

Brief report

## Social functioning and residual symptomatology among outpatients who responded to treatment and recovered from major depression

Vito Agosti<sup>a,\*</sup>, Jonathan W. Stewart<sup>b</sup>

<sup>a</sup>New York State Psychiatric Institute, Psychiatric Institute, 722 West 168th Street, Unit 35, New York, NY 10032, USA

<sup>b</sup>The Department of Psychiatry, Columbia University, New York, NY, USA

Received 7 May 1997; received in revised form 1 July 1997; accepted 1 July 1997

---

### Abstract

It is unclear whether depressed patients who respond to treatment, and subsequently recover, manifest a significant degree of residual symptomatology and enduring psychosocial impairment. The purpose of this study was to compare the social functioning and symptoms of depressed outpatients who responded to acute treatment, and had a sustained recovery from major depression for 6 months, with psychiatrically normal community samples. The sample ( $n = 48$ ) was drawn from the NIMH Treatment of Depression Collaborative Research Program. The Social Adjustment Scale scores and the Symptom Check List of recovered patients were clinically indistinguishable from the community sample scores. These data suggest that patients who benefit from acute treatment and recover from major depression can expect to achieve a normal level of functioning and symptomatology. © 1998 Elsevier Science B.V.

**Keywords:** Major depression; Recovery; Normality

---

### 1. Introduction

A series of studies (Kocsis et al., 1988, 1997; Stewart et al., 1988; Agosti et al., 1991) have documented that depressed patients who respond to acute treatment manifest an improvement in psychosocial functioning and a diminution of symptoms. However, it remains unclear whether responders continue to manifest a significant degree of residual

symptomatology and enduring psychosocial impairment.

We are aware of only one study (Agosti et al., 1993) which compared the symptoms of depressed patients, who responded to acute treatment, to a normal community control group. This study found that patients had scores which were indistinguishable from the community sample.

Controlled studies have typically presented Social Adjustment Scale (SAS) (Weissman et al., 1971) outcomes by comparing scores between treatments. We were only able to locate one study (Stewart et al., 1988) which contrasted the post-treatment SAS

---

\*Corresponding author. Tel.: +1 212 9605605; fax: +1 212 9602326.

scores of responders and nonresponders. The social functioning of responders were significantly more impaired ( $P = 0.000$ ) than (Weissman et al., 1971) normal community controls. However, patients who responded had only been in remission for 2–3 weeks. We speculated that a longer period of remission would be needed for functioning to be adequately assessed.

The assessment of responders may be enhanced by comparing their post-treatment outcomes with a standard of normality. The SAS and the Symptoms Check List (SCL-90-R) (Derogatis, 1977) are widely utilized measures of functioning and symptom severity, respectively. The developers of these scales have reported the scores derived from psychiatrically normal community samples.

The purpose of this study was to compare the social functioning and symptoms of patients who responded to acute treatment, and had a sustained 6-month period of recovery, with a psychiatrically normal community sample.

## 2. Patients and methods

### 2.1. Sample

These data were derived from the public access tape containing data from the NIMH Treatment of Depression Collaborative Research Program (TDCRP). Briefly, the TCDPR sample included 239 patients who completed, dropped out, or were withdrawn from a randomized trial comparing interpersonal psychotherapy, cognitive-behavioral psychotherapy, imipramine plus clinical management, or pill placebo plus clinical management treatments (Elkins et al., 1989).

A naturalistic follow-up of patients who entered the clinical trial was part of the TDCRP's research design. The interviews were conducted 6, 12 and 18 months after treatment terminated. We limited our analyses to the first 6 months of follow-up.

### 2.2. Assessments

The Hamilton Depression Rating Scale (HAM-D) (Hamilton, 1969) was based upon on the first 17 items. The SCL-90-R is a self-rated instrument

containing 90 symptom-related questions. The subject assesses the degree of severity for each symptom: ('Not at All') 1 ('A little bit') 2 ('Moderately') 3 ('Quite a Bit') 4 ('Extremely'). The SAS-II (Schooler et al., 1979) is a modified version of the interview-based SAS. The global judgment ratings range from 1 ('Excellent') to 7 ('Severe Impairment').

The Longitudinal Interval Follow-up Evaluation (LIFE-II) (Keller et al., 1987) was used to assess the course of illness during the follow-up period. This is a semistructured interview that assesses psychopathology, retrospectively, over a period of 6 months. Weekly psychiatric status ratings (PSRs) are made on a six-point scale for episodic affective disorders, ranging from meeting Research Diagnostic Criteria (RDC) (Spitzer et al., 1978) for the index episode (rating of 5 or 6) to no residual symptoms (rating 1).

### 2.3. Community control groups

The normal sample of the interview-based SAS was composed of females who "were screened to be without overt psychiatric disturbance, previous psychiatric treatment of any nature, or current medical illness" (Weissman et al., 1971). The normal sample from the SCL-90-R was composed of a stratified random sample of community residents who were not receiving psychiatric treatment (Derogatis, 1977).

### 2.4. Recovery criteria

The TDCP's criteria for recovery was a stable symptomatic remission from major depression, requiring LIFE-II PSRs of 1 or 2 (minimal or no symptoms) for a minimum of 8 consecutive weeks after leaving the controlled treatment portion of the study. For this study, we required that patients met the recovery criteria for 6 continuous months.

## 3. Results

The demographic and clinical characteristics of the 48 patients who responded to acute treatment and

Table 1  
Pre-treatment clinical and demographic characteristics

	Mean	S.D.	%
Age	34.9	9	
Female			69
Married			33
Caucasian			90
Attended college			71
Hamilton Depression Scale	18.2	3.3	
Age of onset, major depression	28.5	10.9	
Duration (weeks) current episode, major depression	47.3	46	
Intermittent depression (current)			19

remained in remission for 6 months are presented in Table 1.

The mean SCL-90-R Depression and Interpersonal Sensitivity symptom scores of the recovered group were significantly higher than the community control group. However, the between group differences were not clinically significant. The recovered group's HAM-D score of 4.4 (S.D. = 4.4), substantiates that their level of depression was not clinically meaningful. The other SCL-90-R subscale scores were not statistically significant between the two groups (Table 2). Ninety-four percent of the recovered patients had mean Total SCL-90-R score of less than 1 ('A little bit').

For the interview-based SAS, we were only able to find scores for psychiatrically normal women (Weissman et al., 1971). Thus, in order to compare the control group with the recovered sample, we

Table 2  
A comparison of SCL-90-R scores between responders in remission and community controls

	Recovered group ( <i>n</i> = 36)		Control group ( <i>n</i> = 974)		<i>P</i>
	Mean	S.D.	Mean	S.D.	
Depression	0.58	0.61	0.36	0.44	0.004
Obsessive-Compulsive	0.45	0.51	0.39	0.45	NS
Interpersonal Sensitivity	0.49	0.52	0.29	0.39	0.003
Hostility	0.27	0.39	0.30	0.40	NS
Paranoia	0.27	0.31	0.34	0.44	NS
Somatization	0.25	0.36	0.36	0.42	NS
Anxiety	0.38	0.58	0.30	0.37	NS
Phobia	0.10	0.22	0.13	0.31	NS
Psychotic	0.17	0.24	0.14	0.25	NS
Total	0.36	0.35	0.31	0.31	NS

Table 3  
Comparison of the SAS global scores of Weissman's community controls and recovered females

	Recovered group			Weissman's controls			<i>P</i>
	<i>n</i>	Mean	S.D.	<i>n</i>	Mean	S.D.	
Housework	19	1.31	0.49	24	1.50	0.66	NS
Extended family	32	1.43	0.39	39	2.23	0.78	0.000
Marital	20	1.50	0.40	33	2.52	0.83	0.000
Social	33	1.79	0.55	40	1.47	0.60	0.02
Overall	33	2.36	0.90	40	2.46	0.72	NS

confined our statistical analysis to the recovered females.

The recovered group were more impaired in social and leisure functioning than the 'normal' sample, but were less impaired in their relationships with extended family members and spouses. The overall adjustment scores were not significantly different. The mean scores for both groups approximated a 'good' to 'mildly maladaptive' level of overall functioning (Table 3).

#### 4. Discussion

Six months after leaving a university-based research treatment, outpatients with major depression who benefitted from treatment and remained in remission, reached a healthy level of symptomatic recovery. Recovered females manifested a level of psychosocial functioning which was as high as that found among a group of psychiatrically normal females.

DeLisio et al. (1986) utilized the SAS-II to assess the post-treatment functioning of depressed outpatients. Patients in remission manifested significant impairment in social and leisure functioning. We provide possible reasons why our study did not find similar results. Since DeLisio's report did not specify the length of time patients were in remission, it is possible that patients had been in remission for a shorter time than in our study. Second, there was considerable diagnostic heterogeneity between the samples. Thirty-nine percent of DeLisio's sample had dysthymic disorder without major depression (Diagnostic and Statistical Manual-III, American

Psychiatric Association, 1980); all patients in the TDCPR sample had major depression (Research Diagnostic Criteria, Spitzer et al., 1978).

Stewart et al. (1988) observed that the SAS scores of responders improved from pre-treatment, but they remained below the scores in the normal sample. We offer possible explanations for finding different results. Weissman and Bothwell (1976) reported that the mean overall adjustment score of the interview version of the SAS was significantly higher than the self-report version ( $P = 0.01$ ). Thus, the self-report version, used in Stewart et al.'s study, may not be directly comparable to the interview-based version used in the TDCPR study. Second, the sample in the later report consisted of a much higher proportion of patients with chronic depression, whose functioning tends to be more impaired than episodically depressed adults. Third, patients in Stewart et al.'s study had only been in remission for several weeks, compared to 6 months in our report.

These results do not imply that recovered patients were normal in every area of psychosocial adaptation. Though it was not the scope of paper, we would not be surprised to find, for example, that they had higher rates of co-morbid psychiatric disorders than found in the general population. In our opinion, it would be unrealistic to expect that effective treatments for depression could also prevent, or significantly alter, the course of all forms of psychopathology.

## References

- Agosti, V., Stewart, J.W., Quitkin, F.M., 1991. Life satisfaction and psychosocial functioning in chronic depression: effect of acute treatment with antidepressants. *J. Affect. Disord.* 23, 35–41.
- Agosti, V., Stewart, J.W., Quitkin, F.M., Ocepek-Welikson, K., 1993. How symptomatic do depressed patients remain after benefiting from medication treatment?. *Comp. Psychiatry* 34 (3), 182–186.
- American Psychiatric Association, 1980. *Diagnostic and Statistical Manual of Mental Disorder*, 3rd ed. American Psychiatric Association, Washington, DC.
- DeLisio, G., Maremmanni, I., Perugi, G., Cassano, G., Delito, J., Akiskal, H.G., 1986. Impairment of work and leisure functioning in depressed outpatients: a preliminary communication. *J. Affect. Disord.* 10, 79–84.
- Derogatis, L.R., 1977. *SCL-90-R: Administration Scoring and Procedures Manual*. Clinical Psychometrics Research, Baltimore, MD.
- Elkins, I., Shea, T., Watkins, J.T., Imber, S.D., Sotsky, S.M., Collins, J.F., Glass, D.R., Pilkonis, P.A., Leber, W.R., Docherty, J.P., Fiester, S.J., Parloff, M.B., 1989. National institute of mental health treatment of depression collaborative research program. *Arch. Gen. Psychiatry* 46, 971–982.
- Hamilton, M.A., 1969. A rating scale for depression. *J. Neurol. Neurosurg. Psychiatry* 23, 56–62.
- Keller, M.B., Lavori, P.W., Friedman, B., Nielsen, E., Endicott, J., McDonald-Scott, P., Andreasen, N.C., 1987. The longitudinal interval follow-up evaluation: a comprehensive method for assessing outcome in prospective longitudinal studies. *Arch. Gen. Psychiatry* 44, 540–548.
- Kocsis, J.H., Frances, A.J., Voss, C., Mason, B.J., Mann, J.J., Sweeney, J., 1988. Imipramine and social-vocational adjustment in chronic depression. *Am. J. Psychiatry* 145 (8), 997–999.
- Kocsis, J.H., Zisook, S., Davidson, J., Shelton, R., Yonkers, K., Hellerstein, D.J., Rosenbaum, J., Halbreich, U., 1997. Double-blind comparison of sertraline, imipramine, and placebo in the treatment of dysthymia: psychosocial outcomes. *Am. J. Psychiatry* 154 (3), 390–395.
- Schooler, N., Hogarty, G., Weissman, M.M., Social Adjustment Scale II, 1979. In: Hargreaves, W.A., Attkinson, C.C., Sorenson, J.E. (Eds), *Resource Materials for Community Mental Health Program Evaluators*. US Dept of Health, Education, and Welfare. Bethesda, MD.
- Spitzer, R.L., Endicott, J., Robins, E., 1978. Research diagnostic criteria: rationale and reliability. *Arch. Gen. Psychiatry* 35, 773–783.
- Stewart, J.W., Quitkin, F.M., McGrath, P.J., Rabkin, J.G., Markowitz, J.S., Tricamo, E., Klein, D.F., 1988. Social functioning in chronic depression: effect of 6 weeks of antidepressant treatment. *Psychiatry Res.* 25, 213–222.
- Weissman, M.M., Bothwell, S., 1976. Assessment of social adjustment by patient self-report. *Arch. Gen. Psychiatry* 33, 1111–1115.
- Weissman, M.M., Paykel, E.S., Siegel, R., Klerman, G., 1971. The social role performance of depressed women: comparisons with a normal group. *Am. J. Orthopsychiatry* 41 (3), 390–405.