

# From Noncompliance to Collaboration in the Treatment of Schizophrenia

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*Although effective treatment for schizophrenia is available, patients' compliance with treatment prescriptions is notoriously poor. The authors reframe compliance as a collaborative relationship in which both the patient and practitioner assume responsibility for producing a treatment regimen to which the patient can adhere. Barriers that prevent a partnership in treatment may be related primarily to treatment techniques, to characteristics of the patient and his family, to the patient-clinician relationship, or to the treatment delivery system. A comprehensive approach to addressing these sources of noncompliance includes specific skills that can be acquired by the patient, family members, and the practitioner.*

Despite accumulated evidence that available treatments for schizophrenia are effective (1-8), adherence to treatment regimens by patients is notoriously poor. The reported incidence of noncompliance with antipsychotic medication ranges from 11 to 80 percent (3,9-16). Forty-eight percent of patients are estimated to

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be noncompliant within the first year of treatment, and 74 percent within the first two years (17).

Medication compliance is unsatisfactory even on inpatient units (18). Van Putten and his colleagues (19) found that inpatients' compliance with antipsychotic medication is associated with the subjective effect of the drug. Sixty-two percent of schizophrenic inpatients who became dysphoric with medication ultimately refused further drugs, while only 11 percent of medicated patients who were syntonic failed to comply.

Adherence to specific treatment plans can be closely monitored in inpatient settings, and patients can be prompted to take medication if they fail to do so on their own. In addition, the close observation made possible by the high staff-to-patient ratios in these settings can help overcome noncompliance among patients who have a negative subjective response to antipsychotic drugs (20). Even though compliance is obviously facilitated by inpatient treatment, as many as 35 percent of inpatients sign themselves out of the hospital against medical advice or abscond from the hospital without leave (21).

For schizophrenic patients who are compliant while in the hospital, continuing benefit from antipsychotic drugs after discharge depends on compliance with community care and maintenance pharmacotherapy. However, in studies of psychiatric patients referred for outpatient services, only 34 to 46 percent actually completed the referral (6,22-24). Moreover, between 25 and 94 percent of patients who attend outpatient medication clinics do not take their medication as prescribed (25,26).

While data on the compliance of schizophrenic patients with psychosocial programs are limited, poor adherence may be inferred from dropout rates of 18 to 40 percent found in investigations of psychosocial interventions (27-34). Similarly, 29 percent of the patients in a study of a vocational day treatment program refused to join the program, while another 32 percent dropped out before half of the treatment sessions were completed (35).

Most accounts in the literature portray the patient's adherence to treatment in terms of compliance by the patient rather than collaboration between the patient and the clinician. This representation perpetuates the misconceptions that adherence derives primarily from the patient's motivation or resistance and that the clinician is powerless to affect the patient's behavior. Rather than viewing the schizophrenic patient as a passive receptacle for treatment, the therapist can mobilize the patient to cooperate in a partnership in treatment and can share with the patient responsibility for adherence to treatment prescriptions.

To establish and maintain a working alliance with the patient, the clinician needs a variety of strategies for overcoming roadblocks to collaboration that may originate in the treatment techniques used, the patient, the patient's family, the relationship between the clinician and the patient, or the treatment delivery system. Most explanations of noncompliance have focused on one or another of these domains (36,37). In this paper, we present a comprehensive, multidimensional framework that addresses all of these areas. Table 1 gives an overview of barriers to treatment collaboration

Table 1  
Barriers to patient collaboration in treatment and corrective measures

Barrier	Corrective measure
Treatment techniques	
Side effects	Use low-dose medication for maintenance. Prescribe medication to treat side effects. Titrate medication to minimum optimal dose. Reframe side effects as signs that the drug is working. Teach patient to keep a diary for tracking side effects. Educate patient about side effects and their management.
Complex treatment regimen	Ask patient to repeat back written and spoken instructions. Use simple words. Increase complexity of treatment in stepwise increments. Enlist patient participation in creating the treatment regimen. Use stimulus control to remind patient to take medication. Teach family members or caregivers to mediate in reinforcing compliance.
Long-term treatment	Institute treatment holidays. Administer medication intermittently, when symptoms of relapse occur.
Patient characteristics	
Cognitive disorganization	Minimize complexity of treatment regimen. Use telephone calls, compartmentalized pill boxes, and other stimuli to remind patient to take medication. Use cognitive rehabilitation techniques to improve patient thought disorder. Teach self-monitoring techniques to patient. Enlist caregivers' assistance in monitoring patient compliance.
Ignorance about illness	Teach patient about the biomedical nature of mental illness and its relation to stress. Use cognitive restructuring techniques to enhance learning. Offer destigmatizing analogies to other diseases.
Fatalistic attitude	Teach patient about the long-term normalizing outcomes of illness. Use cognitive restructuring techniques to enhance change in attitude. Give patient increased control in goal setting, administration of medication, and psychosocial treatments.
Secondary gains from psychosis	Use paradoxical interventions such as contingency contracting. Build therapeutic relationship as a lever to change. Help the patient sample reinforcers of behaviors that compete with psychosis. Enlist significant others as mediators.
Family characteristics	
Ignorance about benefits of treatment	Encourage family participation in psychoeducation and support groups.
Unrealistic expectations	Encourage family to participate in psychoeducation, survival skills training, and training in communication and problem solving. If other strategies fail, suggest a constructive separation of patient from the family.
Indifference	Promote family education to galvanize social support for patient. Identify reinforcers, such as decreased family chaos, to motivate family involvement. Teach patient to improve relationship with family.
Clinician-patient relationship	
Clinician believes patient has poor prognosis	Learn about practical modes of rehabilitation. Consult professional role models. Ask the patient and family members about their aspirations. Obtain training in counseling skills.
Clinician has aversive interpersonal style	
Clinician ignores patient's dissatisfaction with treatment	Learn about the impact of side effects and how to manage them.
Treatment delivery system	
Aversive clinic setting	Improve clinic decor and ambience. Offer coffee or other refreshments. Encourage clerical staff to be pleasant.
Long waits at clinic	Maintain realistic appointment schedule. Remind patient about appointments.
Lack of coordination in treatment delivery system	Use case managers and continuous treatment teams to coordinate services.

and suggested corrective measures. The list is intended to alert practitioners to challenges to treatment collaboration and to encourage innovative solutions to these problems.

### Promoting treatment collaboration

Strategies for promoting treatment collaboration draw on the clinician's teaching skills and ability to be cooperative. Clinicians can model a cooperative stance by being receptive to the patient's comments. In addition, clinicians can provide realistic and comprehensible information about the patient's illness and treatment options, negotiate treatment contracts with the patient, and provide the patient with explicit feedback about treatment progress, drug side effects, and attainment of goals.

The clinician can work with the patient to elicit cooperation in monitoring participation in pharmacological or psychosocial treatment. Patients with chronic illnesses such as diabetes and hypertension are expected to monitor their physical symptoms and report the results to the physician. Similarly, schizophrenic patients can learn to monitor their daily use of antipsychotic drugs and to report side effects or early warning signs of relapse to their prescribing psychiatrist. Special educational technology that effectively teaches such self-monitoring skills is now available (38).

Because attendance at psychosocial programs can readily be verified, monitoring compliance with this aspect of treatment appears to be simpler than monitoring compliance with pharmacotherapy. Beyond verifying attendance, clinicians and patients can check the effectiveness of psychosocial treatment by monitoring the patient's attainment of behavioral goals and completion of assignments that are carried out at home or in the community (39).

### Barriers related to treatment techniques

**Side effects.** Patients who suffer from side effects of antipsychotic medication such as dry mouth, dystonia, akinesia, akathisia, dysphoria,

sedation, blurred vision, or tardive dyskinesia may be less likely to adhere to drug administration schedules (15,40-44). Psychosocial treatments also have side effects that may influence patients' compliance. Prolonged and intensive rehabilitation sessions can lead to overstimulation, which may exacerbate positive symptoms. Chronic patients with negative symptoms may be pushed to engage in social and vocational activities that are beyond their capacity to perform (45). When these patients fail to meet therapeutic expectations, the treatment program may become aversive to them and they may further withdraw from their surroundings.

Adherence to both pharmacological and psychosocial treatment may be enhanced by titrating doses of the treatment. Medication side effects can be minimized by reducing doses until the side effects dissipate, by using anticholinergic agents to treat extrapyramidal symptoms, or by establishing a low-dose maintenance regimen (46-48). In addition, depot medication can be reliably administered at biweekly or monthly intervals at doses low enough to reduce side effects but high enough to produce sustained protection against relapse (49).

Approximately 20 percent of schizophrenic patients have limited or no therapeutic response to antipsychotic drugs. These patients may have a rational reason for noncompliance with pharmacological treatment. Augmentation strategies, such as adjunctive use of antimanic drugs with the primary antipsychotic agent, and use of new, atypical antipsychotics may help to address this source of noncompliance.

Behavioral strategies can ameliorate medication and psychosocial treatment side effects as well. Teaching patients about various forms of side effects and about ways to monitor the presence and level of side effects and prodromal or persisting symptoms can increase their sense of control, as well as put them in a better position to collaborate with the clinician at the next clinic visit. Brown and her colleagues (50) found that increased knowledge about side effects diminished the

subsequent impact of unpleasant medication effects. Schizophrenic patients can learn to keep a diary to track daily use of medication and presence of side effects (38).

### Complex treatment regimens.

Patients often respond to complicated treatment directions with noncompliance (51). Polydrug protocols, confusing psychosocial program schedules, and difficult-to-follow behavior therapy prescriptions all decrease the likelihood of treatment adherence. The complexity of a treatment program is compounded by the jargon clinicians often use in their directions to patients. Blackwell (37) noted that physicians learn 13,000 new words during their medical education that distance their communication from the everyday vernacular. To help reduce patients' confusion, clinicians should avoid using sound-alike words such as Librium and lithium or Thorazine and thioridazine (36).

**Long-term treatment.** Chronic psychiatric patients frequently find the indeterminable length of their treatment aversive because they must live indefinitely with the stigma of being treated for mental illness and with the associated feelings of hopelessness. Treatment holidays may circumvent this problem. Carpenter and Heinrichs (52) were able to sustain chronic schizophrenic patients in the community using targeted, intermittent administration of antipsychotic drugs. Prodromal symptoms of relapse were monitored, and when they surpassed a criterion level, drugs were temporarily readministered. When positive symptoms remitted, the medications were withdrawn. While strategies based on intermittent use of medication are associated with significantly greater risk of relapse, they may be useful for patients who would otherwise absolutely refuse continued treatment contact.

Some psychosocial programs include vacations that give patients a break from continuous treatment (53,54). Patients look forward to a reprieve from the pressures and regimentation of the rehabilitation program, and staff can use this time to assess patients' progress and evaluate and improve the program.

### Barriers related to patients' characteristics

Major blocks to adherence include patients' not understanding the symptoms of their disorder, the effect these symptoms have on their social life, or their need for treatment (23,27,48,55). McEvoy and associates (56) found that only 40 percent of a sample of chronic mentally ill patients demonstrated fair insight into their disease. In this sample, 98 percent accurately reported that they were taking medications, but only 47 percent believed they needed them and 56 percent said they would be able to discontinue the medications in the future.

Patients plagued by delusions and thought disorder may be unable to sort out the ramifications of serious diseases such as schizophrenia or bipolar disorder. Occasional asymptomatic periods may lead the patient to believe he is cured and no longer needs treatment (17). Ignorance may also result from intellectual impairments interacting with insufficient education about the illness and the patient's need for treatment.

**Cognitive disorganization.** Difficulty with a treatment regimen is magnified by the patient's cognitive disorganization. Even schizophrenic patients in remission have dysfunctions in information processing capacity. Instructions are more likely to be followed if they are written down, divided into small steps, and repeated back by the patient.

Stimulus control can be a useful tool for enhancing the patient's cognitive processing of treatment protocols. For example, a routine in which the patient sets the pill bottle on the nightstand and takes the medication before getting into bed can help increase compliance with the medication regimen. Patients may also use a compartmentalized pill box labeled with the medication schedule. Other strategies include use of a device that contacts the patient by telephone when it is time to complete a behavioral task and use of medication bottles with a light-emitting diode in the cap that illuminates according to a prearranged schedule (57,58). For more confused patients, a trusted and reli-

able third party—roommate, relative, or caregiver—can be enlisted to prompt the patient to take medication.

Carefully designed programs that educate patients about symptoms and treatment can give even naive or confused patients some understanding of their illness. However, cognitive rehabilitation techniques may be necessary to improve pa-

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tients' thought disorder before they begin the educational program (59).

Liberman and his colleagues (60) designed a technique to enhance attention in training conversation skills. By tightly sequencing social skill learning activities, such as modeling target behaviors, role playing the behaviors, and feedback about the role playing, attention to and mastery of targeted skills were shaped. This strategy has been effective in teaching autistic and mentally retarded persons a variety of self-care and communication skills. It may prove useful in helping thought disordered and distractible schizophrenic patients improve their collaboration in treatment.

**Fatalistic attitude.** Chronic mentally ill persons experience serious stigma (17). Some patients may deny their disease rather than admit that they are "schizophrenic." For others, acknowledging their mental illness may seem fatalistic or an admission of impotence in dealing with the problem. In whatever form these attitudes are experienced, patients who already have feelings of passivity and loss of control as a result of their disorder may express autonomy by not cooperating with treatment (15). Cognitive restructuring methods that challenge these

attitudes may be useful. For example, a patient can be asked to explore his opinion that medication only makes him "more crazy" by discussing this view with remitted, higher-functioning patients who have struggled with similar attitudes.

### *Secondary gains from psychosis.*

A subset of patients may actually experience psychosis as ego-syntonic and self-reinforcing. In a study by Van Putten and colleagues (61), patients who did not comply with treatment tended to have grandiose delusions that presented more positive images of themselves than reality provided. Clinicians can work with such patients to identify positive and negative consequences of delusions. For example, a schizophrenic patient who believes he can control the universe can be helped to see how these beliefs prevent him from making friends.

Patients can be exposed to the reinforcing consequences of more realistic beliefs about themselves by practicing newly learned conversation skills with a peer. These techniques have been associated with striking increases in and durability of rational conversation in patients with paranoid schizophrenia who have had grandiose or persecutory delusions for ten to 20 years (62,63).

### Barriers related to family characteristics

Almost two-thirds of chronic psychiatric patients living in the community are cared for by family members (64). Families have a great impact on both the course of the patient's disorder and on the patient's cooperation with treatment (65-67). Patients who receive emotional support from family members and friends are more likely to comply with treatment than patients who do not receive such support (17,35, 65,68). Sweeney and his colleagues (69) found that 80 percent of a sample of chronic mental patients who were accompanied to an outpatient appointment by family members followed up on treatment prescriptions, while only 55 percent of a sample of unaccompanied patients adhered to the treatment regimen.

Family-related barriers arise from three kinds of attitudes: overcon-

cern about the patient's treatment compliance in families that are excessively enmeshed in the patient's activities; anxiety and confusion in families that are overburdened by the patient's illness and that have unrealistic expectations about the patient's performance; and detachment in families that are indifferent or unconcerned about the patient's treatment. Patients in the first two situations often react with resentment and acting out behavior, while patients in the third situation are left without support or assistance in times of need.

Family members can be helped to cope with the patient's disorder through education about symptoms and about medications and their side effects, combined with continuing support from practitioners and self-help groups. Anderson and her colleagues (68) outlined a day-long psychoeducational program for relatives of schizophrenic patients. Experts in epidemiology, psychobiology, psychopharmacology, and genetics present facts about schizophrenia in clear, lay person's language, and family members learn "schizophrenia survival skills."

Lieberman, Falloon, and their colleagues (65,70-73) developed a similar educational program that is attended by the patient as well as the family. Patients share their experiences, and family members have the chance to develop better understanding of the patient's behavior. For example, a patient may explain the defensive function of negative symptoms: "It's embarrassing when I feel that other people can hear my thoughts. When this happens, I usually stay in my room."

Teaching problem-solving techniques to family members may also help overcome barriers to the patient's treatment adherence. In a program developed by Falloon and associates (65), family members, along with the patient, are trained in basic communication skills, which are used in identifying problems, brainstorming, evaluating possible solutions, and choosing a viable alternative. The family then plans and implements the solution for a prescribed length of time and meets at least once a week to monitor and

evaluate the outcome of their joint efforts.

These skills may help overly critical relatives work with the patient to develop appropriate expectations about his performance in social roles. Enhanced problem-solving skills may help the laissez-faire family interact constructively with the patient and help anxious, confused family members contain their distress and develop a practical approach to coping with their mentally ill relative. However, the problems of some families may be best resolved by helping the patient move to a more independent living situation in supported housing or another residential alternative.

### Barriers in the clinician-patient relationship

Patients who experience positive therapeutic relationships with their clinicians are more likely to adhere to treatment regimens (74). However, many practitioners experience treating severely mentally ill patients as frustrating, hopeless, and unrewarding (75-77). In a survey of 436 mental health professionals, Mirabi and his colleagues (78) found that 85 percent preferred not to treat chronic patients, and 68 percent believed that professionals as a whole did not receive adequate training to address the severity of these patients' disorders. Given the unremitting dysfunctional status of many chronic psychotic individuals and the expectation of little treatment gain, the practitioner can easily assume an adversarial or paternalistic relationship with the patient (79,80).

Many clinicians have difficulty collaborating with patients. In one study in North Carolina, only 58 percent of 106 psychiatrists routinely informed their patients about dosage levels of prescribed drugs, while only 50 percent discussed treatment alternatives and 33 percent warned patients about possible side effects of medications (81).

Educational and practicum experiences with severely mentally ill patients during professional or postgraduate training may help young clinicians understand and overcome barriers to adherence and to

promote more collaborative practice styles. A curriculum is available for training psychiatry residents, psychology graduate students, and other mental health and rehabilitation professionals in the principles of diagnosis, psychopharmacology, and psychosocial interventions in treating severely mentally ill patients (82,83).

Active consultation and training can improve mental health professionals' and paraprofessionals' knowledge, skills, and utilization of effective treatment approaches for chronic mentally ill patients (84). Other studies have shown that students rotating through high-quality psychiatric wards that implement state-of-the-art psychopharmacologic and behavioral interventions improve their overall attitudes toward chronic patients (85,86).

Many practitioners may be reluctant to trade paternalistic and authoritarian attitudes toward patient care. Clinicians can work toward a more cooperative stance through dialogue with patients and families about their experiences with medical and psychosocial regimens and their desire to manage their lives independently. Reality-based interactions with patients and families may do more than academic education to convince clinicians of the value of empowering mental health care consumers (87).

Clinicians can facilitate patients' cooperation with treatment by developing interpersonal skills that improve the quality of therapeutic relationships. Active listening, appropriate nonverbal communication, and empathy greatly enhance the interaction. Janis (88) found improved treatment compliance among patients whose therapist provided consistent positive feedback and gently elicited moderate levels of self-disclosure.

Practitioners who work with chronic mentally ill patients can increase their sense of gratification in their professional roles by setting realistic, modest, incremental goals. The satisfying and mutually rewarding therapeutic relationship that results from the clinician's effective use of communication skills and pharmacotherapeutic and psycho-

social treatment techniques can serve as the most powerful source of motivation for the patient's continued adherence to treatment programs.

### Barriers in the treatment delivery system

Several characteristics of the delivery of drug and psychosocial treatments in hospitals, clinics, and mental health centers may be perceived as aversive by patients, making them less likely to follow their treatment regimen when unsupervised. For example, pills are handed out in the conventional medication call in hospitals and residential treatment centers, but patients are given few opportunities to learn about indications for psychoactive drugs or side effects or to build positive attitudes toward pharmacotherapy. Passive reception of medications from a harried and preoccupied nurse hardly prepares or teaches patients to use medication autonomously after leaving supervised settings.

Patients who are subjected to long waits to see the therapist or psychiatrist at a clinic or mental health center may have poor adherence to the instructions they receive from their clinician (89-90). The unattractive institutional appearance of many clinics is a barrier to cooperation as well. These problems can be avoided if clinicians create schedules they can realistically expect to keep and if the physical appearance of the treatment setting is improved. Offering coffee or other refreshments at clinic visits may also improve the quality of the treatment experience (91). Simply paying attention to the systematic scheduling of outpatient clinic appointments and using phone calls or postcards to remind patients about their appointments can substantially increase the attendance rate (92).

Lieberman and Davis (93) designed a program to enrich the experiences of chronic schizophrenic patients attending a monthly medication clinic at a typical community mental health center. The clinic was organized as a social hour in a comfortably furnished room where patients and their relatives or caregivers were served a luncheon buffet

as music played in the background. The psychiatrist mingled with the patients like a host at a party, observing their mental status, interviewing them and their caregivers about symptoms and side effects, and noting the need for changes in prescriptions. The clinician renewed patients' prescriptions and discussed expectations for use of the medica-

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tion while patients ate lunch and socialized informally. Patients also had their urine tested for presence of neuroleptic medication using testing methods described by Forrest and associates (94,95). If test results indicated medication compliance, patients selected from among several rewards, including toiletries and other personal items.

A randomly assigned control group of schizophrenic patients who participated in a conventional medication maintenance program met individually with a psychiatrist for one 15-minute session each month. The psychiatrist inquired about side effects and reviewed therapeutic progress. Patients in both groups were followed for one year, and periodic assessments of attendance, compliance as measured by the urine test, social functioning, and attitudes towards medication were made.

Patients participating in the experimental group showed significantly better attendance, higher compliance levels, and more favorable attitudes toward medication than patients in the control group. The attendance rate at the monthly luncheons was 93 percent, com-

pared with a much lower rate for the conventional medication clinic. Differences in these measures of adherence were particularly marked toward the end of the one-year period, suggesting that the reinforcing aspects of the special program had a cumulative effect. Unfortunately, these differences did not extend to measures of social functioning.

A one-year follow-up revealed a remarkable reduction in use of inpatient facilities by the patients in the experimental program. Inpatient days were reduced from an average of 351 days in the year before the program to 79 days in the year after the program ended. Use of day hospital services by the treatment group also decreased. No reductions in utilization of inpatient or day hospital facilities were observed in the control group.

Another aspect of the mental health care delivery system that can undermine patients' commitment to the treatment program is frequent changes of the primary clinician or case manager (36). Such changes occur when student-clinicians move to other educational activities, when the rate of staff turnover is high, or when patients are discharged or transferred to another service unit. Promoting continuity of care that includes enduring patient-therapist partnerships contributes to a stable collaborative relationship and improvement in treatment adherence. Personalized continuity in relationships can be provided in treatment programs that have no-close policies, that follow the patient through his use of inpatient and outpatient services (96-99), and that deliver services through a case management team that shares the responsibility for long-term maintenance of the therapeutic alliance.

### Empowering the patient

Clinicians can circumvent many of the barriers to treatment adherence by actively engaging patients in the management of their illness. The vast majority of schizophrenic patients are capable of learning a wide variety of skills and information if instruction incorporates insights gained from research about the learning abilities of cognitively im-

**Table 2**  
Skills and goals of training in medication and symptom management for chronic schizophrenic patients

Skill	Goal
Medication management	
Obtaining information about anti-psychotic medication	To understand how antipsychotic drugs work, why maintenance drug therapy is used, and what benefits result from taking medication
Self-administering medication and evaluating the effect of medication	To learn appropriate procedures for taking medication and evaluating responses to medication daily
Identifying side effects of medication	To learn the side effects that sometimes result from taking medication and what can be done to alleviate these problems
Negotiating medication issues with health care providers	To practice ways of getting assistance when problems occur with medication—for example, how to call the hospital or doctor and how to report symptoms and progress
Learning about long-acting, injectible medication	To understand the effects of this type of drug administration
Symptom management	
Identifying warning signs of relapse	To learn how to identify and monitor personal warning signs with assistance from others
Managing warning signs	To learn specific techniques for managing warning signs and to develop an emergency plan
Coping with persistent symptoms	To learn how to recognize persistent symptoms and to use techniques for coping with them
Avoiding alcohol and street drugs	To learn the adverse effects of alcohol and illicit drugs and the benefits of avoiding them

paired persons (100,101). A series of modules for training social and independent living skills have been implemented in comprehensive treatment programs for patients with chronic schizophrenia (5,102,103).

Two of the modules taught in these programs—medication management and symptom management—empower patients to take a greater role in their own treatment. The elements of these skills are shown in Table 2. Patients can make a valuable contribution to the therapeutic alliance if they are able to identify the benefits of antipsychotic medication, to cope with side effects, to negotiate with psychiatrists on medication issues, and to seek early intervention when warning signs of relapse arise. Individuals who learn these skills experience improvement in their sense of self-efficacy and in the quality of their treatment relationships with professionals (5,38,102–104).

The patient's motivation for adherence to treatment may be enhanced if family members or other persons in the patient's social support network participate in learning about medication and symptom management. If such education is made available in both inpatient and outpatient settings, a functional bridge can be built that improves the continuity of treatment and encourages patients to collaborate in treatment.

### Conclusions

Mental health practitioners who view the noncompliant patient as guilty of not adhering to treatment may be better able to promote cooperation by changing their attitudes and approaches regarding the relationship of patient and clinician. To promote adherence to treatment, the clinician needs to assume some responsibility for improving collaboration with the patient. An array

of strategies are available to address the barriers arising from treatment techniques, patients' characteristics, characteristics of family members and friends, the patient-practitioner relationship, and lapses and discontinuities in the service delivery system. Through application of these strategies and creation of patient-practitioner partnerships, clinicians can help patients and members of their support network become more responsible and active consumers of services.

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