New Treatment Systems for Schizophrenia

Loren R. Mosher, M.D.

Introduction

Although schizophrenia is the most prevalent and incapacitating of the major mental illnesses, neither this disorder nor its more than two million American victims are the recipients of much public attention or concern. Admittedly, schizophrenia's obscurity is not unique. The recent announcement of a potentially effective treatment for sickle cell anemia, for example, drew unaccustomed attention to a disease of which most Americans had never even heard.

Noting that it has claimed more lives—very few of its victims live beyond the age of 40—than many far more highly publicized illnesses, a Washington news commentator wondered aloud if sickle cell anemia's relative obscurity might be in any way related to the fact that it occurs almost exclusively in members of the Negro race. Not unlike Black Americans, schizophrenics constitute a neglected minority group, lacking economic resources and political "clout." It seems unlikely, however, that the public apathy they engender can be attributed to this fact.

The Social Context

The specter of schizophrenia is not discriminatory. Madness has never been limited to any one age, or race, or nationality, or geographical area, or socioeconomic group; it threatens us all. Who among us has never worried—however fleetingly—that the small patch of irrationality lurking within him might not someday expand until, unchecked, it dominates his personality?

Given the almost universal fear of "losing one's mind," it is small wonder that our society has traditionally kept its "madmen" at a distance—both physically and emotionally. Physically distant, because so many of the mentally ill are housed far away from populous areas (to avoid "infecting" others, perhaps?) in large, impersonal state institutions. Emotionally distant, because "out of sight, out of mind."

Nonetheless, the forgotten schizophrenic performs a service for society; he personifies and, thus, bears the burden of our own suppressed irrationality. Reflecting the attitude of society at large is the tendency of the schizophrenic patient's immediate family to shrink away from its sick member; by relegating him to a distant custodial institution, they are able to shield themselves from day-to-day confrontations with his frightening, perplexing disorder. Ironically, one of the schizophrenic's most
striking characteristics is his indifference to his own fate and to events in the world around him—a lack of interest which the world repays in kind.

A Difficult Research Problem

If the general public's tendency to ignore the problem of schizophrenia is rooted in irrational fear, the corresponding indifference of the scientific community is eminently rational and self-interested. While the discovery of the cause" or the cure of schizophrenia has been announced almost annually (to the accompaniment of much fanfare and enthusiasm in the popular press), these newspaper and Sunday supplement announcements have invariably been followed by less publicized failures to replicate and validate preliminary evidence. Thus, cycles of great expectations, questioning, disenchantment and despair have been constantly recurring phenomena in the investigation of schizophrenia.

Two aspects of this process are especially troubling. Initially, the eminently human need for a simple authoritative answer to a most difficult and frightening problem has led us to embrace too readily, too impetuously each successive solution to the schizophrenic conundrum. But when each proffered solution is in turn discredited, a tendency also exists for its former adherents, embittered at the loss of the hoped-for total "answer," to dismiss too hastily the very real contributions to the understanding of schizophrenia made by these (and other) studies.

Given this discouraging history of dashed hopes and perennial confusion, schizophrenia's failure to excite more widespread investigative interest is hardly surprising; scientists, alas, are by no means exempt from the all too human need for positive reinforcement.

Indeed, if there now exists some young James Watson on the make for a Nobel Prize, one suspects that schizophrenia research is not his odds-on choice as a field of investigative inquiry. We can take comfort, however, in the fact that, having achieved preeminent positions in other fields, a number of Nobel laureates—among them, Drs. Pauling, Calvin, Nirenberg, and, significantly, Watson, have now turned to the study of the brain.

Drug Treatment

If the cure for schizophrenia has remained elusive, it is nonetheless undeniable that notable advances have been made in this complex disorder's treatment. Remarkably effective in the reduction of acute psychotic symptoms, the major tranquilizing agents deserve primary credit for the 30% decrease in hospitalized schizophrenics since their introduction in the mid-1950s. In addition to their pharmacological effects, these drugs have also had a powerful, if less fully documented, effect on the prevailing attitude toward schizophrenia (see, for example, Sheperd1).

Seeing marked improvement in patients who had previously been considered "hopeless" has led hospital staff members to take a more optimistic view of schizophrenia—a view which frequently communicates itself to the patients themselves. But despite these salutary effects, it must be recognized that the phenothiazines, which have now been in widespread use for over 15 years, have proved ameliorative but not, as was once hoped, curative.

Recent statistics make clear that significant problems in the treatment of schizophrenia remain: For example, discharged schizophrenic patients still show a high readmission rate (40-60% within two years of discharge) and very inadequate levels of overall community adjustment (only 15-35% of ex-patients achieve an "average" level of community adjustment). Latest figures also indicate that about 20% of first admission schizophrenics will need long-term care. This figure must be compared

88
with recently obtained data from Denmark and Finland, where heavy emphasis is placed on the psychosocial aspects of treatment, showing that no more than 5% of first admission patients diagnosed as schizophrenic will be hospitalized five years later.

Since Danish and Finnish psychiatrists administer tranquilizing drugs much as their American counterparts do, they believe this lower rate of chronic hospitalization must result from their greater emphasis on non-drug-related treatment efforts. In view of the Scandinavian experience, a renewed emphasis on psychosocial aspects in our overall treatment programs would seem to be indicated.

A Balanced Treatment Program

Indeed, one purpose in my speaking here today is to attempt to redress the balance of emphasis in our present-day treatment philosophy. Today, there is a tendency for many clinicians to rely on the major tranquilizing agents (and other somatic therapies) to the exclusion of other treatment approaches. This is unfortunate because, at the very least, significant psychosocial treatment (e.g., continued interpersonal contact) has proven a major determinant in the prevention of chronicity.

Given the phenothiazines' ability to combat acute psychotic symptoms and the effectiveness of supportive psychotherapy in preventing relapses in remitted patients, a comprehensive treatment program which emphasizes both nonsomatic and somatic approaches would seem to offer our best hope of successfully confronting schizophrenia—at least at the present stage of our knowledge about this recalcitrant disorder.

If in the remarks that follow I seem to emphasize psychosocial approaches exclusively, bear in mind that phenothiazines are already the preeminent treatment for schizophrenia, whereas nonsomatic therapies are relatively neglected. And in view of their makers' ample advertising budgets, I think it's safe to say that the major tranquilizing agents need no plugs from me!

My plea for a greater emphasis on the nonsomatic aspects of treatment must, however, be tempered with reality. The sad truth is that we do not have widely available the variety of settings needed for the treatment of schizophrenia.

If there is anything we know about schizophrenia, it is that the term encompasses a heterogeneous group of disorders; therefore, we cannot expect that a single facility or type of treatment will be effective with all persons designated schizophrenic. If we are to provide them adequate treatment, ancillary facilities must be developed and their effectiveness evaluated.

We must commit ourselves to the development of a system of care—not a series of disorganized, fragmented, confusing, noncommunicating therapeutic bits and pieces. One view of schizophrenia characterizes it as a fragmentation and disorganization of the ego into a series of non-communicating compartments resulting in confusion about who or what one is.

Appallingly, this description of the patient's state might equally well be applied to many of our present-day treatment systems. Given this state of affairs, how can our treatment programs help but reinforce psychic fragmentation rather than fostering restitution, as they are supposed to?

Schizophrenia in Historical Perspective

Before describing several innovative treatment systems which may serve as examples of the types of programs needed, I think it useful to place our present day treatment into historical context: The conceptualization of deviant behavior as medical illness is relatively new. It first arose almost 200 years ago as part of a humanitarian movement to accord persons housed in asylums decent, non-punitive treatment. In conjunction with Virchow's systematization of pathology, Pasteur's discovery of the
tubercle bacillus and emerging concepts of social Darwinism, it had ascended to a pre-eminent position by the end of the 19th and the beginning of the 20th century, and was best exemplified by Kraepelin's approach in Germany.

Today, the disease model of mental illness is universal, reified, sacrosanct—in a word, 'establishment.' And as such, it is increasingly under attack. To many psychologists and psychiatrists, yesterday's humanitarian reform has become today's anachronistic abuse.

In a spirit of reexamination they are looking anew at conceptions of madness alternative to the now traditional disease model, and they are struck by the fact that deviant behavior has been dealt with in very different ways by different societies, depending upon how each society, at a given time and place, has viewed that deviance. Peculiar behavior has variously been considered as a sign of magical powers, possession by the devil, an incurable hereditary malignancy and, in most recent times, a treatable disease.

Yet, despite all this, the medical model, though challenged, has not been displaced; by and large, much deviant behavior is still regarded as an "illness" to be "treated." Nonetheless, we are now witnessing a new trend, a fresh emphasis in treatment: Patients diagnosed schizophrenic (along with other mentally "diseased" deviants) are increasingly moving out of the hospital and into the community.

Era of Moral Treatment

But as has been pointed out by some oft-quoted (and no doubt jaded) students of history, very little is new under the sun and, indeed, the present-day revolution in mental health care might more accurately be called a re-revolution, a return to the era of "moral treatment" most widely practiced in the United States at the end of the 18th and the beginning of the 19th centuries. This movement, an outgrowth of the philosophic influence of New England's transcendentalists, developed a community-care model for treatment that has yet to be duplicated.

The insane person was treated in his home community, where he could be visited by, but did not necessarily live with, his family. Treatment modalities were purely social or psychological, if you will, and the patient was housed in a variety of settings: in his home, in a community residence which contained a number of disturbed individuals or in the home of the attending physician's family, an interesting form of foster care. (The parallels to the current movement toward community treatment of the mentally ill are striking.)

This promising treatment philosophy's untimely demise* was brought about by such factors as the initial waves of Southern European immigration, Social Darwinism and, most importantly, the gradual ascendancy of the medical model of mental illness, a byproduct of epochal development in medicine. Medical concepts which had led to the building of large hospitals were soon applied to the recently acquired mental disease category.

Indeed, most state hospitals presently operating were founded between 1850 and 1900, and many have buildings which date from these eras. It has been said that our results in the treatment of the insane peaked in the 1840's, with the century between 1855 and 1955 representing a valley out of which we are only now climbing. In fact, many argue we still are not doing as well as was the case at that time.

Treatment Innovations

Let me turn now to several examples of the types of programs now being developed which echo the spirit of the era of moral treatment. Innovations in the treatment of schizophrenia, at least in the psychosocial field, have recently taken several major

* For interested readers, Bockoven's account of this treatment and its fall from favor is highly recommended.
NEW TREATMENT SYSTEMS FOR SCHIZOPHRENIA

Chief, Center for Studies of Schizophrenia
Division of Extramural Research Programs
National Institute of Mental Health
Rockville, Maryland 20852

Loren R. Mosher, M.D.

directions. Some therapists are attempting to gain acceptance for a view of schizophrenia as a process of developmental crisis (involving disintegration, disorganization, reorganization and reintegration), with potential for positive growth.

This therapeutic model is based on clinical evidence that many patients, having undergone a schizophrenic episode, emerge from the experience profoundly changed—often for the better. As Karl Menninger has said, "We must not lose track of the fact that some people go through a schizophrenic episode and get well and then get weller and weller."3

Schizophrenia as Developmental Crisis

A project to study this view of madness in a systematic fashion is at the present time being developed on the West Coast where acutely psychotic patients will be admitted into a house in the community (not a hospital with its too often rigid and inflexible rules and role structure); in this setting, they will be treated, for as long as is necessary, by a group of specially trained paraprofessional persons (who may themselves have experienced an "altered state of consciousness" like that which occurs in schizophrenia).

These paraprofessionals will attempt to share the patient's experience and to minister to his needs for support, confrontation, and withdrawal during the various stages of his psychotic episode without, at the same time, doing anything to him. Rather than requiring the patient to conform to their expectations (as is too often the case), the staff will accompany the patient on his "trip."

This project's utilization of indigenous paraprofessional personnel illustrates a major new development in the treatment of schizophrenia. Because they allow us to view schizophrenia as a creative experience, with potential for positive change, projects like this one may enable us to find this potential and to develop other innovative treatments and facilities to encourage, tolerate and facilitate its growth.

A Foster Care Program

As is obvious from the statistics I quoted earlier, a major weakness in the treatment of schizophrenics is in helping them bridge the gap from the 24-hour supervision of a hospital ward to an independent life in the community. In an effort to confront this problem and also to tap the therapeutic talents of nonprofessionals, a foster family program was undertaken as a "town project" in a small Midwestern community—a venture which took its inspiration from a Belgium community in which townspeople and mental patients have lived together harmoniously for several centuries.4

Of the 33 patients who have participated in this program, seven have been placed in foster homes, two are living independently in apartments, four are residing in a boarding home, one is staying with his family, and 11 have dropped out of the program; the remaining eight patients are still involved in preliminary "practice"
phases of the project and have not yet been released from the hospital.

This program's encouraging preliminary results suggest that nonprofessionals can perform very valuable therapeutic functions. Their success, in fact, raises provocative questions about "professionalism" in mental health. Who, for example, should play a therapeutic role? How much training and supervision is necessary?

A Community Lodge
In another approach to the problem of chronicity, a West Coast investigator set up a small "community lodge" in which patients were given major responsibilities in organizing the household, preparing and purchasing food, caring for each other, keeping books, securing employment, etc. As the program progressed, professional staff gradually relinquished their supervisory roles. Subsequently, the 75 chronic patients who volunteered for this program were compared with a hospitalized group of 75 matched patients who received the usual discharge planning and community assistance, including outpatient psychotherapy, foster home placement, etc.

Results for the first six months showed that 65% of the lodge group and only 24% of the control group were able to remain outside of the hospital. Also, 50% of the lodge group, as compared with 3% of the controls, was employed full time during this period! Over the succeeding 3 1/2 years of follow-up these rates have remained stable. In addition, the cost for maintaining lodge members was calculated at $6.37 per day as compared with $14.34 per day for the hospital group.

As may be seen from the descriptions of these innovative programs it is not so much that the particular approach is new; rather, they generally involve a whole system of care. Thus, their success may lie as much with the interest and continuity and flexibility of care they provide as with the particulars of the approach. In these programs the individual patient's treatment is no longer as fragmented as he may feel. His needs, rather than those of the facility, are being served.

The Future
At the present time a great deal of research is needed to define which treatment, for whom, when, in what sequence and in what context is most effective. Research to evaluate various treatments should be designed to allow more homogeneous subgroups of "responders" to be identified within the notoriously heterogeneous diagnostic category known as "schizophrenia." This type of research will allow us, over time, to deliver the most effective treatment to individual patients.

Although we are gradually moving away from the large hospital concept and have made a number of important treatment innovations, even greater effort is needed to broaden the spectrum of community-based care which is available. Diverse resources must be developed to deal with the diverse conditions subsumed under the rubric "schizophrenia," and major emphasis should be focused on the development and implementation of better treatments for the first phase of psychosis—so that chronic institutionalization or multiple readmissions (the revolving door) do not eventuate.

A consideration of the future is especially relevant to a symposium like this one. Where are we going? Why are we so often stymied? What must change to allow us to deal more adequately with schizophrenia?

Suppose next year we discover a biochemical deficit which occurs in schizophrenia and which is as specific as the abnormal amino acid sequence that explains sickle cell anemia. Can this biochemical deficit ever fully explain schizophrenia?

Consider this fact: we know that one member of a pair of identical twins can develop schizophrenia, while the other does
NEW TREATMENT SYSTEMS FOR SCHIZOPHRENIA

not. This suggests that an interaction between biological and psychosocial factors must be a prerequisite to the development of schizophrenia. And if both biological and psychosocial factors are implicated in schizophrenia's etiology, then both biological and psychosocial approaches will be necessary parts of its therapy.

Imagine, further, a man of 40 whose mother has been surreptitiously spiking his orange juice with LSD for the past 25 years. (We've all heard of the schizophrenogenic mother, but this poor man has an hallucinogenic mother.) Suddenly, the mother dies, and the morning of her funeral her bereaved son's biochemical peculiarity is suddenly corrected. Could we really expect this man to pick up a hat and briefcase and head downtown for his first day on the job? One suspects that psychological therapy and retraining would be vital in helping this poor fellow match his behavior pattern to his newfound biochemical normality.

Given the present state of our knowledge about schizophrenia we can ill afford to practice premature closure in our thinking about it. So long as schizophrenia remains enigmatic we must not impulsively embrace facile pseudosolutions because of our need for the answer. No approach, no theory, orthodox or unorthodox, can be disregarded until adequately tested. Schizophrenia research needs the increased understanding which can result from such a pluralistic view.

This non-dogmatic, flexible, multifaceted approach has been shown to lead to broadened conceptualizations and significant breakthroughs in other fields of inquiry. We must not cling tenaciously to a single theory, especially when dealing with as complex and diverse a set of conditions as "schizophrenia." Only by broadening our horizons can we guard against the possibility of becoming trapped in what Laing has called a "conceptual straight jacket."6

For too long, psychiatry has been divided in two warring and mutually contemptuous camps—those who believe that only drugs or purely biological approaches can combat the schizophrenic "disease" and those who see the schizophrenic "experience" in a purely social context. But it well may be that both twisted molecules and twisted societies make schizophrenics. And if this is true, it will take both Orthomolecular and orthosocietal approaches to untwist them.

REFERENCES