-0.60	0.59	-0.35	0.66	-2.37	0.019
MWS Global score	-0.58	0.58	-0.31	0.56	-2.83	0.005

DISCUSSION

It is important to note that although the DSM-IV-TR describes two forms of adjustment disorder – acute and

chronic - (4), results of our study indicate that almost half of the patients with a single adjustment disorder diagnosis covered by a managed behavioral health organization remained in treatment for over 6 months, suggesting that the chronic form of adjustment disorder is quite common. Some patients carrying the adjustment disorder diagnosis had their treatment extending over two years. Furthermore, despite both groups starting at similar levels of clinical distress, NT patients achieved significantly more improvement using half the number of sessions and at significantly lower costs than the ET patients. These findings would support the validity of having both an acute and chronic form of adjustment disorder.

Given that the ET group did not improve at the same rate as those in the NT group, appropriate clinical care clearly would indicate that these patients with a chronic form of adjustment disorder needed to remain in treatment at least until they achieved a similar level of improvement as those with the acute form who completed treatment within 6 months. However, because both groups had similar levels of distress and symptom presentation at the beginning of treatment, the question remains as to why differences exist in the rates of improvement. A possibility is that patients in the ET group suffered from chronic stressors such as domestic violence, abuse, divorce, or chronic illnesses/disabilities that could result in maladaptive emotional or behavioral reactions persisting for longer than 6 months (4,5,6,7,8,9). This possibility reinforces the importance of the diagnostic category of a chronic form of adjustment disorder as described in the DSM-IV-TR.

Patients in the ET group may have been misdiagnosed, or they may have displayed sub-syndrome symptoms precipitated by a stressful event that made clear diagnosis difficult early on (1, 5, 12). In either case, keeping patients in treatment for up to a year or more with a single adjustment disorder diagnosis could indicate an inadequate diagnostic assessment, particularly if the clinician did not take the time to rule out a possible diagnosis of a chronic form of adjustment disorder, which can only occur after six months have elapsed where the patient can them migrate to the chronic form of adjustment disorder. Also, patients in the ET group may have worsened and no longer qualified for any form of adjustment disorder (whether acute or chronic), yet the treating clinician did not change the diagnosis when billing services to avoid stigmatizing or 'labeling' a patient. Furthermore, clinicians using automated billing systems may simply have sent the same billing forms with changed dates

of service, but failed to change original diagnoses. Such errors or gaps in clinical information can compromise the ability to derive valid quality data from administrative claims data (19). It is the responsibility of the clinician to alter the diagnosis if more serious pathology emerges.

In general, regardless of the diagnosis, it is also possible that patients in the ET group responded poorly to psychotherapy, or were "treatment resistant" (20). Also it may be that some of the treatment resistant patients to psychotherapy alone should have had psychopharmacological agents added to the regimen. Research has shown that a proportion of patients do not benefit fully or at all from psychotherapy alone. On the other hand, patients in the ET group may have received inadequate or inappropriate clinical care and therefore failed to improve at the same rate as those seen in the NT group (21,22,23). Because there is no official consensus on optimal treatment for adjustment disorder given the lack of treatment outcome research focused singly on this topic $\binom{1}{24}$, patients in the ET group may not have received brief counseling aimed directly at reducing the maladaptive response to the stressor, as well as the stressor itself and this may have turned into a chronic form of adjustment disorder or changed to a more severe psychiatric diagnosis (24).

This brief descriptive report is subject to several limitations. First, the clinical information is limited because it does not include those who resolved their difficulties on their own, it is based solely on a self-report measure available only for those patients who responded to the MWS, and the MWS may not capture all of the differences in clinical severity. Second, the diagnosis is not based on a structured clinical interview but on the assessment of the treating clinician as recorded in billing forms. Third, the diagnosis of adjustment disorder in general is subject to error given the absence of symptom checklists, the subjective nature of this subsyndrome classification, and the possibility of racial, ethnic, and cultural considerations. Fourth, there are methodological problems related to the use of bivariate and retrospective analyses, plus the inability to include medical or pharmacy claims data prevented examination of whether and how these common co-morbid factors influenced outcomes. Fifth, the MWS survey was last filled out at 6 months from intake, therefore there is no clinical information to assess improvement after the initial 6 months of treatment.

CONCLUSIONS

In conclusion, short-term outpatient services for adjustment disorder may not be the norm among managed behavioral health organization covered patients and some may necessitate further evaluation and clinical care. Patients not improving may benefit from medication evaluation, referral to self-help groups, education on coping strategies and relaxation training, as well as alternative non-mental health services such as exercise, yoga, and meditation. Further clinical research of adjustment disorder is needed, particularly for non-improved patients continuing in long-term treatment who may have a chronic form of adjustment disorder.

ACKNOWLEDGEMENTS

This study was supported in part by a grant from NIMH (#R43MH57614) titled "New Automated Telephone Technology for Mental Health."

CORRESPONDENCE TO

Francisca Azocar, PhD United Behavioral Health 425 Market Street, 18th Floor San Francisco, CA 94105 USA Telephone: 415-547-6148 Fax: 415-547-6164 e-mail: francisca_azocar@uhc.com

References

- 1. Casey P. Adult adjustment disorder: A review of its current diagnostic status. J Psychiatr Pract 2001; 7:32-40.
 2. Cuffel B, McCulloch J, Wade R, Tam L, Brown-Mitchell R, Goldman W. Patients' and providers' perceptions of outpatient treatment termination in a managed behavioral health organization. Psychiatr Serv 2000; 51:469-473.
- 3. Peele PB, Scholle SH, Kelleher KJ, Lave JR. Datapoints: costs of employee behavioral health care by diagnosis. Psychiatr Serv 1998; 49:1549.
- 4. American Psychiatric Association: Diagnostic and Statistical Manual Of Mental Disorders Fourth Edition, Text Revision: DSM-IV-TR. Washington, D.C. American Psychiatric Association, 2000.
- 5. Kay J, Tasman A. Adjustment disorders. In Kay J, Tasman K, eds., Essentials of Psychiatry. John Wiley, New York, 2006, p. 778-784.
- 6. Widiger TA, Frances AJ, Pincus HA, Ross R, First MB, Davis WW. DSM-IV Sourcebook, vol I. Washhington, DC, American Psychiatric Association, 1994.
- 7. Widiger TA, Frances AJ, Pincus HA, Ross R, First MB, Davis WW. DSM-IV Sourcebook, vol II. Washington, DC, American Psychiatric Association, 1996.
- 8. Widiger TA, Frances AJ, Pincus HA, Ross R, First MB, Davis WW. DSM-IV Sourcebook, vol III. Washington, DC,

- American Psychiatric Association, 1997.
- 9. Widiger TA, Frances AJ, Pincus HA, Ross R, First MB, Davis WW, Kline M. DSM-IV Sourcebook, vol IV. Washington, DC, American Psychiatric Association, 1998. 10. Casey P, Dowrick C, Wilkinson G. The "afterthought" diagnosis: rehabilitating adjustment disorders. Expert Rev Neurother 2006; 6:145-151.
- 11. Casey P, Maracy M, Kelly BD, Lehtinen V, Ayuso-Mateos JL, Dalgard OS, Dowrick C. Can adjustment disorder and depressive episode be distinguished? Results from ODIN. J Affect Disord 2006; 92:291-297.
- 12. Takei N, Sugihara G. Diagnostic ambiguity of subthreshold depression: minor depression vs. adjustment disorder with depressed mood. Acta Psychiatr Scand 2006; 114:144.
- 13. Spitzer RL, Wakefield JC. DSM-IV diagnostic criterion for clinical significance: Does it help solve the false positives problem? Am J of Psychiatry 1999, 156:1856-1864.
- 14. Bourgeois JA, Kremen WS, Servis ME, Wegelin JA, Hales RE. The impact of psychiatric diagnosis on length of stay in a university medical center in the managed care era. Psychosomatics 2005; 46:431-439.
- Psychosomatics 2005; 46:431-439. 15. Lonnqvist JK, Henriksson MM, Isometsa ET, Marttunen MJ, Heikkinen ME, Aro HM, Kuoppasalmi KI. Mental disorders and suicide prevention. Eur Arch Psychiatry Clin Neurosci 1995; 49(supplemental):111-116.
- 16. Polyakova I, Knobler HY, Ambrumova A, Lerner V. Characteristics of suicidal attempts in major depression versus adjustment reaction. J Affect Disord 1998; 47:159-167.
- 17. Portzky G, Audenaert K, van Heeringen K. Adjustment disorder and the course of the suicidal process in adolescents. J Affect Disord 2005; 87:265-270.
- 18. Azocar F, Cuffel B, McCulloch J, McCabe JF, Tani S, Brodey BB. Monitoring patient improvement and treatment outcomes in managed behavioral health. J Healthc Qual 2007; 29:4-12.
- 19. Lezzoni LI. Assessing quality using administrative data. Ann Intern Med 1997; 127:666-674.
- 20. Dunner DL, Rush AJ, Russell JM, Burke M, Woodard S, Wingard P, Allen J. Prospective, long-term, multicenter study of the naturalistic outcomes of patients with treatment-resistant depression. J Clin Psychiatry 2006; 67:688-95.
- 21. West JC, Leaf PJ, Zarin DA. Health plan characteristics and conformance with key practice guideline psychopharmacologic treatment recommendations for major depression. Ment Health Serv Res 2000; 2:223-237.
- 22. Wennberg JE. Understanding geographic variations in health care delivery. N Engl J Med 1999; 340:52-53.
- 23. Wolfe J. Overcoming barriers to evidence-based practice: Lessons from medical practitioners. Clin Psychol 1999; 6:445-448.
- 24. Strain JJ. Adjustment disorders. In: GO Gabbard, ed. Treatments of Psychiatric Disorders. American Psychiatric Press, 1995, p. 1656-1665.

Author Information

Francisca Azocar, Ph.D.

Behavioral Health Sciences Department, United Behavioral Health

Gregory L. Greenwood, PhD, MPH

Behavioral Health Sciences Department, United Behavioral Health