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EDITORIAL

Psychodynamic treatment of schizophrenia: is there a future?[1]

The psychoanalytic treatment of schizophrenia has had a long and controversial history. Freud and his more orthodox followers felt that schizophrenics were not suitable for psychoanalysis. However, a long list of dissenters have enthusiastically advocated this treatment (e.g. Rosen, 1947; Fromm-Reichmann, 1950; Will, 1958; Searles, 1965; Pao, 1979). For decades the dominant treatment model, the efficacy of psychoanalytic and psychodynamic interventions for schizophrenia has recently been questioned (May, 1968, 1984). Despite some decline in popularity, psychodynamic therapy continues to be an important individual treatment modality for schizophrenics. Psychodynamic treatment is usually provided in combination with pharmacotherapy (Feinsilver, 1983; Normand & Bluestone, 1986) for schizophrenics in both in-patient and out-patient settings (e.g. Karon & Vandenbos, 1982; Stone *et al.* 1983; Frosch, 1983; Auerhahn & Moskowitz, 1984; Spotnitz, 1985; Silverman & Lachmann, 1985; Feinsilver, 1986; Kernberg, 1986; Lassers, 1986; Mann, 1986; Benedetti, 1987; Munich, 1987; Strean, 1988).

To examine whether there have been changes in the general scholarly and clinical interest in the psychodynamic treatment of schizophrenia, we conducted a review of the literature published in journals over the past twenty-one years. Using the Medline (National Library of Medicine, 1987) and PsychINFO (American Psychological Association, 1988) data bases, we identified articles using the index terms or title words 'schizophrenia', 'psychodynamic', or 'psychoanalysis'. A total of 478 articles were located, of which 159 (33%) described actual schizophrenic patients who had been treated according to this approach. (Duplicate articles describing the treatment of the same patients were counted only once.) Fig. 1 contains a plot of the number of psychodynamically-orientated treatment articles on schizophrenia and the total number of articles on psychodynamic theory and schizophrenia from 1966 through 1987. Inspection of the figure suggests a recent decline in the

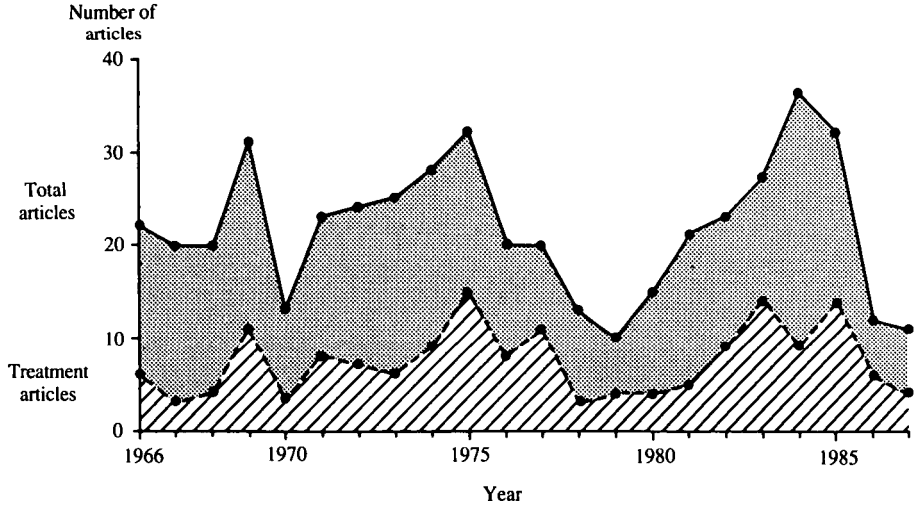

FIG. 1. Plot of the number of journal articles on psychodynamic treatment of schizophrenia and total number of articles on psychodynamic theory and schizophrenia published between 1966 and 1987 (source: Medline and PsychINFO data bases).

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number of treatment and theoretical articles on psychodynamics and schizophrenia, to a level similar to that following a decline which occurred between 1975 and 1980. Although the yearly rate of published articles on psychodynamic theory and treatment of schizophrenia have fluctuated over the past twenty years, the number of publications per year has never dropped below ten.

Considering that the number of journal articles published is only a crude index of the current role of psychodynamic therapy in schizophrenia since only a small fraction of practitioners publish their treatment cases, the literature review and our own clinical experience indicate a continuing influence, albeit not predominant, in the treatment of schizophrenia. This influence, in light of recent negative outcome studies (Gunderson *et al.* 1984), makes a reassessment of the value of this treatment timely. In this article we will briefly review the data concerning the effectiveness of psychodynamic treatment for schizophrenia, and evaluate the implications of these results for future treatment and research priorities.

TREATMENT OUTCOME RESEARCH

Before reviewing the controlled clinical trials, we will briefly discuss the outcome criteria that we feel should be used to judge the effectiveness of interventions with schizophrenic patients. Schizophrenia can affect many different aspects of functioning, and different indices of functioning tend to have only moderate or low intercorrelations: thus a multidimensional approach to the measurement of treatment outcome is essential (May & Tuma, 1964; Strauss & Carpenter, 1972; Avison & Speechley, 1987). The criteria for evaluating outcome can be classified in a number of different ways, but the following four dimensions are usually included in any comprehensive assessment: (1) symptoms; (2) rehospitalization; (3) social adjustment; and (4) vocational adjustment.

Since the present review concerns the effects of psychodynamic treatment on the *outcome* of schizophrenia, measures of theoretical constructs such as ego strength and insight which are hypothesized to have an impact on outcome will not be considered here. Examining the effects of psychodynamic treatment on such constructs is important for validating the theories upon which these interventions are based. However, the clinical efficacy of treatments must be evaluated solely on the basis of their impact on widely accepted outcome criteria, such as those described above.

CONTROLLED CLINICAL OUTCOME STUDIES

Four studies have compared psychodynamic treatment with other treatments for schizophrenia, with the primary research workers including May (1968), Karon and VandenBos (1972, 1975), Grinspoon (Grinspoon *et al.* 1972), and Gunderson (Stanton *et al.* 1984; Gunderson *et al.* 1984). Table 1 provides an overview of the four studies. Included are: random assignment to treatment groups, patient chronicity (number of hospitalizations and time in hospital), treatment groups, length and duration of treatment, methodological weaknesses, and outcome results for four dimensions (symptomatology, rehospitalization, social adjustment, and vocational adjustment). While these studies have been reviewed before (Stanton *et al.* 1984; Gomes-Schwartz, 1984), the present review goes beyond these by examining the results according to different dimensions of outcome, and evaluating the implications of the results for future treatment and research in view of advances in alternative treatment approaches.

Three of the four studies described in Table 1 found that psychodynamic treatment failed to exert any beneficial effect on outcome, either alone or in combination with antipsychotic medication. Grinspoon's study (Grinspoon *et al.* 1972) was unique in its treatment of chronic, institutionalized schizophrenics. While they failed to find any beneficial effects of psychodynamic treatment, serious methodological flaws in their design limit the conclusions that can be drawn. The May (1968) study also failed to find any beneficial effects of psychodynamic treatment. This study did not have any major methodological weaknesses from an experimental design perspective, but it has been criticized for its use of inexperienced psychotherapists (Karon & VandenBos, 1970; but cf. Tuma & May, 1974).

Table 1. *Characteristics and results of outcome studies*

	May (1968)	Karon & VandenBos (1972, 1975)	Grinspoon *et al.* (1972)	Stanton *et al.* Gunderson *et al.* (1984)
Random assignment	Yes	Yes[1]	No[2]	Yes
Number of prior hospitalization	0	0·3	2·7	0·9
Months of prior hospitalization	0	0·2	78·0	0·9
Treatment[3] groups (*N*)	PD (46) PD-D (44) D (48) Milieu (43) ECT (47)	PD (12)[4] PD-D (12) D (12)	PD (10) PD-D (10) D (21)	PD-D (43) Reality Adaptive Support therapy RAS-D (52)
Length duration of RX.	2 hrs/wk for 1 yr	PD: 5 hrs/wk then 1 hr/wk for 20 months PD-D: 3 hrs/wk then 1 hr/wk for 20 months	2 hrs/wk for 2 yrs	PD-D 2 hrs/wk for 2 yrs RAS-D 0·6 hrs/wk for 2 yrs
Symptoms	D = PD-D >[5,6] ECT > PD = M	PD ≥[7] PD-D > D	D = PD-D >[8] PD	RAS-D = PD-D[9]
Rehospitalization	D = PD-D = ECT > PD = M	For experienced therapists: PD = PD-D > D For inexperienced therapists: PD > PD-D = D	—	RAS-D >[9] PD-D
Social adjustment	—	—	D = PD-D >[10] PD	RAS-D ≥[9,11] PD-D
Vocational adjustment	—	—	—	RAS-D >[9] PD-D
Method weakness	Inexperienced therapists	Only 2 experienced therapists Non-random assignment of patients to experienced or inexperienced therapists Drug only group transferred to different hospital	Non-random assignment to treatment groups Drug only treatment given in different environment Patients very chronic	High dropout rate (42%) Absence of drug only control group

[1] Patients were randomly assigned to PD, PD-D, and D groups, but were not randomly assigned to experienced or inexperienced therapists.

[2] Patients in the D group were those who elected to remain at the state hospital and were compared with the PD and PD-D groups, which were composed of those patients who consented to be transferred to a clinical research centre for treatment.

[3] PD = Psychodynamic; D = Drugs; PD-D = Psychodynamic plus drugs.

[4] The PD group was treated with 'active psychoanalytic psychotherapy,' whereas PD-D was treated with 'ego-analytic psychoanalytic psychotherapy'.

[5] '>' denotes statistically significant ($P < 0·05$) difference between treatment groups for most or all relevant measures. '≥' denotes a significant difference between treatment groups for at least one measure, but an equal number or more non-significant differences on other relevant measures.

[6] Based on Symptom Rating Sheet, Ann Arbor, and Clyde Mood Scale (May, 1968, pp. 168, 170, 173, 175).

[7] Based on Feldman–Drasgow Visual Verbal Test for thought disorder (Feldman & Drasgow, 1951) and clinical status interviews (Karon & Vandenbos, 1972, p. 116). The Visual Verbal Test is not a direct measure of symptomatology, but rather is a test of abstract conceptual thinking that has been found to discriminate schizophrenics from non-schizophrenics.

[8] PD and PD-D differences based on Behavior Disturbance Index (Grinspoon *et al.* 1972, pp. 149–151).

[9] Based on Gunderson *et al.* (1984, pp. 592, 596).

[10] PD and PD-D differences based on Hospital Adjustment Scale (Grinspoon *et al.* 1972, pp. 149–151).

[11] Household responsibilities: RAS-D > PD-D; Significant relationships: RAS-D = PD-D (Gunderson *et al.* 1984, pp. 592, 596).

Gunderson *et al.*'s collaborative study (Gunderson *et al.* 1984; Stanton *et al.* 1984) did not suffer from any of the shortcomings noted in the two studies previously mentioned, and employed highly experienced psychotherapists. This study also had by far the most comprehensive assessment of treatment outcome of all the studies described in this paper, including multiple assessments for each outcome dimension, and stands as an example of a well-conceived and executed treatment study. These investigators compared reality-adaptive supportive (RAS) therapy with exploratory insight-

orientated (EIO) psychodynamic therapy. The following descriptions illustrate the differences between the insight orientated, psychodynamic treatment and the RAS approach of attempting to enhance practical coping skills. RAS therapy 'focused on problems in the current living situation of the patient. In contrast to the EIO therapy, there was little attempt to explore the past and to seek correlates between past experience and the present. Rather, the exploration of the present was intended to identify problems that could be solved or that could be expected to recur in the future so that more effective coping strategies could be mapped out. Another major feature of the RAS therapy was its focus on the patient's behavior itself rather than the covert meanings behind that behavior' (Stanton *et al.* 1984, p. 535). The EIO treatment was 'a form of analytic psychotherapy adapted from that described by Frieda Fromm-Reichmann (1950) "...it was by no means psychoanalysis... its aim is to increase insight"' (Stanton *et al.* 1984, p. 536).

Gunderson *et al.* found that psychodynamic therapy (EIO) was clearly *inferior* to reality-adaptive supportive (RAS) therapy in three out of four outcome criteria: rehospitalization, vocational adjustment, and to a lesser extent social adjustment. The two treatments did not differ in their impact on symptoms.

Since our summary of the Gunderson *et al.* data is at some variance with their own summary, a brief discussion of this discrepancy is warranted. Gunderson *et al.* (1984) wrote 'when one looks at our complete array of results, the overriding impression one gets is that in most respects the EIO (psychodynamic) and RAS patients performed similarly' (p. 582). Nevertheless, RAS-treated patients spent significantly less time in the hospital and more time employed than their psychodynamically treated counterparts. Furthermore, RAS patients assumed more major household responsibilities than psychodynamically treated patients, indicating that at least one aspect of social adjustment was superior for the RAS than EIO group. Other dimensions of social adjustment, such as social dysfunction and social relationships, did not differ between the two treatments, nor did any measures of symptoms. The only advantages Gunderson *et al.* attribute to the psychodynamic treatment over the RAS treatment is in the area of 'ego functioning', and even here the treatments did not differ at a statistically significant level (May, 1984) on *any* of the variables measuring this construct (adaptive regression, ego weakness, and subjective experience). Thus, our interpretation of the data differs from Gunderson *et al.*'s conclusion that the two treatments were essentially equivalent.

Karon & VandenBos (1972, 1975) reported that psychodynamic treatment was superior to antipsychotic drug treatment. Serious methodological shortcomings limit generalizability from this study. Although patients were randomly assigned to one of the three treatment groups, there was a confound between therapist and treatment modality. Half of the patients in the psychodynamic-treatment-alone group were treated by one 'experienced' therapist and half of the patients receiving psychodynamic treatment plus antipsychotics were treated by a second 'experienced' therapist. The remaining patients receiving therapy were treated by 'inexperienced' therapists. Since only one experienced therapist treated patients in one group, and a different experienced therapist treated patients in the second group, the obtained interaction between therapist experience and concomitant pharmacotherapy may simply reflect differences between the therapists. In addition, patients in the drug-only group were transferred to a different hospital for treatment. Thus, it is impossible to determine whether the effects noted by Karon & VandenBos resulted from different types of treatment, different therapists, or different treatment facilities.

NATURALISTIC STUDIES

Two reports have recently been published on lengthy followups of large samples of schizophrenic patients treated with psychodynamic therapy. Stone (1986) followed up 72 schizophrenic patients who received an average of 12·3 months of intensive psychodynamic therapy at the New York State Psychiatric Institute. Ten to twenty years later, more than half of the patients were substantially dysfunctional.

McGlashan (1984*a*,*b*) reported on the outcomes for schizophrenic patients treated at Chestnut

Lodge, a long-term private residential facility that specializes in intensive, psychoanalytic treatment. Of 163 schizophrenic patients treated at the Lodge for an average of over three years, two-thirds were functioning marginally or worse 15 years later. Thus, this large sample of schizophrenics appears to have gained little, if anything, from their intensive psychoanalytic treatment. McGlashan concurs with this conclusion in his summary of the effects of intensive psychodynamic treatment for schizophrenia: 'Unfortunately, we still have not improved much on Kraepelin's work. In effect, with chronic schizophrenia, we are still just beginning to fight' (McGlashan 1983*b*, p. 600).

DELETERIOUS EFFECTS OF PSYCHODYNAMIC THERAPY

Strupp *et al.* (1977) have pointed out that psychotherapy can sometimes lead to deleterious rather than beneficial effects. There are several reasons why a search for harmful effects of psychodynamic treatment of schizophrenic patients is especially warranted. First, as noted earlier, Freud himself felt that schizophrenics were not suitable candidates for psychoanalysis. Second, most schizophrenics would match the following description of the type of patient who was found to respond poorly to psychoanalysis in the Menninger Foundation Psychotherapy Research Project: 'patients with low initial quality of interpersonal relationships, low initial anxiety tolerance, and low initial motivation' (Kernberg, 1973, p. 66). Finally, Stone (1986) has suggested that psychodynamic treatment can be harmful to schizophrenic patients because it can expose them to memories and insights that they are unable to deal with emotionally.

Some of the data from the aforementioned outcome studies suggest that psychodynamic treatment may have deleterious rather than beneficial effects for schizophrenic patients. Gunderson *et al.* (1984) presented data on the relation between outcome and the number of months patients were treated with psychodynamic or reality-adaptive therapy. One would expect that the longer patients remain in an effective treatment, the better their outcomes would be. However, these expected correlations between outcome and time in treatment were not found for the psychodynamic treatment. In fact, when the patient sample was restricted to McLean Hospital, many of the correlations were significantly *negative*. Table 2 contains correlations between the number of months patients spent in psychodynamic or reality-adaptive therapy at McLean Hospital and six different outcome measures. One can see from this Table that time spent in psychodynamic treatment was consistently correlated with a poor outcome. These correlations were statistically significant at the $P < 0{\cdot}05$ level on two out of six outcome measures and approached significance ($P < 0{\cdot}10$) on two additional measures. On the other hand, positive correlations were found between outcome and time in reality adaptive therapy on five out of six measures, three of which were statistically significant.

One might posit that the reason for the negative correlations between months in psychodynamic treatment and outcome is that time in therapy was largely determined by the severity of the patient's

Table 2. *Correlations between months in reality-adaptive supportive (RAS) or psychodynamic (PD) therapy and amount of improvement for patients treated at McLean Hospital. Positive correlations denote greater improvement with longer periods of treatment (adapted from Gunderson* et al. 1984, *p.* 597)

	RAS	PD
Time in hospital	0·52***	−0·30+
Rehospitalizations	−0·13	−0·15
Days employed full time	0·44*	−0·75****
Occupational level reached	0·26	−0·32+
Household responsibilities	0·26	−0·39*
Significant relationships	0·39*	−0·28

Note: + $P < 0{\cdot}10$; * $P < 0{\cdot}05$; ** $P < 0{\cdot}01$; *** $P < 0{\cdot}005$; **** $P < 0{\cdot}001$.

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Table 3. *Correlations between months in reality-adaptive supportive (RAS) or psychodynamic (PD) therapy and amount of improvement for patients treated at Boston University and VA Hospitals. Positive correlations denote greater improvement with longer periods of treatment (adapted from Gunderson* et al. 1984, *p.* 597)

	RAS	PD
Time in hospital	−0·24	−0·49
Rehospitalizations	0·03	0·68**
Days employed full time	0·30	−0·08
Occupational level reached	0·19	0·30
Household responsibilities	0·23	−0·09
Significant relationships	0·02	−0·17

Note: ** $P < 0{\cdot}01$.

illness. This explanation would not explain why the correlations were negative for the psychodynamic treatment but positive for the reality adaptive treatment. In addition, patients who dropped out of either therapy within the first six months of treatment did not differ from patients who remained in treatment in pre-morbid adjustment, chronicity, or two-year outcome (Stanton *et al.* 1984; Katz *et al.* 1984), suggesting that less severely ill patients did not tend to terminate treatment prematurely.

The hypothesis that psychodynamic therapy had deleterious effects on schizophrenics, as evidenced by the negative correlations between months in therapy and outcome at McLean Hospital, must be tempered by the fact that such correlations were *not* obtained for patients treated at the other two sites of the study: Boston University and the Bedford Veterans Administration Hospital. Table 3 contains the correlations between months in RAS or psychodynamic treatment and clinical outcome for patients treated at Boston University and the VA hospital. No consistent pattern of correlations separates the two treatments. The significant differences between months of RAS or psychodynamic treatment and outcome for patients treated at McLean (Table 2), contrasted with the absence of such differences at the other two hospitals (Table 3), may reflect the fact that the two treatments were more distinguished from each other at McLean than the other two hospitals. For example, the McLean RAS and psychodynamic therapists were more experienced and divergent in their attitudes and practices. In addition, there was more institutional support for the practice of psychodynamic therapy at McLean Hospital, leading the investigators to anticipate that 'the specific effects of the EIO (psychodynamic) treatment might emerge more clearly in the McLean setting than in the other settings' (Stanton *et al.* 1984, p. 569). Another reason why the correlations at the Boston University and VA hospitals may have differed from the correlations at McLean is that the sample size of the former group was small, approximately half the size of the McLean group. While these data are open to different interpretations, the possibility that psychodynamic treatment provided at McLean Hospital had negative effects cannot be dismissed.

In the follow-up study reported by Stone (1986), 20% of the patients who received psychodynamic therapy committed suicide, approximately double the suicide rate commonly reported for schizophrenics (Winokur & Tsuang, 1975; Drake & Cotton, 1986; Roy, 1986; Roy *et al.* 1986). This high suicide rate may be further evidence for the potentially negative effects of psychodynamic treatment for this population.

An alternative explanation for the high suicide rate in the Stone study is that many of the individuals diagnosed as schizophrenic may have actually been psychotic depressives or bipolar disorder patients. Although this is a possibility, diagnoses in this study were made using DSM-III criteria. The question of diagnosis is probably more pertinent for those studies conducted prior to DSM-III, such as Karon & VandenBos (1972, 1975). The possibility of misdiagnosis does not change the meaning of the failure of the studies reviewed to find a beneficial effect for psychodynamic treatment, however. The inclusion of depressives would probably have increased the likelihood of obtaining positive results rather than decreasing it, since there is empirical support

for the efficacy of at least some forms of psychodynamic treatment for depression (Hersen *et al.* 1984).

The thesis that treatments which are too intensive may have adverse effects on schizophrenic patients is not new (Drake & Sedere, 1986). Psychoanalytic treatment of schizophrenia is usually provided with greater intensity than other psychotherapeutic approaches. For example, the patients in the Gunderson study (Gunderson *et al.* 1984) who received psychodynamic therapy spent more than three times as much time in therapy as patients treated with reality adaptive therapy (2·0 *v.* 0·6 hrs/wk, respectively). However, intensive treatments do not invariably worsen the outcome of schizophrenia. Social skills training, a highly structured and directive treatment, can produce positive outcomes even when multiple sessions are held daily (Liberman *et al.* 1986).

Thus, it is clear that having frequent sessions will not necessarily lead to worse outcome. It is possible, however, that therapy that is too emotionally intense may be harmful for at least some schizophrenics. If psychodynamic treatment is harmful for schizophrenics, it is probably the emotional intensity of the treatment rather than the frequency of sessions that is responsible.

IMPLICATIONS FOR FUTURE TREATMENT AND RESEARCH

The evidence that psychodynamic treatment worsens the outcome of schizophrenia is indirect and debatable, largely due to the fact that only one controlled study compared schizophrenics receiving psychodynamic therapy plus antipsychotics with patients receiving only antipsychotics (May, 1968). On the other hand, the data supporting the efficacy of this treatment are even less convincing. These findings contrast with the results of recent outcome studies on the efficacy of social skills training (Bellack *et al.* 1984; Liberman *et al.* 1986; Hogarty *et al.* 1986) and certain forms of family therapy for schizophrenia (Leff *et al.* 1982, 1985; Falloon & Pederson, 1985; Hogarty *et al.* 1986).

For example, Liberman *et al.* (1986) found that during the two years following hospital discharge, a group of schizophrenics who received nine weeks of intensive social skills training had significantly better social functioning, less severe symptomatology, and spent less time in the hospital than a group of schizophrenics who received a holistic health treatment. Both groups of schizophrenics received antipsychotic medication in addition to their other treatments while they were in the hospital.

In a study of schizophrenics who were receiving maintenance antipsychotic treatment and who were living in high Expressed Emotion (EE) households, Hogarty *et al.* (1986) found that none of the schizophrenics receiving both psychoeducational family therapy and social skills training relapsed over one year, compared to 20% of the schizophrenics receiving only skills training, 19% receiving only family treatment, and 41% receiving only supportive therapy. Two-year relapse rates were higher for all groups (25, 42, 32 and 66% for the four treatment groups, respectively), but nevertheless supported the efficacy of the psychosocial interventions (Hogarty *et al.* 1987).

Falloon and his colleagues (Falloon & Pederson, 1985; Falloon *et al.* 1985, 1987) reported that 17% of schizophrenic patients living in high EE homes treated for two years with behavioural family therapy relapsed, compared to 83% of patients treated with individual supportive therapy. These differences for patients receiving the family treatment were paralleled by improvements in social and vocational performance, as well as fewer rehospitalizations, less time spent in the hospital, and lower doses of antipsychotics prescribed by psychiatrists who were blind to treatment assignment. Last, Tarrier *et al.* (1988, 1989) reported that a nine-month behavioural intervention with families significantly reduced the relapse rates of schizophrenic patients returning home after in-patient treatment for an acute exacerbation. Patients with high EE relatives who received the behavioural intervention had two-year relapse rates of 33%, comparable to patients living with low EE relatives, and significantly lower than the 59% relapse rate of patients living with high EE relatives who received no treatment.

We recognize that the number of studies demonstrating the efficacy of treatments such as social skills training and family therapy may not be large and some may have methodological

shortcomings (e.g. Leff *et al.* 1982; Liberman *et al.* 1986). Clearly, additional research validating such treatments is warranted, especially concerning the effects of interventions on outcome criteria other than relapse rate (e.g. social and vocational adjustment). Nonetheless, the pattern of results has been consistently positive. Despite the failure of empirical investigations to demonstrate that psychodynamic treatment is effective for schizophrenics, and the development of other interventions that controlled studies suggest improve outcome, psychodynamic therapy continues to be offered as a treatment for schizophrenia. Stanton *et al.* (1984) noted, 'Of the many institutions approached about possible collaboration, most of those that had the strongest identification and tradition with the practice of intensive psychotherapy still felt they could not randomly withhold this treatment from patients admitted to their institutions' (p. 524). Thus, psychodynamic therapy appears to remain an influential choice in the treatment of schizophrenia.

Resources for treating schizophrenia are limited. A probable consequence of providing schizophrenic patients with psychodynamic treatment is that they will be deprived of other treatments which have been demonstrated to be effective, such as social skills training or some forms of family therapy. Since psychodynamic treatment has not been demonstrated to be effective, and more effective treatments are available, we propose a moratorium on the use of psychodynamic treatments for schizophrenia. Indeed, if a drug had the 'efficacy profile' of psychoanalysis it would surely not be prescribed, and no one would have the slightest qualm about relegating it to the 'dust bin of history'. A further need for a moratorium is that clinicians who are taught to treat schizophrenic patients with psychodynamic techniques may otherwise refrain from taking the necessary steps to obtain training in empirically validated clinical interventions for schizophrenia.

It is possible that some schizophrenics may benefit from psychodynamic treatment, as they might from any of the myriad of unproven pharmacological strategies such as orthomolecular treatment. However, at present there is no data that would permit a clinician to predict which patients would benefit. To offer such a treatment before attempting an intervention with greater empirical support raises ethical questions. In order to provide schizophrenics with psychodynamic treatment, the clinician must assume that he or she either practices a superior variation of therapy than has been previously tested or is able to identify a responsive subset of patients. To our knowledge, neither of these assumptions has been evaluated. Perhaps patients who do not appear to respond to social skills training or certain forms of family therapy could be treated psychodynamically? This is possible, but our preference would be to try Gunderson *et al.*'s 'reality-adaptive supportive' therapy, which outperformed the more costly psychodynamic treatment.

Just as resources for patient care are limited, so are resources for research. It would be economical to study how the theoretical constructs presumed to be modified by psychodynamic treatment are related to outcome among schizophrenic patients before conducting further expensive outcome studies. Gunderson *et al.* (1984) reported that there was a trend for schizophrenics who received psychoanalytic treatment to have higher scores on measures of ego functioning than schizophrenics who received reality-adaptive therapy. Despite having higher ego functioning scores, the psychodynamically treated patients had poorer social and vocational adjustment and were rehospitalized more frequently than patients receiving reality-adaptive treatment. If future research found that constructs such as ego functioning or insight were predictive of poor social adjustment and more frequent rehospitalization, the desirability of goals to improve these constructs would need to be questioned. Determining appropriate goals for treatment will be clearer once we have a more thorough understanding of the variables that contribute to social and vocational adjustment, the absence of overt psychotic symptoms, and the ability to remain out of the hospital. Once such information has been obtained it will be possible to develop specific therapeutic interventions to address each of the factors necessary for a successful outcome.

We have proposed a moratorium on the use of psychodynamic treatments for schizophrenia. Our intention is not to alienate dedicated practitioners, but rather encourage them to consider treatment alternatives. The empirical evidence indicates that in order to help schizophrenics best, clinicians need to forego their psychodynamic formulations and instead focus on building individual and family social competence, while decreasing ambient stress. Practitioners who have been treating

schizophrenics with insight-orientated approaches need not abandon their attempts to help such patients. Their experience can be harnessed by focusing on patients' current problems in living and their ability to cope with daily stresses. Descriptions of recent treatment approaches are readily available to the interested clinician (e.g. Leff *et al.* 1982; Curran & Monti, 1982; Kelly, 1982; Falloon *et al.* 1984; Anderson *et al.* 1986; Liberman *et al.* 1989) as are training opportunities. Recent advances in the psychosocial treatment of schizophrenia, fuelled by a surge in funding for schizophrenia research, make this an exciting and hopeful area in which to work. Although clinicians tend to be slow to abandon their old methods of treating patients (Barlow, 1981; Backer *et al.* 1986), we hope they will take advantage of these recent advances in order to improve the outcome of their patients with schizophrenia.

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