

Improved Psychological Status in a Modified Therapeutic Community for Homeless MICA Men

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ABSTRACT. An adaptation of the drug-free therapeutic community (TC) model to homeless men with comorbid mental illness and chemical addiction (MICA) was evaluated with respect to change in psychological status over the course of a six-month residential treatment. Psychological status was assessed by: the Symptom Checklist-90-R (SCL90-R), Beck Depression Inventory (BDI), Shortened Manifest Anxiety Scale (SMAS), and Tennessee Self-Concept Scale (TSCS). A total of 52 out of an original study cohort of 124 residents were followed in longitudinal

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analyses to treatment midpoint, with a subset of 34 assessed through treatment completion. Significant, widespread psychological improvements were found during both the first and second half of treatment; it would appear that distress reduction was ongoing throughout treatment, with intrapersonal preceding interpersonal relief. The premise of applying a socially-based treatment to this population is discussed in light of these findings. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <getinfo@haworthpressinc.com> Website: <<http://www.HaworthPress.com>> © 2002 by The Haworth Press, Inc. All rights reserved.]

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Recent history has witnessed the growing interface of homelessness, severe mental illness, and chemical abuse—at a time when public funds for housing and treatment have dwindled.¹ The scope of the problem is broad, with the number of homeless clients with both mental illness and chemical addiction (MICA) in the United States on any given week estimated to be upwards of 82,000.² Evidence of comorbidity is considerable and emerges from the perspective of each of these distinct psychosocial concerns.³⁻⁶ As described by Drake and colleagues,¹ the risk of becoming homeless increases when people with severe mental illness abuse alcohol and drugs, which accelerates the appearance of disruptive behavior and the loss of social supports. Homelessness, in turn, can exacerbate addiction and mental illness, creating a malignant cycle of increased symptomatology.⁷

That homeless MICA individuals pose highly specific treatment issues is well recognized by mental health, substance abuse, and housing policy makers. Housing is generally regarded as a precondition to proper treatment of mental health and substance use disorders, which should be addressed in an integrative, concurrent approach.¹ Aside from the recognized value of intensive case management,⁸ group-based interventions with strong peer orientations that range from mental hygiene skills to 12-step meetings have also proven effective.⁹ While residential care has been strongly supported,¹⁰⁻¹² the programmatic structure of residential care that leads to the greatest short- and long-term benefits is not yet clear and challenges are great in engaging and retaining this population in treatment.¹²

One promising approach is to adapt the drug-free therapeutic community (TC) model, as described by De Leon,¹³ to this homeless MICA population.¹⁴ This approach has the benefit of offering specific behavioral guidelines understandable by individuals who have cognitive limitations, and makes use of peer leadership, engagement, care, nurturing, structure, limit setting, develop-

ment of responsibility, positive reinforcement, and self-esteem as core features of treatment.¹⁵ The modifications introduced into the MICA adaptation of the TC model allow for a more individualized treatment approach, with greater flexibility and lower demands, as well as a greater level of staff involvement in the implementation of activities. This approach has been well defined by Sacks and colleagues.¹⁶ The modified MICA TC perspective of mental illness supports the individual's active acceptance of his/her psychiatric diagnosis and cooperation with treatment to reduce symptoms; however, that person's recovery is assumed to be more than symptom reduction and is designed to include the potential for significant individual growth and development.

The modified MICA TC approach was designed by the Center for Therapeutic Community Research (CTCR) during the 1990's and has been adapted to a variety of settings, to now include: mental health,¹⁷ methadone treatment settings,¹⁸ aftercare settings,¹⁹ the prison system,²⁰ and hospital-based day treatment and halfway house programs.²¹⁻²³ The current study focuses on the last-mentioned variant of this modified MICA TC, a halfway house of six-month planned duration which is set in a men's shelter adjoining a municipal hospital. The program's initial development stemmed from recognition that the municipal hospital had become an important setting for treatment of the problems of homeless MICA patients, as observed by the prevalence of substance abuse in emergency rooms, psychiatric units, and perinatal programs.²³ Prior to the program's establishment in 1990, we had found referral options that addressed the multiple, overlapping concerns of such clients quite limited. Both traditional psychiatric services and drug treatment units were ill-equipped to address the problems of the other discipline's province (e.g., a general dearth of mental health workers in drug treatment settings, reported to be 10% according to a 1993 SAMHSA report²⁴).

Research findings have generally supported the effectiveness of the TC approach in the treatment of chemical addiction. Aside from reduced drug use and criminal activity and increased level of employment in non-MICA TC settings,²⁵⁻²⁷ improvements in psychological well-being both during and after treatment have also been reported.²⁷⁻³¹

The assessment of psychological functioning has long been appreciated as an important aspect of drug treatment evaluation, both with respect to its own importance, as well as its associated role with drug treatment outcomes.³² It is generally noted that substance abuse clients with demonstrable psychopathology respond poorly to treatment.³³ For example, in one study by Slater and Linn,³⁴ scores on the global severity index (GSI) of the SCL-90 were found to predict reliably relapse and rehospitalization of alcoholic patients. Changes in psychological status have also been reported to be an important factor in retention in non-MICA TC treatment settings.³⁵ Evaluating change in psychological functioning that occurs during modified TC treatment is of particular

importance with respect to MICA individuals, as their ability to manage the vicissitudes of their psychiatric illness may be a linchpin to their satisfactory long-term stabilization. Thus, the central issue addressed in the current study is evaluation of the change in multidimensional aspects of psychological functioning.

METHOD

Treatment Setting

The study was conducted in a modified TC organized as a six-month 30-bed residential treatment unit, located in a homeless shelter immediately adjacent to Bellevue Hospital Center in New York City. The format of the program was adapted from the model of the drug-free therapeutic community,³⁰ customized to meet the needs of the psychiatrically compromised. The program was staffed mainly by mental health professionals and para-professionals with special training in the therapeutic community for addictions. Treatment groups were often abbreviated in length and mental health staff supplemented peer-led groups focused on abstinence with professionally-led groups targeted to coping with symptoms of severe mental illness. Psychiatric medication compliance was monitored closely throughout treatment and residents were required to meet with a mental health primary therapist for weekly therapy sessions. With the exception of the research component itself, which increased staff attention and interest, the program was structured in much the same way as the standard TC. For example, residents were required to share living quarters and work together closely in division of responsibilities (e.g., preparation of meals, conduct of meetings, etc.). There were no appreciable changes in staffing or procedures during the period under evaluation.

Subjects

Admission to the unit was limited to indigent MICA men who carried Axis I diagnoses of both substance dependence and severe mental illness, as well as the further requirement of homelessness. While all men had histories of severe and persistent mental illness, they were already stabilized on psychiatric medication at time of admission (further adjustments in level and type of medications might be introduced, however, during the course of residential treatment) and an overwhelming majority had been referred directly from controlled environments, such as inpatient hospitalizations. Diagnoses were determined consensually by the clinical team, making use of DSM-IV criteria and interview with the unit chief psychiatrist, input of staff upon observation during the first week of entry, and history of past treatment episodes. Homelessness was

defined by the New York City/New York State criterion as lacking residence for a minimum of 14 of the past 60 days.

A total of 131 homeless, dually diagnosed men consecutively admitted over the period from September 1997 to November 1999 were recruited for the study, of whom 124 agreed to begin the assessment process upon intake to the residential treatment program. The seven men (5%) who refused participation at the outset expressed discontent with non-cash incentives and/or the overall treatment program. The completion rate for the full six months of the program was 34% ($n = 45$) for all 131 admissions and 35% ($n = 43$) for the cohort of 124 men included in the study, which is in line with prior cohorts evaluated at this site, as well as at other TCs.³⁶⁻³⁷ While failure to complete treatment is generally viewed as a negative event and reflective of some personal characteristic, reasons for dropping out would appear to be diverse and subject to external factors as well (e.g., an unexpected opportunity for shelter that surfaces during treatment).

A total of 52 subjects had both baseline and three-month reassessment on psychological status indices at the midpoint of their treatment tenure. This subgroup of 52 residents, with data available to allow for assessment of change in psychological status, was the primary focus of data analyses in the current study. Within this subgroup of 52 subjects with psychological data who were retained at three months, a smaller cohort of 34 subjects with psychological data completed treatment and were reassessed at six months. The 52 subjects available for longitudinal assessment were not significantly different from the remainder of the original cohort of 124 subjects with respect to baseline scores on any measures of psychological status, using the Student *t*-test for independent groups.

Procedure

Interviews were conducted face-to-face in a private office with a trained research assistant. The psychological status measures, while developed as instruments to be self-administered, were completed in this study with staff assistance, as needed (e.g., in reading items). Assessments were conducted at the following time points: intake (T1); midpoint/3 months (T2); and completion/6 months (T3). While clients were presumed to be psychiatrically stable at intake, testing was generally not initiated until at least three days of residence in order to allow potential subjects time to orient themselves to the program. Incentive for participation in the research study was a \$20 non-cash equivalent, provided at each of the three assessment points, and distributed in the form of coupons redeemed at local movie theaters and/or fast food establishments. As noted through written informed consent procedures, clients were ad-

vised of their right to withdraw from participation in the study at any time point.

Measures

Psychological status was assessed by: the Symptom Checklist-90-R (SCL-90-R),³⁸ Beck Depression Inventory (BDI),³⁹ Shortened Manifest Anxiety Scale (SMAS),⁴⁰ and Tennessee Self-Concept Scale (TSCS).⁴¹ With the exception of the Tennessee Self-Concept Scale, elevated scores are associated with more impaired functioning on each of these measures. These instruments have been used in other evaluative studies of TC-type interventions.^{18,42}

The *SCL-90-R* is a measure of current, point-in-time, psychological symptom distress, on which respondents rate themselves on a Likert scale ranging from zero (not at all) to four (extremely) for each of the 90 component items. It is intended to reflect underlying disturbances in the following nine areas: (i) somatization (12 items), (ii) obsessive-compulsivity (10 items), (iii) interpersonal sensitivity (9 items), (iv) depression (13 items), (v) anxiety (10 items), (vi) hostility (6 items), (vii) phobic anxiety (7 items), (viii) paranoid ideation (6 items), and (ix) psychoticism (10 items). The global severity index (GSI) combines information concerning the number of symptoms reported with the intensity of perceived distress and is the best single summary measure of the SCL-90-R. The validity of the BSI symptom dimensions (a brief version of the SCL-90-R) has been confirmed recently in a homeless MICA sample using interviewer ratings on the Brief Psychiatric Rating Scale as the "gold standard." Modest agreement was established between patient and interviewer ratings for anxiety, depression hostility, and somatization ($r = 0.40-0.60$ over 5 time points covering a 24-month period). Rating agreement was poor, however, for psychoticism ($r = -0.01-0.22$), which may reflect differences between the nature of the BSI and BPRS, i.e., the former rates symptom distress while the latter rates symptom severity.⁴³

The *BDI* is a 21-item rating scale of depression, yielding one overall score. Items include cognitive, affective, somatic and behavioral/vegetative symptoms of depression, each rated on a Likert scale from 0 (absent) to 3 (high).

The *SMAS* is a 20-item rating scale of anxiety, yielding one overall score. Items are rated as true-false.

The *TSCS* consists of 100 self-descriptive statements that the respondent uses to portray his own self-picture. Items are each rated on a Likert scale from 1 (completely false) to 5 (completely true), yielding a composite Total Score (also referred to as the Total Positive Score). This score is an overall index of self-esteem and reflects the extent to which the respondent likes himself, feels he is a person of value and worth, has self-confidence, and acts accordingly.

In addition to psychological status indices, *urine toxicology assays* were obtained routinely on a twice weekly basis during the residential treatment, with additional samples collected immediately upon return from overnight visits off-premises. These urine samples were obtained under direct observation by staff only when a resident was suspected of drug use. The specific drugs assayed were: opiates, cocaine, barbiturates, benzodiazepines, amphetamines, cannabinoids, and alcohol. Background demographic and treatment characteristics were obtained by residents' self-report, corroborated by medical records and social work intake; discrepancies between different sources of information were reconciled by follow-up probes addressed directly to the residents.

DATA ANALYSIS

The internal consistency of each assessment instrument was evaluated in this highly comprised MICA sample by computing reliability coefficients using Cronbach's alpha for each instrument at each time point. Rather than confining these analyses to the 52 residents available for reassessment, a larger cohort of subjects available at baseline assessment was included, thereby including less compliant subjects who had dropped out of treatment prior to the second assessment period.

Change in psychological status over time was evaluated by a series of paired t-tests computed between baseline and three-month psychological status scores, as well as between baseline scores and six month reassessment scores. We used this approach for primary analyses, in combination with repeated measures ANOVA, to permit maximal use of subjects and not limit findings to only those subjects available through program completion. To minimize the probability of making Type I errors, we set the alpha level of statistical significance at .01, more stringent than the customary .05 level of exploratory research.

The relationship between severity of mental illness and change in psychological status was addressed via a series of partial correlations computed between number of prior inpatient psychiatric hospitalizations (a proxy of mental illness severity) and T2 or T3 scores, with baseline scores partialled out. This proxy of mental illness severity was selected based on prior findings suggesting its utility with this patient population;³⁶ it is noteworthy that in the primary group of analysis, the 52 residents with at least T1-T2 assessments, the three subject groups of psychiatric diagnoses (i.e., schizophrenia, major depression and bipolar illness) did not differ on any baseline psychological scores or number of prior psychiatric hospitalizations in a series of one-way ANOVA's.

RESULTS

Client Characteristics

The mean age of the 52 residents assessed in the longitudinal study was 38.2 (± 9.1) and their mean years of education were 12.0 (± 1.9). Racial/ethnic backgrounds were: 30 African American (59%), 16 White (31%), and 5 Hispanic (10%). Clients' first episode of homelessness dated back a median length of 4.6 years and their most recent episode of homelessness was a median length of 16.0 months, with a range of zero months (i.e., only recently undomiciled) to a full 18 years of homelessness.

The psychiatric diagnoses represented were: schizophrenic spectrum ($n = 23$; 44%); major depression ($n = 19$; 37%); and bipolar illness ($n = 10$; 19%). Antipsychotic medication was prescribed to 78% of patients with schizophrenia, 60% of patients with bipolar disorder, and 32% of patients with major depression. Antidepressant medication was prescribed to 95% of patients with major depression, 60% of patients with bipolar disorder, and 52% of patients with schizophrenia. Mood stabilizers were also prescribed across diagnostic categories: 60% of bipolar patients, 22% of schizophrenics, and 21% of patients with major depression. The total number of treatment episodes for mental illness and/or substance abuse was a median of 6.5 (Mean = 9.4; SD = 8.9), of which the number of inpatient psychiatric hospitalizations was a median of two (Mean = 2.8; SD = 2.7), and the number of inpatient drug treatment admissions was also a median of two (Mean = 3.7; SD = 5.4).

As described of previous cohorts in this treatment setting,³⁶ multiple drug use was the most commonly reported pattern of use of addictive substances. With respect to primary drug of abuse, cocaine was cited most frequently ($n = 21$; 40%), followed closely by alcohol ($n = 19$; 37%), with the remaining clients citing: marijuana ($n = 6$; 12%), heroin ($n = 4$; 8%), barbiturates ($n = 1$; 2%), and hallucinogens ($n = 1$; 2%).

The majority of clients also had notable dealings with the criminal justice system. For example, 77% of clients had a history of arrest, 50% had been incarcerated (median length of 16 months of incarceration for this subgroup) and 27% had a history of arrest for at least one violent crime. At intake, only one client was employed, part-time status. The remaining 51 clients were unemployed; a total of 14 clients (27%) were supported by SSI pensions for psychiatric disability. However, the overwhelming majority of clients ($n = 51$; 98%) had held a job at some point and the median time spent on their longest job was 36 months.

In the context of the controlled nature of the program, a positive urine toxicology finding was a highly unusual occurrence, with only five residents out of 52 (10%) having positive urine toxicologies reflective of current illicit drug use rather than pre-admission use or related to a medical procedure. One of

these five residents had two distinct drug use episodes; the remaining four had only one isolated episode of drug use. Drugs detected in urine tests were: barbiturates ($n = 2$), opiates ($n = 2$), cocaine ($n = 2$), marijuana ($n = 1$), and alcohol ($n = 1$). In view of the rarity of a positive toxicology, this factor was not included in the data analyses.

Internal Reliability of Psychological Status Measures

Data were available on 96 to 108 clients assessed at intake (T1 baseline) for each of the psychological indices. The alpha coefficients were as follows: BDI (.91), SMAS (.88), TSCS: Total Positive Score (.91), SCL-90-R GSI (.97), Somatization (.82), Obsessive-Compulsivity (.86), Interpersonal Sensitivity (.85), Depression (.89), Anxiety (.87), Hostility (.85), Phobia (.83), Paranoid Ideation (.74), and Psychoticism (.83). The SCL-90-R subscale alpha coefficients in the present study were comparable to those in the reliability study of 103 psychiatric outpatients⁴⁴ reported in the SCL-90-R manual (ranging between a low of .79 for Paranoid Ideation to a high of .90 for Depression). Perhaps more surprising in view of the severity and chronicity of the psychiatric disorders represented by our sample, T scores on the SCL-90-R ranged between 48 and 53, i.e., about average, relative to norms for psychiatric outpatients. When compared to non-patient adult male norms, T scores on all of the symptom dimensions were elevated, ranging between 63 and 72 (e.g., more than two standard deviation elevations on the GSI, Psychoticism, Depression, Anxiety, and Phobia dimensions).

Changes in Psychological Status Indices

Improvements were widespread during the interval from intake to the 3-month midpoint in treatment (Table 1). Improvements at the .01 level of significance with two-tailed testing were noted on the BDI, SMAS, and the GSI, as well as Somatization, Depression, Anxiety, and Psychoticism symptom dimensions of the SCL-90-R. Score changes in the direction of improvement were also noted for Obsessive-Compulsivity, Phobia, Paranoid Ideation, Hostility, and Interpersonal Sensitivity, as well as the TSCS.

A subset of 34 of these 52 clients evaluated at T1 and T2 were still in treatment and available for assessment at six months, the planned duration of treatment. Comparisons of psychological status indices for these treatment completers showed improvements at the .01 level of significance on all dimensions tested (Table 2), with the exception of SCL-90-R Hostility and TSCS (both showing trends in the direction of improvement), in a series of two-tailed tests.

As a supplement to the paired t-test comparisons for psychological status indices, we evaluated time changes by a repeated measures ANOVA, with planned comparisons for the T1-T2 and T1-T3 time intervals, for the completer subset of 34 subjects. These findings essentially confirmed the findings

TABLE 1. Psychological Status: Period Sample t-Tests of Intake (T₁) to Midpoint/Three Month Testing (T₂) (n = 52)

Measures	Intake		Midpoint/3 Months		t
	T ₁		T ₂		
	M	SD	M	SD	
BDI	18.06	(11.79)	12.98	(9.62)	4.51*
SMAS	11.49	(5.68)	9.83	(5.03)	2.57*
TSCS: Total Positive Score	307.06	(34.76)	312.22	(29.58)	-1.68
SCL-90-R					
GSI	1.04	(0.73)	0.82	(0.63)	4.03*
Somatization	0.79	(0.71)	0.62	(0.68)	2.98*
Obsessive-Compulsivity	1.18	(0.96)	0.97	(0.75)	2.27
Interpersonal Sensitivity	1.07	(0.91)	0.95	(0.73)	1.65
Depression	1.46	(0.96)	1.00	(0.80)	5.15*
Anxiety	1.14	(0.98)	0.77	(0.85)	4.07*
Hostility	0.70	(0.86)	0.56	(0.74)	1.51
Phobia	0.60	(0.82)	0.43	(0.58)	2.20
Paranoid Ideation	1.07	(0.91)	1.01	(0.96)	0.58
Psychoticism	0.90	(0.79)	0.71	(0.71)	2.59*

* p < .01 in 2-tailed test.

based on the larger sample of residents who had been evaluated through the program midpoint. For example, using an .01 level of significance for the repeated measures ANOVA's, all psychological indices were significantly improved in the T1-T3 comparisons, with the exception of SCL-90 Hostility and TSCS: Total Positive (both narrowly missing the cutoff of significant improvement at the .01 level).

As a follow-up to these longitudinal comparisons, we addressed the question whether severity of psychiatric disorder was related to improvement in psychological status. To this end, a series of partial correlation coefficients was computed between number of past psychiatric inpatient hospitalizations (a proxy for psychiatric severity) and T2 or T3 psychological status scores, with baseline scores partialled out. In no case was any of these correlations statisti-

TABLE 2. Psychological Status: Paired Sample t-Tests of Intake (T₁) to Completion/6-Month (T₃) Testing (n = 34)

Measures	Intake		Completion/ 6-Month		t
	T ₁		T ₃		
	M	SD	M	SD	
BDI	17.44	(11.86)	8.94	(6.84)	4.73*
SMAS	11.19	(6.32)	8.65	(5.04)	3.03*
TSCS: Total Positive Score	300.80	(37.77)	313.01	(28.47)	-2.57
SCL-90-R					
GSI	1.05	(0.76)	0.61	(0.50)	4.31*
Somatization	0.77	(0.65)	0.49	(0.60)	2.97*
Obsessive-Compulsivity	1.15	(0.94)	0.69	(0.52)	3.34*
Interpersonal Sensitivity	1.22	(0.97)	0.65	(0.56)	3.93*
Depression	1.50	(1.04)	0.83	(0.72)	3.75*
Anxiety	1.09	(0.97)	0.59	(0.64)	3.42*
Hostility	0.84	(1.00)	0.51	(0.65)	2.32
Phobia	0.53	(0.78)	0.21	(0.33)	2.91*
Paranoid Ideation	1.10	(0.99)	0.69	(0.64)	2.73*
Psychoticism	0.91	(0.85)	0.43	(0.52)	4.42*

* p < .01 in 2-tailed test.

cally significant, suggesting that improvement was not contingent upon severity of mental illness.

DISCUSSION

By definition, the clients admitted to our modified MICA TC had a history of severe, protracted mental illness, as well as substance abuse and at least a recent history of homelessness. Nonetheless, their psychological distress scores at intake were comparable to psychiatric outpatients without such severe mental illness. T scores on the SCL-90-R ranged between 48 and 53, i.e., about average relative to norms for male psychiatric outpatients. Relative to male

non-psychiatric adult norms, clients' scores did rise to the level of "caseness," T scores on all of the symptom dimensions being elevated between 63 and 72 (e.g., more than two standard deviations elevation on Psychoticism, Depression, Anxiety, and Phobia subscales). These findings are most likely reflective of our admission policy to admit clients already stabilized on psychiatric medications and the fact that an overwhelming majority had been referred directly from controlled environments (e.g., inpatient hospitalization) which had dissipated the effects of drug withdrawal. This disjunction between psychiatric history and current psychological status is a phenomenon that had been previously commented upon by De Leon³⁰ in terms of state-trait status in TC admissions, as well as by Sacks and colleagues specifically in reference to a community-based MICA TC.⁴²

Clients corresponding to each of our three major diagnostic categories (schizophrenia, major depression, bipolar disorder) did not differ significantly on any of our baseline psychological measures. While the three psychiatric groups differed in type(s) of prescribed psychiatric medication corresponding to their psychiatric disorder, considerable overlap was noted. For example, a majority of patients in each of these three diagnostic groups was prescribed antidepressant medication. This finding of equivalence in level of baseline psychological distress and overlap in prescribed medications across the psychiatric diagnostic categories at baseline suggest that the "homogenizing" effect of treatment (i.e., the tendency for clients to become increasingly similar in behavioral patterns in response to the TC community-based intervention⁴⁵) may actually begin earlier with MICA clients through screening procedures for admission and adequate use of major psychotropic medication.

Clients showed wide-ranging psychological improvements during both the first and second half of their six-month treatment over and above the stabilization already achieved at baseline. These improvements were statistically significant by midpoint for all symptom indices of depression, anxiety, and frankly psychotic thinking. By six months more subtle psychological status improvements were noted, such as decreased interpersonal sensitivity and paranoid ideation. Thus, it would appear that distress reduction is ongoing throughout treatment, with intrapersonal preceding interpersonal relief. While small subsample sizes did not permit statistical comparison of completers and dropouts with respect to change in psychological status, it is noteworthy that even the dropouts showed score changes in the desirable direction although seemingly to a lesser degree than the completers.

Affiliation with a highly cohesive group such as a TC may offer some measure of relief, in part due to that group's ability to offer an ideology that explains problems previously regarded as insurmountable. This "relief effect" has been hypothesized by Galanter⁴⁶ to serve as the basis for operant reinforcement of membership, thereby insuring continued adherence to the norms of the

group. Such a “relief effect” has been observed in a wide variety of groups characterized by three psychological elements: (1) shared belief system; (2) a high level of social cohesiveness; and (3) strong group behavioral norms. The modified MICA TC of this study included these fundamental characteristics.

The premise of applying a socially-based treatment approach to this population has been questioned because of these clients’ pronounced histories of mistrust, a byproduct of their psychiatric history, the residuals of a drug lifestyle, and the dangers of living on the street. The structure of the modified TC required residents to share living quarters and work responsibilities on a daily basis. These programmatic aspects might have been instrumental in heightening social discomfort if not framed in a therapeutic context. Evidence that a meaningful context was established for this client group was provided by the finding that the more interpersonally-based symptom dimensions showed no tendency to worsen and in fact improved (with no apparent differential response by clients with frankly paranoid diagnoses). It seems likely that the trustful actions mandated within this community of peers fostered increased feelings of fellowship—even among clients with chronic histories of alienation. This issue of physical and psychological safety of the community in establishing interpersonal trust and providing other healing experiences is discussed in recent TC writing.^{47,48}

Evidence to support psychological improvements associated with the modified MICA TC is mounting and derives from a variety of settings (e.g., community-based) with differing planned durations. The modified MICA TC of this report had a planned duration of six months, which was followed by extended aftercare and placement in community-based housing after graduation. Thus, the program was relatively short, as compared with standard TC’s and other modified MICA TC’s (usually a minimum of one year residence). Nonetheless, improvements in psychological functioning were realized in this reduced time frame which appear comparable in scope to that achieved in a community-based one-year modified MICA TC⁴⁹ that applied the same battery of measurement. Other findings of improved psychological functioning for MICA clients in TC-type treatment have also been reported.^{45,50} Together, these findings suggest that elements of the TC may confer added benefit to treatment of this population as compared with housing alone.

As a supplement to quantitative evaluations, all clients were queried by research staff (with assurances of confidentiality) using open-ended questions (e.g., “What do you like/dislike most about the program?”). These questions focused on residents’ reactions to the modified TC one month after their arrival, presumably long enough to have had sufficient experience to make relative evaluations about treatment components. With grudging acknowledgment, many residents admitted that the very feature of greatest annoyance to them, the high level of structure, was also probably the most helpful. Nearly all re-

spondents applauded the self-help aspects of treatment as helping build self-confidence and found the psychoeducation regarding psychiatric illness and drug abuse (particularly “Double Trouble” groups) quite positive. In accepting the need to comply with psychiatric medication, clients seemed able to make a distinction between psychiatric medication as vital to their coping with reality and day-to-day stress, and illicit drug use which offered the opposite—at best, a reprieve from what might be experienced as a painful reality. As the program setting was immediately adjacent to the general hospital, clients were also able to make limited use of medical services, which seemed an additional inducement to stay in treatment (e.g., opportunity to secure prescription reading glasses, dental care, and the like). While most of the 52 clients described in these longitudinal analyses had a continuous stay, four (8%) required psychiatric hospitalization for acute decompensation (Median = 6 days; range of 1 to 39 days) and another seven (13%) required medical hospitalization (Median = 9 days; range of 1 to 41 days). Such transfers were accomplished without significant rupture in treatment. These clients were able to resume participation without undue bureaucratic barriers and improve on psychological measures and complete treatment at a rate (45%) comparable to other residents.

The results of the study are promising but will require corroboration with larger-scale samples, as well as use of controlled clinical trial with an intent-to-treat model in which all study subjects who are admitted are assessed at follow-up. The study targeted subjects with at least three months of program participation, thereby limiting conclusions to only those available for longitudinal comparison. Also, the study was necessarily limited in that full detoxification from drug use was not guaranteed at the time of intake and baseline measurement of symptoms may thus have been inflated to some extent.⁵¹ With larger-scale study, the effects of prior drug use and type of primary drug might be analyzed as factors possibly associated with relief from psychological distress. Although this study confined measurement to client self-report, future research might be expanded to include staff ratings, perhaps of greatest utility with the most impaired clients. Indeed, discrepancies between staff and patient report of psychological status in highly impaired clients have been found to be negatively related to measures of patient participation in treatment and length of stay in residential drug treatment.⁵² While the psychological indices of the current study focused on assessment of personal distress, new measures addressing interpersonal distress, e.g., the Inventory of Interpersonal Problems,⁵³ which parallels the format of the SCL-90-R, might be a particularly useful supplement for so community-based a treatment modality.

While the six-month residential primary treatment stage has been the focus of this report, MICA treatment continues as clients graduate and make the transition to community living and continued participation in aftercare. As treatment unfolds after time of discharge other concerns emerge, such as insuring

continued medication compliance, safe housing, resumed family ties, and development of suitable vocational goals and experiences. The modified MICA TC model can be adapted to this aftercare phase of treatment (e.g., our own hospital-affiliated day clinic) to bridge and help consolidate the newly embraced drug-free pro-social orientation to living. Clearly, the MICA TC is an evolving model whose effectiveness has relied on its continued ability to incorporate and refine dimensions from the mental health perspective without compromising its central mutual self-help orientation to drug abstinence.

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