Psychosocial Approaches to Treatment of Schizophrenia

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The purpose of this paper is to provide an overview of psychosocial treatment methods which can be used to support and augment medical treatment of schizophrenia. These methods can assist the patient and family to obtain and make use of the best treatment medical science has *to* offer, and to learn new skills for coping with this devastating illness. While the psychosocial treatments are great in number and quite varied, this paper will be concerned with four primary areas which have particular utility in treatment of schizophrenia: (1) Behavioral Medicine; (2) Patient and Family Education; (3) Psychotherapy; and (4) Psychiatric Rehabilitation.

Certain characteristics of schizophrenia as an illness and as a handicap make it a prime target for use of the social and behavioral programs combined with a good medical program into a comprehensive treatment approach.

First, there is no longer any great doubt that schizophrenia is a biochemical disorder affecting a wide variety of brain functions. New research appears daily supporting the fact that the brains of schizophrenics are in a number of ways different from those of "normals" and that chemical intervention is effective in removing schizophrenic symptoms. It is fairly clear that the tendency to manifest schizophrenic symptoms is largely genetically based and chemically mediated. Further, schizophrenia appears to be primarily a chronic illness (or series of illnesses), and as such, is very like diabetes, hypertension, and other chronic illnesses.

The fact that schizophrenia is considered to be a chronic, biochemical disturbance is important for a number of reasons which impact on choice of treatment, aside from the most obvious necessity for using chemical treatment.

The fact that the illness is chronic brings to light issues related to treatment compliance or adherence. In all illnesses taken together, studies of adherence to treatment regimens have shown that (depending upon the individual study) 28 percent to 73 percent of patients do not follow their treatment as prescribed. Adherence is no better in schizophrenia taken alone. Chronic illnesses are associated with poor adherence because these illnesses require constant vigilance and care, and because the treatment regimens prescribed for these illnesses are often complicated, with several medications to be

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taken at various times throughout the day. Further, the medications usually ordered for the chronic illnesses are those which keep away symptoms rather than simply alleviating them. We are taught to think of medications as curative, using the "headache" model: take an aspirin or two, the headache goes away, and stop the medication. Many schizophrenic patients believe that they can stop their medications when the symptoms go away.

Another reason for the importance of thinking of schizophrenia as a chronic, biological condition is related to the effects of stress on this condition. It appears that the biological predisposition to become mentally disorganized lowers the ill person's resistance to stress. Stress has the same kind of effects on the schizophrenic person as have been shown to be present in other chronic illnesses such as diabetes and hypertension. Stress exacerbates these illnesses, contributing to the onset of illness episodes. It seems apparent that any treatment interventions which can contribute to adherence to medical prescriptions and which can alleviate the effects of stress can be useful in treating schizophrenia.

Another aspect of schizophrenia which makes psychosocial treatment appropriate is the fact that this illness is also severely handicapping in a variety of areas. Long after an acute episode has been treated and subsided, the schizophrenic suffers residual deficits. There may be lingering perceptual disturbances or delusions, occasional or cyclic emotional upheavals, severe susceptibility to stress, and behavioral skills deficits. One particularly difficult problem is retarded social development. Many patients become ill just at the age when they would normally be having a social growth surge, learning interpersonal skills, relationships with the opposite sex, and employment and educational skills, and developing an adult self-concept. The result of becoming severely ill at this age is that they often end up as adults socially arrested at age 14,16,18 or 20.

Schizophrenics, then, have needs which can best be met with psychosocial treatment approaches. They need to be taught how and why they should adhere to medical treatment programs; they need to have programs that will reward adherence; they need to learn to decrease stress; they need to learn new ways of interpreting perceptual phenomena other than developing delusions; they and their families need to learn about the illness and how to cope with the illness and manage the environment to lower stress; and they need to learn social skills to overcome deficits and make progress in the areas of interpersonal skills, sexual relationships, employment skills, and social relationships. Psychosocial treatments are designed specifically to address these skills areas and to assist patients in meeting these needs.

Behavioral Medicine

This emerging field is concerned with the study of how environmental and psychological factors interact with physiologic and biochemical processes in determining the outcome of illness and treatment. It is the field in which behavioral science, knowledge, and techniques are applied to the understanding of physical health and illness, and the application of this knowledge and these techniques to diagnosis, prevention, treatment and rehabilitation (Schwartz and Weiss, 1977). Behavioral medicine is in the process of coming "full circle" from its origins, which were in mental health. Technology was developed in mental health for reliably changing overt behavior; this technology was then applied, beginning in the 1960s to more medically related problems such as obesity and smoking. It has not been applied widely with psychiatric illnesses such as schizophrenia, but the techniques are quite useful and hopefully will begin to be applied in this area. This process in medicine was supported by the fact that the major killers of people had been eliminated, leaving a host of diseases, such as cardiovascular disease and cancer, that had to be managed rather than cured — the forte of behavioral medicine (Blanchard, 1982).

Behavioral medicine emphasizes individual responsibility for health, and thus is consistent with patient responsibility, holistic approaches to medicine, and orthomolecular treatment. Its interventions require active participation by the patient, as well as mutual goal setting by the therapist and patient. There is a strong emphasis on self-control skills and other forms of patient participation.

Methods used in behavioral medicine include a variety of assessment techniques such as interviews, questionnaires, self-monitoring, behavioral observation, psychophysiological measurement, and other assessment methods. The goal of these assessments is to count the frequency of a behavioral response, which in schizophrenia might be frequency of a certain perceptual experience or the level of a behavioral skill. Also used are traditional learning/conditioning techniques such as counterconditioning, shaping, modeling, contingency contracting, punishment, response cost, and reinforcement of other behavior. Specific behavior therapy techniques are also used, such as bio-feedback, relaxation training, and cognitive strategies such as covert reinforcement and covert extinction or thought stopping. Some of the most useful methods are the self-management techniques such as self-monitoring, goal specification, cueing strategies, incentive modification, and rehearsal, the latter of which is especially useful in learning social skills.

Present applications of behavioral medicine include a wide variety of physical illnesses, including cardiovascular, gastrointestinal, and skin disorders, arthritis, asthma, chronic pain, diabetes, cancer, insomnia, headache, smoking, and obesity. This field has seen limited application to the traditional mental illness, although there has been some application to alcoholism and seizure disorders. With the latter, behavioral medicine techniques have consisted of operant and respondent conditioning to control antecedents of seizures, relaxation and cognitive strategies to control anxiety, and biofeedback based on the presence of an aura preceding seizures.

It is ironic that behavioral medicine has not been widely applied in the treatment of schizophrenia, in view of the fact that the field's origins are deeply imbedded in treatment of mental disorders. One reason for the lack of application in the area of schizophrenia and other serious mental disorders is that in their origins, these methods were based on a behavioral model of mental disturbance. It was felt that in order to use behavioral techniques, one must assume that the disorders were behaviorally based. This belief led to attempts to "cure" behavioral disorders with behavioral treatments. It was concluded that what mattered in treatment was that the patient did not talk about his hallucinations, not whether he did in fact hallucinate. Behavior was controlled by external means of reinforcement rather than internal self-control methods now in use.

A more useful application of behavioral medicine techniques to treatment of schizophrenia would utilize teaching the patient ways to control hallucinations, perhaps through relaxation and thought stopping and other cognitive means. This application gives recognition to the inner experience of schizophrenia and utilizes the idea that schizophrenic symptoms are chemical manifestations of the body's reaction to stress. This application requires an entirely new angle for the field of behavioral medicine — viewing schizophrenia as a biochemical disorder. Hopefully, the application of these methods will soon become commonplace, as behavioral medicine has a great deal to offer in treatment of schizophrenia.

Patient and Family Education

Patient education is based on the philosophy that a well-informed patient will make more sensible treatment decisions than will one who knows nothing about the illness, and thus will adhere more closely to the prescribed treatment regimen. Patient education in psychiatry has its roots in health education and patient education with other chronic illnesses such as diabetes and cardiovascular disease. Teaching psychiatric patients has been a more recent development (Osmond, Mullaly, and Bisbee, 1978), but has grown steadily since its beginnings over five years ago (Bisbee, 1979).

Family education with families of schizophrenic patients had its origins in family therapy, although the philosophy of family education is much altered from that of original family therapy approaches. These latter forms of treatment were based on studies indicating that schizophrenia was caused by the family, through deviant communication, disrupted family structure, or a "schizophrenogenic" mother. Fortunately, the philosophy of family therapy has changed in recent years, with the failure to find experimental evidence that the family is the

cause of the illness. There is a tendency to make the family an ally in treatment rather than to blame the family, a view that has proven much more beneficial for both patient and family.

Methods used in patient education rely on traditional educational techniques, including the traditional classroom setting, with student desks and chalkboards, visual aids, and a didactic approach. Patients are expected to adhere to classroom rules and to learn informational material. There is a great deal of structure in patient education, including pre- and post-testing covering the material to be learned. There is a strong emphasis on the teaching of the patient role, with its rights and responsibilities. Once the patient is installed in the patient role, then the remainder of the information on diagnosis, symptoms, treatment, and prognosis, are relevant. Topics learned include information about medication, nutrition, diet, exercise, and stress management, as well as about community resources and family issues.

In family education, families of schizophrenics attend workshops, classes, or family sessions for the purpose of learning information about the illness and its management. More and more families are being given the burden of caring for their ill relatives at home, with the current trend of decreased length of hospitalization, increased difficulty in getting patients into hospital, and the philosophy that patients should be treated in the community. The family education approaches are designed to give the families information they need to cope with the illness at home, especially with regard to environmental management to decrease stress, and to ways of dealing with irresponsible behavior on the part of the patient.

Neither patient education nor family education are considered to be psychotherapy or family therapy. They take place in a very structured setting, and their purpose is to provide information, answer questions, and teach management techniques rather than to do individual or family therapy. Patients and families may need psychotherapy or family therapy, but these methods are not carried out in the context of patient and family education.

Patient education has become "old hat" in application to other chronic illnesses. It has only recently been applied in treatment of schizophrenia, perhaps for some of the same reasons that behavioral medicine has not been widely applied. Recent results, however, indicate a great deal of success with patient education in treating psychiatric patients and working with families. The Psychological Learning Center (Osmond, Mullaly, and Bisbee, 1978) has served over 3,000 patients in the past five years, with a great deal of approval from patients and families. There are large numbers of psychiatric medication education groups established in various parts of the country, and a number of comprehensive patient education programs are opening in several locations. Family education is more widespread, with psychoeducational groups in abundance (Anderson, Hogarty, and Reiss, 1980), and family self-help groups in operation for a number of years under the auspices of the American Schizophrenia Association and the National Alliance for the Mentally Ill and other organizations.

Psychotherapy

This technique has been well established for many years, with its philosophy and methods dependent upon the particular theoretical basis for the type of therapy being offered. There are many different kinds of psychotherapy offered individually and in groups. Limited success, however, has been found with schizophrenic patients using traditional psychotherapeutic methods. More recently, some success has occurred with using the more structured types of psychotherapy based on reality approaches and problem solving.

Perhaps the error in using psychotherapy in treatment of schizophrenia has been using this method as a means of "curing" the illness or "curing" the family. A more useful approach is to use psychotherapy to work out individual and family management techniques, to provide alternative explanations for the patient's perceptual disturbances, and to work out interactional problems between patient, family, and therapists.

In using psychotherapy to establish management techniques with patient and family, the therapist concentrates on individualized family situations to assist the family in working out a plan for management that will apply

directly to their particular situation. Research has indicated that patients discharged from hospitals into families with a high level of "emotional expressiveness" relapse much more quickly than do those placed in families with lower levels of this emotional climate. Much can be gained from working with the family to establish ways of decreasing emotional expressiveness — an overinvolved, critical, protective family attitude — to give the patient some understanding and privacy, much needed by the schizophrenic person. The family can also learn ways to manage environmental stress and to deal with behavior of an irresponsible patient.

Psychotherapy with the patient can be very effective in giving alternative explanations for perceptual disturbances for which the patient might otherwise develop a delusional explanation. Many times delusions are simply a wrong explanation for perceptual disturbances often experienced by the schizophrenic (Osmond, 1979). The therapist can be very effective in helping the patient learn about perceptual phenomena and develop more reality-based explanations for these experiences.

Psychotherapy based on the temperaments of the patient, family, and others is very useful in establishing good family-patient relationships based on an understanding of individual differences within the family. This type of work can differentiate between illness and personality factors, giving a clear indication of where therapeutic intervention should take place to treat the illness. There is recent experimental evidence that patients of different temperaments tend to be given different psychiatric diagnoses (Bisbee, Mullaly, and Osmond, 1983). Further research will indicate more specifically the ways in which temperament and illness interact and give us a better understanding of how to work with patients, families, and therapist interactions to get the most benefit out of therapeutic measures.

Psychiatric Rehabilitation

This form of treatment is based on the principles of psychiatric treatment and physical rehabilitation. The person receiving help is considered a "psychiatrically disabled help-ee" and the goal of psychiatric rehabilitation is to maximize each person's ability to achieve success in the environment of his or her choice. Success is not identified by a return to completely normal functioning, but is relative to the individual's needs and the living, learning, and working environment in which he or she chooses to be. Therapy focuses on increasing the patient's skills or developing supportive resources needed by the patient to be successful in the environment. The treatment is highly individualized, based on the idea that each person's skill strengths and deficits are different and each person will therefore need different kinds of skill training and resource development. The involvement of the client in all decisions about where to live, receive therapy or learning, and work is vital to the proper implementation of the psychiatric rehabilitation model.

The methods used in psychiatric rehabilitation are extremely varied, as they are determined by the needs of the client/patient. The method is organized around a three-step process, including (1) Diagnosis in the areas of overall rehabilitation goal, functional assessment, and resource assessment; (2) Planning to set priorities on skill and resource development needs and to identify the interventions needed to develop the skills and resources; and (3) Implementation of the interventions**,** which may be skill teaching, skill programming — practicing the learned skill in the proper environment, linking the patient/client with existing resources, or creating resources which do not already exist. Assessment consists of evaluating with the client/patient the outcome of the interventions and the benefits derived by the client/patient in terms of success in the chosen environment.

Psychiatric rehabilitation has shown a great deal of success in improving recidivism rates to hospitals and improving the percentage of patients who are gainfully employed after having been mentally ill. Patients treated using the psychiatric rehabilitation model also appear to make more use of the treatment resources available in the community than do others treated with more traditional kinds of therapy (Anthony, 1980). This method is extremely useful in dealing with the handicapping aspects of schizophrenia. It is specifically designed to teach patients the social and other skills needed to

be successful in the chosen environment.

A case example should serve to illustrate the use of each of these methods in treatment of chronic schizophrenia. Mr. E.R. had been hospitalized for the past seven years on his third admission, precipitated by extreme psychotic symptoms and threatened violence toward his mother, with whom he lived. He was 33 years old and living in a ward in the state hospital. While he was no longer in danger of being violent, he was still suffering from a variety of perceptual disturbances, primarily body and sensory perceptual distortions. For each of these perceptual experiences he had developed a delusional explanation. For example, he was bothered by small motors such as that in the water cooler on the ward, as he thought that it was sending him messages. He also believed that there were insects which could interpret his thoughts through their antennae. He suffered from a cyclic mood disturbance also, and became depressed and despondent about every three weeks. He was very responsible about attending treatment programs and working at his job. He was at first unable to carry on a conversation for more than five minutes without lapsing into delusions. He had an extreme susceptibility to stress and would have increased perceptual disturbances when any stressful event occurred. Mr. E.R. had relatively good social skills, with the exception of talking about his delusions with anyone who would listen. He was bright and had a working knowledge of electronics principles, but had an exaggerated sense of his own importance, believing that he was an alien from another planet, an important person in the CIA, and had a classified record about his activities in Russia.

In addition to his medical program which included vitamin therapy and psychotropic medications, Mr. E.R. was involved in a variety of psychosocial treatments. Behavioral medicine techniques were used to establish and reinforce a healthful lifestyle, including proper nutrition behavior, exercise, and stress management, using relaxation training and cognitive measures. Mr. E.R. was also able to self-monitor his symptoms using the Experiential World Inventory special checklist (Bisbee and Mullaly, 1980) and his behavior was monitored using a behavioral checklist filled out by ward staff. From these latter two measures, we were able to map out his mood and symptom cycles. Behavioral management techniques were used to decrease the frequency of his delusional discussions. Specifically, Mr. E.R. wore a rubber band on his wrist and snapped his wrist whenever he began to talk in a delusional manner. The treatment staff also used social disapproval to decrease his delusional talk and approval to increase conversations about appropriate topics. He was able, at the time of release, to carry on a 20-minute conversation without reverting to delusional subject matter and was pleased to have made this improvement. Mr. E.R. was also part of a ward levels system which reinforced increased responsible behavior in a variety of areas by granting of additional privileges.

Psychotherapy was used to counsel Mr. E.R. about his use of his knowledge of electronics. We were fortunate enough to have available a therapist who was also very knowledgeable in this area, and were thus able to evaluate his actual knowledge and help him differentiate it from delusional expansion. We also used this method to provide Mr. E.R. an alternative explanation for his perceptual disturbances. He was told that these were an aspect of his illness, the result of chemical imbalances in the brain, a fact which he found much more comforting than the prospect of having motors giving him signals.

Mr. E.R. was also involved in patient education classes throughout his stay in our program. Through these classes, he learned about his role as a patient, the need for a healthful lifestyle, and other topics pertinent to his full understanding of his illness and treatment. He is now placed in a foster home in the community, and is involved in the rehabilitation process in which he plans to pursue vocational training in the area of electronics and become gainfully employed in this field.

In conclusion, psychosocial treatments — behavioral medicine, patient and family education, psychotherapy, and psychiatric rehabilitation — have much to offer the schizophrenic patient in conjunction with a quality medical program. They can augment and

support biochemical treatment as part of a comprehensive treatment program designed to come at the illness and handicap of schizophrenia from all directions.

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