Effects of Psychotherapy in Schizophrenia

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Fifty-one schizophrenic patients were randomly assigned to receive insight-oriented or supportive psychotherapy. After two years of treatment, their outcomes were compared on a broad range of measures. The results of the two therapies were, for the most part, similar. Some advantages for each were also seen in the sectors of outcome toward which the two treatments were focused. The supportive therapy group did better in areas of practical adaptation and the insight therapy group did better in areas of intrapsychic function.

The practice of psychotherapy with schizophrenic patients was given major importance through the optimistic endorsements provided by Harry Stack Sullivan and his students. These spokespeople were enormously influential in drawing attention to both the pathogenic and therapeutic possibilities of psychosocial factors on schizophrenic individuals. They openly challenged the belief that schizophrenia was a largely organic disorder predictive of a downhill course. In its place, they advocated a model for schizophrenia in which the illness was seen as essentially a problem in relating to other people, which could be altered by a corrective relationship with a trained therapeutic person. In a larger sense, the humanistic message and hopeful possibility that curative change could be achieved for schizophrenic patients captured the attention of the entire mental health field.

To evaluate this possibility, five studies were done in the 1960s by Fairweather et al. [1], Rogers et al. [2], Grinspoon et al. [3], Karon and VandenBos [4], and May [5]. Because these studies overall failed to confirm the powerful benefits for psychotherapy which were hoped for, their effect was to raise serious doubts about its value. Despite the resulting decline in enthusiasm within academic psychiatry for the therapy of schizophrenia, these studies had little impact on the practices of those who had been advocating and providing this service. For them, the limitations of the studies precluded any serious judgment about the value of the work as it was practiced. Thoughtful proponents of psychotherapy for schizophrenic patients felt that the studies failed to utilize therapists who were sufficiently skilled, failed to follow patients for long enough periods of time to find differences, and failed to utilize samples of patients on whom good results could be expected. Finally, they argued that the nature of the changes caused by psychotherapy—which well conducted on suitable patients—was not likely to be tapped by the outcome measures of recidivism and role performance that typically were used.

The Clinical Research Branch of the National Institute of Mental Health recognized the danger of a premature closure to this ongoing and reasonable controversy. In
fact, the divergent results obtained by Karon and VandenBos [4] and May [5] and the divergent interpretations by empiricists and clinicians seemed to indicate that these prior studies had aggravated rather than resolved this controversy. There existed a clear possibility of foreclosing a treatment which might offer the best hope for truly deep and enduring change in schizophrenic psychopathology. This possibility was recognized even by those whose criticisms of psychotherapy's effectiveness had been vindicated by its disappointing performance in these studies. Thus, the ongoing debates about its effectiveness and the obvious importance of the issue made further and more definitive studies of this problem highly desirable.

In this context, the National Institute of Mental Health sought to involve experienced therapists in the research through a series of workshops organized by Loren Mosher and myself from 1971 to 1975. Eventually, this gave way to the development of the current project under the direction of the late Alfred H. Stanton along with Peter Knapp and myself. This paper gives a condensed description of the design and main effect analysis from this project. The design of this project attempted to utilize what had been learned from prior studies and then to improve upon them when possible. We set out to compare the forms of psychotherapy which represented the two most usual forms of individual psychotherapy currently practiced. One, entitled "Exploratory Insight Oriented" psychotherapy, hereafter referred to as EIO, was to be contrasted with "Reality Adaptive Supportive" psychotherapy, hereafter referred to as RAS. The EIO therapy was to be provided three times weekly and the RAS therapy was to be once weekly.

Our design called for a mid-range prognostic group of schizophrenic patients so as to rule out the very chronic and the very acute. Despite changes in diagnostic standards, all patients met research criteria for schizophrenia and most fulfilled the narrow DSM III criteria at time of admission. To be in the study, patients were required to have completed over six months within their assigned form of therapy. As shown in Fig. 1, 95 patients formed our study sample; ultimately we had 51 who remained in their assigned treatment (28 RAS and 23 EIO) for the two-year study period.

All patients were initially hospitalized and, in addition to their assigned psychotherapy, received active milieu treatment, flexible but expertly guided pharmacotherapy, and the usual range of aftercare services—halfway houses, home, day care, and the like.

The therapists in this study were selected for their experience (both groups averaged about ten years) and commitment to both the treatment of schizophrenia and the particular model of treatment which they purveyed. They were fully reimbursed for their services. As reported earlier by Frosch et al. [6], the RAS therapists basically adopted the view of schizophrenia as biological, emphasized medications, and focused on the practical issues of daily life. In contrast, the EIO therapists were mainly analysts, were more non-directive, and believed schizophrenia had important developmental determinants. They focused more on the therapeutic relationship and the past.

Areas in which we expected the supportive therapy to differ from the insight-oriented therapy are summarized in Table 1. The following clinical example helps to illustrate these differences further by showing how these two approaches were expected to contrast. In this example, a patient reports to his therapist that he had attended a party, but he had left early and gone home because he felt upset.

RAS The RAS therapist would attempt to identify the consequences of this behavior. "If you leave such parties, you will not be able to make friends. This will only
add to your sense of loneliness." He will help the patient anticipate future situations in which such reactions might recur. "The next time you go to a party, we should discuss this because you can expect to feel similarly upset." He will feel free to suggest that the patient's reasons for being upset are unrealistic and that the fearful consequences he expected from staying at the party are symptoms of his illness. As a result, the RAS therapist might then direct the patient not to act on this feeling, but to stay at the next party with the added encouragement that he believes the patient is able to do this and will be better off if he does.

EIO The EIO therapist would be likely to inquire in more detail about what was going on at the party—the intent being to isolate the precipitant and focus on the interpersonal context in which the patient's maladaptive behavior began, i.e., his withdrawal. Second, the EIO therapist would try to understand more about the nature of the patient's being upset: What were the physical sensations? Had the patient felt that way before? When? Where? In this way, the therapist would try to anchor the experience both within the patient's body, thereby helping to establish ownership and identity, but also to anchor it in terms of the patient's ongoing life experience so that

FIG. 1. Number (percentage) of patients who were in therapy and completed assessment battery at each time period.

Abbreviations: Rx = therapy; Assess. = assessments
TABLE 1
Description of the Therapies

|   | RAS                                                                 | EIO                                                                 |
|---|----------------------------------------------------------------------|----------------------------------------------------------------------|
| 1. | Objectives                                                          | Self-understanding: how one feels and thinks and how these influence the course of one's life |
| 2. | Interview focus                                                     | Relationship to therapist and significant others, exploration of feelings and conflicts |
| 3. | Psychic arena                                                       | Look for current meanings, hidden motivation, unconscious             |
| 4. | Temporal focus                                                      | Present and past                                                      |
| 5. | Techniques                                                          | Support, reassurance, limits, clarification, direction, suggestions for environmental manipulation, use of community resources |
| 6. | Transference                                                        | Accept positive and work through negative                             |
| 7. | Countertransference                                                 | Mixed feelings expected and generally not disclosed                   |

some perspective on this feeling state and the patient's flight from it could be attained. Possibly, the nature of the feared consequence would be explored, i.e., the fantasies which mobilized the retreat from the party, "What do you imagine would have happened?" and so on. Finally, the therapist would be aware of and potentially would explore the transference meaning of the patient's reporting this incident. For example, "Had you hoped I might be able to help you in some way with this?"

We examined the degree to which the two therapies differed in ways called for by our design and as illustrated in Table 1 and this clinical vignette. To do this, we examined reports from both patient and therapist which were obtained on a monthly basis, as well as from tapes which were recorded whenever possible. Our initial impressions are that in terms of objectives the two therapies clearly differed in the ways described. Also, with respect to interview focus, there were clear differences, especially in the degree to which the RAS therapists focused more on drug management and the EIO therapists more on exploring conflict. Differences in the psychic arena that were prescribed were harder to assess. Our ratings indicated much more attention by EIO therapists to thoughts and memories, to undercurrents, and even to unconscious issues. As desired by our design, both types of therapy paid attention to the present and the EIO type attended more to the past. In the area of techniques, there was more crossover than had been planned in the design. Namely, the RAS and EIO therapists both provided similar and high levels of support in the form of suggestions, reality testing, encouragement, and warmth. In the areas of transference and countertransference, we were not satisfied fully with our ability to assess the expected differences, but the differences which were found were all in the directions predicted; namely, EIO therapists were more interested in working with negative feelings and clearly focused more on the within-session relationship to the therapist.

Before leaving the subject of the study's design, I would like to comment on the depth and the breadth of the assessments which were done on study patients. Quite aside from the assessments which were done on the therapists and on the therapies
themselves, there were extensive evaluations done on all major areas of outcome, including those which might be specific to schizophrenics in intensive psychotherapy and involving areas which had generally received little attention in prior research, namely, intrapsychic, ego-functioning, interpersonal, and cognitive areas of outcome. In all, patients were seen every six months and received over six hours of assessment at baseline and every six months thereafter for follow-up visits.

RESULTS

Engagement/Continuance

Figure 1 illustrates that we had considerable attrition in our sample over the two-year study period. Of the 164 patients found suitable for this study, 95 remained in their assigned treatment beyond the first six months and only about half of these were still in their assigned treatment at two years. Katz et al. [7] have reported that our dropouts most usually left treatment because of resistance on the part of the family or the patient and only rarely out of the logistical problems of relocation or finances. Most of the patients who did drop out went on to receive a good deal of treatment over the next two years. Unfortunately, we were not able to get comparable outcome information on this group as compared to the 95 study patients who remained beyond six months.

The frequency with which patients dropped out highlights an important clinical problem associated with individual psychotherapy or other psychosocial therapies with schizophrenic patients. We found that the patients who remained in supportive therapy were systematically different from those who remained in the insight-oriented modality [8,9]. Patients who have positive symptoms of schizophrenia such as manifest cognitive and behavioral disturbance, but who are relatively optimistic about their prospect of recovery, are more likely to be engaged and remain in supportive therapy. This makes sense because the supportive (RAS) therapy is a focused treatment which reinforces a patient's expectations of a good response and because patients with positive symptoms welcome a treatment that is not too emotionally and interpersonally demanding. By contrast, the type of patient who is more likely to become engaged and remain in insight-oriented (EIO) therapy is the patient who has negative symptoms, such as social isolation and retardation apathy, and who has more modest expectations regarding future prospects. EIO remainers also have more education. The type of treatment an EIO therapist offers makes sense for a patient who has been worn down by the illness or previous exposures to treatment, but who has the requisite compulsivity to attend intensive therapy on a regular basis. Insight-oriented therapists tend to emphasize the serious prognostic implications of schizophrenia, the need for long-term treatment, and the need to search out covert causes. They offer the hope that a slower, more basic change can be hoped for. This approach makes sense for patients who have some stable but unsatisfactory level of function and who view their illness discouragingly.

These differences in the types of patients who remain in the insight-oriented and supportive therapies have implications for matching types of individual therapy with different subgroups of schizophrenic patients. Regardless of what type of therapy our study patients received, it was clearly not the stereotypic, good psychotherapy patient (i.e., acute, intelligent, insightful, and affectively available) who was most apt to remain in treatment.
Outcome

The high frequency of dropouts also had implications for the assessment of outcome. The sample remaining in treatment for two years was no longer representative of the general population of patients beginning treatment and, in fact, was systematically different in some ways. In order to deal with this problem, we supplemented usual group contrast techniques with partial correlations and we relied heavily upon effect size analyses. A full description of these techniques and their rationale is available to the interested reader elsewhere [10].

We hypothesized that the patients who received the exploratory insight-oriented psychotherapy (EIO) would show greater improvement than patients receiving reality adaptive supportive psychotherapy (RAS) after two years in the seven areas listed. (These hypotheses are listed in order of the size of the expected between-group differences that we predicted.)

1. Cognition: Patients given EIO treatment would show more clarity, precision, accuracy of thought, and less confusion than patients given RAS treatment.

2. Ego Functioning: The capacity to delay, understand, modulate, and express impulses and emotions as well as flexibility and ease in communicating would be greater in the EIO group than in the RAS group.

3. Interpersonal Relationships: The ability to form and maintain reliable, durable, satisfying, and mature relationships would be greater for patients given EIO than RAS treatment.

4. Signs and Symptoms: Manifest disturbances of ideation or affect would be less in the EIO than in the RAS group.

5. Major Role Performance: EIO patients would do better in both family and work roles than RAS patients. More particularly, EIO patients would assume higher occupational levels than RAS patients after the first year of treatment.

6. Medication: The EIO patients would require less medication than RAS patients after the first year of treatment.

7. Hospitalization: Initially, time spent in the hospital would be greater in the EIO group than in the RAS group. Over time, however, EIO patients would require progressively less hospital treatment so that by two years the situation would be reversed, and total time spent in the hospital would be greater for RAS than EIO patients.

Because we expected that these hypothesized differences would be most pronounced for those patients who received the maximum dose of treatment, i.e., who remained in their assigned therapy condition for the full two years of the study, and so as not to confound the results by variations in amounts of treatment received, only the 51 therapy remainers are used in analyses reported here and summarized in Table 2.

1. Cognitive Functioning: Included in this domain were measures of (a) thought disorganization and (b) clarity and depth of insight. Contrary to what was hypothesized, EIO and RAS patients showed comparable increases in their capacity to reflect on their experiences and realistically appraise their difficulties (i.e., in insight) between baseline and the two-year follow-up. Likewise, in the area of thought disorganization, the two groups did not significantly differ, although a trend favoring the EIO treatment was apparent from the effect size calculations. In summary, there was some evidence supporting the hypothesis that EIO treatment exercised preferential effects in the area of cognitive functioning. Nevertheless, the effects were small, and for the most part confined to a reduction in thought disorganization. Overall, these
analyses failed to confirm the strong effects expected in this outcome domain for the EIO treatment.

2. Ego Functioning: A moderately sized effect favoring the EIO treatment was found. Thus, the hypothesis that, over time, EIO patients would become more able to delay, understand, modulate, and express impulses and emotions than RAS patients received some support.

3. Interpersonal Relationships: No differences between EIO and RAS patients in their capacity to form and maintain meaningful relationships were found. In both groups, only a minority of the patients (approximately one-third) were able to form such relationships during the two-year follow-up period.

4. Signs and Symptoms: Again, contrary to what had been hypothesized, EIO and RAS patients showed comparable reductions in symptomatology between baseline and the two-year follow-up.

5. Major Role Performance: The hypothesis about the differential effects of the EIO and RAS treatments in this area needs to be examined in more detail since the domain includes measures in three different areas: (a) Occupational functioning—Analysis of occupational functioning clearly refuted the hypothesis that EIO patients would outperform RAS patients over the course of two years. The advantage found for the RAS group in occupational functioning was clear, substantial, and significant. (b) Self-sufficiency—In the area of self-sufficiency, the better performance of the RAS patients seen in the area of occupational functioning was only weakly mirrored. This aspect of role performance was assessed by examining the number of days the patients spent functioning independently and the degree to which they were able to support themselves financially, without assistance from family or significant others. Since EIO patients spent far more time in the hospital (which was considered time as a dependent) than RAS patients, their similar level of self-sufficiency indicates that when they (i.e., EIO patients) were out of the hospital, they achieved a fair degree of independence. (c) Social functioning—EIO patients also made a social adaptation that was comparable to the RAS patients. There was, however, a weak but noticeable trend favoring patients in the RAS condition.

|               | EIO | RAS | Neither |
|---------------|-----|-----|---------|
| Cognitive functioning |     |     |         |
| Thought disorganization |     | x   |         |
| Insight        |     |     |         |
| Ego functioning |     | x   |         |
| Interpersonal relationships |         | x   |         |
| Signs and symptoms |     |     |         |
| Major role performance |   |     |         |
| Social functioning |     |     |         |
| Self-sufficiency |     |     |         |
| Occupational functioning |       | x   |         |
| Medications    |     |     | x       |
| Hospitalization |     |     |         |
In sum, by various measures of role performance, but especially according to the measure of occupational functioning, differences were found which spoke to the preferential benefits of the RAS treatment, and which ran counter to our hypotheses.

6. Medications: Both groups received considerable pharmacotherapy throughout the study period but did not differ in terms of amount of usage. There was no tendency for patients in EIO to receive less medication over time than RAS patients.

7. Hospitalization: As noted, EIO patients spent considerably more time in the hospital than RAS patients in the two-year study period, despite the fact that RAS patients were rehospitalized somewhat more often. This difference in the total number of days spent in the hospital was largely accounted for by the longer initial hospitalization of the EIO patients. While the observed difference in length of initial hospitalization was consistent with what had been predicted, the observed difference in overall amount of time spent hospitalized was not. Specifically, the hypothesis that over time EIO patients would require progressively less hospital treatment compared to RAS patients was not confirmed.

Two obvious questions are whether these results would have been different if the size of the sample were larger or if the length of therapy had been longer. With regard to the first issue, I think a larger sample would probably not affect the results. Our results were generally consistent with prior work—thereby adding consensual validity to each other. Moreover, our interpretation of the results depended on effect size, i.e., magnitude of differences rather more than statistical significance. With regard to the second question, it remains a possibility that a longer duration of psychotherapy might increase the differences. However, even if this occurred, the failure to show differences in two years would speak to a significant limitation in EIO, and our present analyses showed that the magnitude of group differences leveled off after 12 months. They were not present at six months but remained about the same from 12 months to 24 months.

Future analyses will look closely at the subsequent course for the 30 patients who remained three years or more as well as whether other statistical techniques would yield different results.

Subgroup Analyses

Another question raised by this study is whether there are characteristics of the patients or within the psychotherapy itself (i.e., process variables) which predict good or poor response to either EIO or RAS therapy. Our results to date indicate that the overall ability of baseline patient characteristics to predict outcome was weak. There was a preliminary result that the presumably “good” therapy patients (i.e., bright, acutely disturbed, young) did, as expected, well in RAS; but, contrary to predictions, did poorly in EIO. Within the EIO treatment, agitation and hostility at baseline was a useful discriminator of subsequent outcome. Patients in EIO who were initially hostile and agitated tended to do well. Patients in EIO who were less hostile and agitated, but were more anxious or depressed initially, did poorly.

Other analyses suggest that what went on in the therapy itself was a stronger predictor of outcome than were patient characteristics. More will be said about this important area, but further dissection of the data and clinical synthesis by us is still needed.

DISCUSSION

A picture emerges from this study of a complex interaction between the type of psychotherapy which is provided and the domain of psychopathology which is affected.
The results cannot be reduced to a single statement that one form of therapy is preferable to the other. Indeed, patients in both RAS and EIO improved considerably in almost every area of outcome. Still, the results failed to confirm either the strength or the breadth of favorable effects that we hypothesized would be associated with the EIO as opposed to the RAS treatment. Instead, the data suggest that in the areas of recidivism and role performance (i.e., occupational functioning, hospitalization, and to a lesser extent social adaptation), RAS therapy exerts preferential and specific action compared with EIO therapy. In contrast, EIO therapy appears to exert preferential albeit more modest action in the areas of ego functioning and cognition (i.e., adaptive regression and to a lesser extent thought disorganization). These results are generally consistent with the focus and intention of the two treatment modalities. That is, the EIO therapy was directed more toward reducing disturbances in interpretation of events and toward promoting self-knowledge and understanding, while the RAS therapy was more concerned with the practical issues of daily living. Although each treatment exerted preferential action in the sectors toward which its attention was directed, neither EIO nor RAS had an apparent advantage over the other in the impact on most aspects of the schizophrenic patient’s psychopathology.

Future analyses are under way to explore whether greater duration of treatment would affect these conclusions and, more important, whether there were subgroups of good responders who can be identified on the basis of either their baseline characteristics or the nature of the psychotherapeutic processes.

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