A Reevaluation of Milieu Therapy for Nonchronic Schizophrenic Patients

by John G. Gunderson

Abstract

Until recently almost all the controlled research on milieu therapy for schizophrenic patients involved nonintensive milieus and chronic patients. Under these circumstances the effectiveness of milieus was not evident. Recent studies have suggested that intensive milieus significantly benefit nonchronic patients. These studies have indicated the importance of defining what ingredients can make a milieu therapeutic. The existing research evidence is surveyed, and the nature of what some of these ingredients might be described.

Two major questions can be raised about milieu treatment for schizophrenia: Is it in fact therapeutic, and if so, what are its therapeutic ingredients? In this article, I review some current research evidence relevant to these two questions with respect to nonchronic schizophrenic patients.

In a scholarly review of studies assessing the efficacy of milieu therapy for schizophrenia, Van Putten and May (1976) concluded:

The evidence from controlled studies suggests that current methods of milieu therapy . . . add little to the treatment of the ordinary schizophrenic patient once gross neglect is corrected and adequate chemotherapy is used. [p. 239]

Milieu therapy may have a special role in the treatment of those acute or subacute patients who react adversely to drugs. [p. 229]

Van Putten and May (1976) infer from their review that:

Milieu therapy has increasingly become an ideology rather than a defined method of treatment, sustained to a large extent not by scientific evaluation, but by a steady flow of rhetoric and by humanitarian and emotional justifications. [p. 218]

The thesis of the present article is that such pessimistic conclusions are premature and too global in the light of more recent research evidence. The disparity between the relatively positive results of newer studies and the largely negative results of the older studies reviewed by Van Putten and May (1976) may stem from the differing samples of schizophrenic patients and the differing qualities of the milieu therapies that have been studied.

Is Milieu Therapy Therapeutic for Schizophrenia?

To evaluate the overall effectiveness of a milieu treatment for schizophrenics requires a design in which milieu treatment is compared with another treatment of known efficacy such as drugs, or a design in which one form of milieu treatment is compared with another. Since all residential treatment takes place in some type of milieu, experimental treatment conditions in either of these designs are superimposed upon a baseline level of custodial care. Although the studies reviewed by May and Van Putten (1976) conformed to these designs, they were almost all nonintensive milieus for chronic patients. Three recent studies with comparable designs examined the effectiveness of intensive milieus with nonchronic patients.

Carpenter, McGlashan, and Strauss (1977) studied an intensive milieu at the National Institute of Mental Health (NIMH), which made extensive use of a medical model,
professional staff, and the adjuncts of formal individual and group therapy. Schizophrenic patients treated with and without drugs in this milieu were compared with a sample of schizophrenic patients treated at several local hospitals with short-term stays and an emphasis on drugs. Although the samples were not randomly assigned to the two different forms of hospital milieu, they were similar on ratings of mental status, demographic variables, and premorbid adjustment. Drugs were given to patients in the NIMH milieu based on presumed clinical need, but drug-treated patients did not differ from drug-free patients on extensive measures of mental status and prognosis. At the conclusion of the NIMH patients' 4-month residential stay, no differences in outcome were found between medicated and unmedicated patients. It may be that the patients who received drugs were clinically more disturbed in ways that were not measured in the study, or it may be that drugs were unnecessary within the context of this type of intensive milieu. When all the NIMH patients—those who received drugs and those who did not—were compared with drug-treated, short-stay patients from local hospitals, the two samples did not differ on a broad variety of measures of symptoms, prognosis, and level of psychopathology. Treatment during the followup period was similar for the NIMH and the community hospital groups; neither group received systematic aftercare. Nevertheless, the NIMH patients were rated as significantly better in both mental status and social functioning at 1-year followup. These findings suggest that the favorable effects exerted by the NIMH's intensive psychosocial milieu were a more powerful treatment factor than drugs. No firm conclusions can be drawn, however, because of possible sampling biases and the lack of random assignment.

Mosher, Menn, and their collaborators have studied a small six-bed milieu located in a house in the community (called Soteria) and staffed almost entirely by nonprofessionals (Mosher and Menn 1976, 1978; Mosher, Menn, and Matthews 1975; Mosher, Reifman, and Menn 1973). An important aspect of the treatment orientation is a belief that there are long-term advantages in accepting and living through a psychosis without medication. Length of stay for schizophrenic patients at Soteria is approximately 3 to 6 months. Experimental patients were compared with similar patients assigned to a well-staffed, medically oriented community mental health center (CMHC) with a rapid turnover (mean stay = 15 days) and active aftercare programs. During their brief initial inpatient stays, all of the CMHC patients received psychotropic drugs, and most were maintained on drugs throughout the 2 years postdischarge. In contrast, only a few Soteria patients initially received drugs, and only half received any significant drug treatment after discharge. The results at 1 year postadmission showed no differences in the functioning of the two groups as reflected in symptomatology, recidivism, and social functioning. A preliminary report on the 2-year followup confirms these results but also indicates that Soteria patients were significantly more likely to be living away from their nuclear families and to be working at higher level occupations (Mosher and Menn 1978). Although the results provide only a weak case for the advantages of a Soteria-like milieu treatment, they echo the study of Carpenter, McGlashan, and Strauss (1977) in suggesting that with an intensive psychosocial milieu, drugs may be unnecessary. Since the Soteria milieu without drugs proved as effective as the CMHC milieu plus drugs, it is possible that had drug treatment been used at Soteria House, the advantages of the Soteria milieu would have been quite apparent.

One major methodological problem must be taken into consideration in any evaluation of the Soteria project. Patients were assigned to Soteria as beds became available, and the next appropriate patient became a control at the CMHC. Although this assignment procedure is an improvement over the NIMH study, it still leaves open the possibility that unspecified biases might have influenced the results. Extensive baseline testing procedures, however, failed to show any indications that favored the Soteria patients.

Rappaport et al. (1978) studied the effects of a short-term hospital milieu in which acute schizophrenic male patients were randomly assigned to receive drugs or placebo. As in the Soteria project, the milieu in this study was staffed by specially trained nonprofessionals who believed strongly in the value of interpersonal contacts and who had developed skills for working with actively psychotic patients in the absence of drugs. Patients who received drugs showed more improvement at discharge (approximately 6 weeks postadmission). Yet among the patients for whom followup data were available over the next 1 to 3 years, those initially given placebo showed less recidivism and a higher level of social functioning than their drug-treated counterparts; they were also somewhat, though not significantly, better in ratings of severity of illness. These
results could have been influenced by the higher number of dropouts from the placebo group (43 percent vs. 26 percent, \( p < .01 \))—especially if those lost to follow-up constituted a poorer outcome subsample. Notwithstanding this possible biasing factor, the overall conclusion that drug treatment was unnecessary for a considerable portion of the acute schizophrenic patients treated in the milieu program appears tenable.

All three of these studies suggest that with an intensive milieu, many nonchronic schizophrenic patients do not require psychotropic drugs. A further source of support for this conclusion comes from an NIMH collaborative study of 299 acute schizophrenics treated in a variety of hospital settings (Schooler et al. 1967). At 1-year followup, patients who received placebo were less likely to be rehospitalized than drug-treated patients. The interpretation of this finding is complicated by the fact that patients who could not be maintained on placebo for 6 weeks (approximately 25 percent) were excluded from the data analysis—a potentially biasing factor. Schooler et al. (1967) speculated that the placebo patients may have received a more intensive milieu experience to compensate for their greater distress and that this might have had lasting advantages for them.

How can the effectiveness of the milieu programs described above be reconciled with the results from earlier studies that showed milieu therapy to be relatively ineffective for unmedicated nonchronic schizophrenics? The most influential of these studies was a study conducted by May (1968), in which 228 first admission, nonchronic schizophrenics were assigned to five different treatment conditions. Those patients who received milieu treatment alone were less improved after 6 months of treatment and had higher relapse rates at follow-up (May and Tuma 1976) than those who received milieu treatment plus drugs. The discrepancy of this result from those reported by Carpenter, Mosher, Rappaport, and their collaborators suggests that the type of milieu provided by the state hospital in which May's study was carried out lacked the essential therapeutic characteristics. Milieu therapy in May's study had a high staff/patient ratio, but such characteristics as patient participation, use of groups, or the attitudes and expectations of the staff are not described by May (1968). Greenblatt (1972) noted that May conceived of the milieu as a limited resource that did not involve “active promulgation of progressive expectations or goals for improvement” (Foreword, p. x).

If it is reasonable to attribute the ineffectiveness of milieu treatment in May's study to the quality of his milieu, it is more difficult to explain the failure of an intensive milieu described by Spadoni and Smith (1969). Like Carpenter, Mosher, Rappaport, and their associates, Spadoni and Smith conducted their study on a small, well-staffed unit that accepted the value of psychosocial efforts without drugs. However, they found that only 21 of the 43 patients included in their study could be discharged after 6 months' treatment and that 10 of those relapsed within 6 months. The fact that only 7 of the 17 patients who were transferred to a state hospital where they received drug treatment were discharged after an additional 6 months in that setting suggests that the sample contained patients with a poor prognosis and that the disappointing results may not be due to the specific milieu approach. However, the relatively

small, poorly described sample and the absence of a control group make the results difficult to interpret. Spadoni and Smith's results do suggest that we must be cautious about the generality of the promising results reported by Carpenter, Mosher, Rappaport, and their associates.

Fairweather et al. (1960) randomly assigned 96 patients to four different treatment programs that ranged from custodial care to an intensive group living situation. Although chronic schizophrenic patients did worse in the intensive therapy program, the more acute schizophrenics did better in this environment. Patients in the intensive therapy program also showed the greatest variance in ward behavior and outcome, indicating such programs may have the potential to make some patients better and some worse. The results of Fairweather et al. are consistent with the positive results described above in indicating that nonchronic schizophrenics can benefit from intensive milieu therapy. These results also help explain Van Putten and May's pessimistic conclusions about the role of milieu therapy, since the studies they reviewed were almost exclusively done on chronic patients or with nonintensive forms of milieu.

The positive studies reviewed here have all used intensive milieu approaches with nonchronic patients. That negative results are possible in milieu therapy of nonchronic patients has also been demonstrated by May and by Spadoni and Smith. Taken together, these studies draw our attention to the fact that it is not just any intensive milieu treatment that will be effective. Rather, there must be critical ingredients that discriminate milieus that are therapeutic for the nonchronic schizophrenic patient from those that are not.
What Are the Characteristics of Therapeutic Milieus?

When we examine the three milieu therapies that seemed to have special effectiveness in the outcome studies reviewed above, four shared characteristics emerge. First, all of the units had a high patient/staff ratio with relatively small (10 or less beds) units. Moreover, the staff members were predominantly youthful contemporaries of the patients. Second, there was a distribution of responsibility among all staff members, and a high premium was placed upon the involvement of all members of the community—including the patients, who were believed capable of assuming social responsibilities. Thus, the units all embody some of the qualities of a therapeutic community; i.e., there is a diffusion of authority and an expectation of participation by all members of the community. Third, all three units viewed psychosis as a process to be understood, lived through, and accepted. They did not view it as something to be abbreviated unnecessarily. All of them viewed the signs and symptoms of schizophrenia as important and meaningful expressions of the patient’s experience. Fourth, all of the units were attempting something iconoclastic, i.e., a mode of therapy at variance with the norms of treatment. The importance of this factor may lie in the missionary zeal of the participants or in the charismatic halo of the leaders.

In addition to the outcome studies reported above, there have been three major efforts to define the therapeutic ingredients of milieu therapy. The conclusions reached from these are based on correlational studies between outcome variables and the characteristics of a wide variety of milieus. Although these studies do not control for patient population, they each include systematic, quantitative, and replicable assessments of milieu ingredients.

A recent review by Ellsworth (in press) has focused attention on two ingredients of successful milieu. The first of these is that high interaction between patients and staff is associated with improved psychosocial adjustment in discharged patients. This conclusion affirms the report by Kellam et al. (1967) that initially drew attention to the importance of the amount of staff/patient interaction. Linn (1970) has also found that high staff/patient interaction within the milieu results in higher release rates. A second major ingredient highlighted by Ellsworth, Dickman, and Maroney (1972) is the degree to which patients and staff are involved in decisions and share responsibilities. Patients discharged from milieus with this characteristic show lower readmissions and increased psychosocial adjustment compared to patients discharged from milieus in which there is a low involvement of patients and staff in decision making and a lack of shared responsibility.

Like Ellsworth, Moos (1974) has developed methods for quantifying basic characteristics of treatment environments and has begun to examine which characteristics can be used to predict various indices of treatment outcome. Moos, Shelton, and Petty (1973) found that treatment environments producing particularly good community tenure tended to be high on the following five characteristics: autonomy, practical orientation, order and organization, focus on personal problems, and open expression of angry feelings. These characteristics emphasize aspects of the treatment programming in a milieu as opposed to either development of relationships or administrative structure of the milieu. Interestingly, Moos (1974) has also reported that community tenure is positively related to staff control on large wards but negatively related to staff control on small wards. This finding is consistent with the fact that the three small wards studied in the outcome studies described above all tended to discourage unilateral staff controls.

Smith and King (1975) have analyzed 18 hospitals in the United States and correlated organizational variables of the milieus with outcome measures. Allocation of staff and resources appeared to be most significant in promoting community adjustment. A decentralized decision-making process and involvement of middle level staff emerged as important factors. Smith and King concluded that administrative support of middle level staff and a relatively democratic but structured decision-making process were important in promoting milieu effectiveness.

In the work of Ellsworth, Moos, and Smith and King, the factors that were correlated with length of stay in the community after discharge were different from those that were correlated with rapid release. Thus, rapid discharge may be a poor criterion by which to gauge the effectiveness of a milieu—particularly if one is interested in more long-term indices of patient welfare. Since the milieu programs that appeared effective in treating nonchronic schizophrenics varied from short (6 weeks) to medium (6 months) stays, it is possible that longer stays in favorable milieus would result in further benefits. This conclusion is supported by the study of Click and Hargreaves (1979). These investigators found that nonchronic schizophrenic patients (but not many other patient types) did better with 3 to 4 months of intensive milieu therapy than with
only 1 month in the same milieu.

The clinical impressions of experienced therapists, nurses, and aides are a third source of information about the ingredients of therapeutic milieus for schizophrenic patients. These workers tend to emphasize: (1) the distribution of responsibility; (2) the expectations and rewards for social participation and interaction; (3) the necessity for clear and perhaps charismatic leadership; (4) the advantages of a heterogeneous group of patients, including a number who are functioning on a relatively high level, to improve role modeling and social participatory ingredients of the milieu; (5) an overworked and busy staff, which is likely to have a better morale and greater sense of involvement than a staff that is not sufficiently occupied; (6) a clear philosophic orientation; and (7) the recognition of individual differences in patient needs.

Discussion

Recent evidence suggesting that milieu therapy can be effective for nonchronic schizophrenic patients has been reviewed. There appear to be two main reasons for the failure of past research on milieu therapy to demonstrate such efficacy: (1) The research has studied programs lacking the investment, coherence, and intensity required for therapeutic success. (2) Almost all of the previous research has been done on chronic patients. Even with respect to chronic patients, however, a recent study by Paul and Lentz (1978) has suggested that a well-designed milieu can be effective. The results of that study also indicate that specific milieu qualities determine whether and to what degree the milieu is or is not therapeutic.

Although a considerable number of nonchronic schizophrenics can apparently be treated without drugs, such a practice is not necessarily preferable. The abundant evidence of the initial advantages of drugs in limiting the gross signs and symptoms of psychosis preserves this role for them even within an optimally designed milieu. The more recent research reviewed here does indicate, however, that when good milieu conditions are available, drugs can be safely discontinued earlier than is commonly done. Drug therapy, with its known effects on acute signs and symptoms, and intensive milieu therapy, directed at improving interpersonal or social comfort and sensitivity, may be most effective at different stages of treatment. The current studies all underscore the potential role of nonprofessionals within successful milieus and suggest that their motivation and enthusiasm may be as important as the specific treatment model around which the milieu is organized (e.g., authoritarian-medical vs. democratic-egalitarian). Finally, evidence from a variety of sources repeatedly points to some specific qualities of milieus that are associated with therapeutic success. Foremost among these qualities are: (1) distribution of responsibilities and decision-making power; (2) clarity in treatment programs, role, and leadership; and (3) a high level of staff-patient interaction. Based on existing research evidence, milieus that incorporate these characteristics can be expected to have significant beneficial effects for nonchronic schizophrenic patients.

References


**Acknowledgment**

The preparation of this article was supported by PHS Grant #25246–03 of the National Institute of Mental Health. The helpful suggestions of Jonathan Cole, M.D., are gratefully acknowledged, although the author alone is responsible for the conclusions reached.

**The Author**

John G. Gunderson, M.D., is Associate Professor, Department of Psychiatry, Harvard Medical School, and Director of Psychotherapy and Associate Psychiatrist, McLean Hospital, Belmont, Mass.

---

**Dean Research Award**

William T. Carpenter, Jr., M.D., John S. Strauss, M.D., and John J. Bartko, Ph.D., have been named recipients of the 18th annual Dean Research Award. The $2,500 award is granted each year by the Fund for the Behavioral Sciences and the American College of Psychiatrists in recognition of basic research accomplishment in the behavioral sciences contributing to our understanding of schizophrenia.

Dr. Carpenter is Director, Maryland Psychiatric Research Center, and Professor of Psychiatry, University of Maryland School of Medicine, Baltimore, Md. Dr. Strauss is Professor of Psychiatry, Yale University School of Medicine, New Haven, Conn. Dr. Bartko is Mathematical Statistician, National Institute of Mental Health, Bethesda, Md.