

# Compliance and the Rehabilitation Alliance

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Expectations for the treatment of schizophrenia have historically been modest, with emphasis on eliminating positive symptoms and keeping patients out of the hospital. Noncompliance with traditional antipsychotic agents, which have limited efficacy and are associated with numerous adverse side effects, has contributed to these low expectations. The atypical antipsychotics can improve compliance because of their better safety, efficacy, and tolerability and thus help raise treatment expectations from mere removal of symptoms to fuller rehabilitation. This rehabilitation can even include the reintegration of patients with schizophrenia into the community. Compliance with any drug regimen, however, does not in itself guarantee the return to a normal life for patients with schizophrenia. Instead, compliance must occur within a rehabilitation alliance—a supportive network that includes the patient, the treating physician, family members and friends, and other caregivers.

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**R**eintegration for persons with serious and persistent mental illness is a relatively new concept for many practitioners. Historically, the treatment of psychosis has consisted of maintenance—keeping patients symptom free and out of the hospital. The low expectations often found within the psychiatric community for persons with severe, long-term schizophrenia have reflected the dim hopes that society as a whole has had for reintegrating these patients into the larger community.

Multiple factors contributed to these low expectations. The disciplines of psychiatry and rehabilitation, although both committed to the well-being of patients with schizophrenia and other mental illnesses, have often held differing goals of treatment and ideals of recovery. The 2 disciplines thus have been at odds at least as often as they have combined their resources.<sup>1</sup> Often, suspicion by members of each discipline about the practices of the other has furthered this disconnect. Patients receiving pharmacologic treatment for schizophrenia sometimes have received inadequate social and vocational rehabilitation, whereas patients receiving chiefly rehabilitative therapy have sometimes not received sufficient drug treatment.<sup>1</sup>

Within psychiatry itself, the limitations of the treatment capabilities of traditional antipsychotic medications helped to narrow the outcome possibilities for patients with schizophrenia further. Although these medications show efficacy

for the positive symptoms of schizophrenia, they often do not lead to full remission of these symptoms.<sup>2</sup> In addition, the traditional antipsychotics show poor efficacy for negative symptoms of schizophrenia and often worsen them.<sup>3</sup> Moreover, these medications are not associated with improvement of the cognitive impairment found with schizophrenia and may even compound this impairment.<sup>4</sup> Finally, traditional antipsychotics can produce a variety of adverse and often debilitating side effects, including tardive dyskinesia and extrapyramidal side effects (EPS).<sup>5</sup> These side effects can worsen the overall quality of life of patients with schizophrenia when traditional antipsychotics are given at therapeutic doses; consequently, EPS also deter therapeutic dosing and therefore hinder adequate treatment of positive symptoms.

The combination of inefficacy and adverse side effects associated with traditional antipsychotic medications hinders patient compliance with treatment regimens. Conversely, drugs that provide greater efficacy and produce fewer side effects should promote better compliance. Although no single antipsychotic agent shows superior efficacy for the treatment of the symptoms of schizophrenia,<sup>6</sup> the newer, atypical antipsychotics as a class show equivalent efficacy but a more favorable side effect profile compared with the traditional drugs.

But does compliance with a medication regimen ensure meeting the big-picture goals of patients with schizophrenia—the goals of returning to and becoming vital, productive, and increasingly independent members of the community? The maintenance model of treatment saw the elimination of positive symptoms as the goal of treatment. More recently, however, professionals in the fields of psychiatry and rehabilitation have increasingly seen their treatment approaches as complementary rather than conflicting. Newer models of treatment for patients with

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schizophrenia have begun to stress the need for combining the efforts of physicians and rehabilitation therapists, as well as the family, friends, and other caregivers of patients, in what have been dubbed *rehabilitation alliances*.<sup>7</sup> The pooling and coordination of treatment resources combined with advances in pharmacologic treatment of schizophrenia have begun to help patients realize these big-picture goals to a greater extent than in the past, providing real hope to a group of patients who historically have had little hope.

Thus, drug compliance, although important itself, should be but a single facet within broad rehabilitation alliances that have the goal of not only eliminating positive symptoms of schizophrenia but also reintroducing patients with schizophrenia into the larger society. Strategies for and pitfalls associated with compliance to antipsychotic medications, as well as specific benefits that the atypical antipsychotics may have in improving compliance, are to be considered within the context of the goals of broader treatment programs.

## THE REHABILITATION ALLIANCE

### Background and Definition

The physician-patient relationship has traditionally been seen as a key to success in the treatment of illness and an important factor in successful rehabilitation. This therapeutic alliance, however, has often been insufficient in meeting the needs of persons with severe and persistent mental illness. Although severity of illness and lack of response to adequate therapeutic regimens limit recovery, the success of schizophrenia treatment is often hindered by nonproductive interactions between patients, physicians, and other caregivers within the mental health system.

Factors adversely affecting the therapeutic alliance between patients and medical care providers are numerous. Brief and impersonal encounters eliciting limited diagnostic information, a focus on psychopathology and symptom management during such encounters, narrow vision of outcome possibilities, lack of community support and opportunity, and isolation among service providers all can combine to deflect attention from the life goals and hopes of patients and stifle the creativity, courage, persistence, and compassion that are essential ingredients for building and maintaining alliances.

Hence the *rehabilitation alliance* refers to a network of salutary relationships that needs to develop over time to support persons with disabilities in their pursuit of recovery. Such an alliance involves mutual respect, trust, and seriousness of purpose among not only patients, clinicians, and practitioners but also all others involved in patients' recovery from schizophrenia, including family and friends and, in a more general way, employers, landlords, and neighbors.<sup>7</sup>

### Goals

The rehabilitation alliance strives to stabilize, restore, and enhance the capacity of persons with schizophrenia to function consistently, regain control of their lives, and become valued and contributing members of the community.<sup>7</sup> The alliance does so by first acknowledging patients as human, by supporting the hopes and goals of individual patients while not denying their real pain and sorrow. Patients are encouraged to take risks that lead to greater independence, but are asked to do so only one step at a time. In like manner, physicians and other medical professionals are challenged to see beyond their roles as caregivers and interact with patients as fellow human beings, even during times when psychotic symptoms make this task difficult.<sup>7</sup>

The attainment of these goals demands courage and persistence on the part of all individuals involved in the alliance and requires that honest communication, negotiation, and confrontation occur among members.<sup>7</sup> Specifically, the coordinated appraisal and planning that facilitate recovery presumes free communication between various caregivers and patients and among the caregivers themselves.<sup>8</sup> Recovery from schizophrenia and reintegration of patients into the community is not only a long-term process but a recursive one. Thus, members of the alliance must recognize that improvements may be followed by relapses, but that these relapses do not necessarily denote treatment failure.

We have effectively applied the principles outlined above at a large inner-city medical center.<sup>9</sup> Our alliance typically consists of the patient, the psychiatrist, and a rehabilitation staff member or other individual. The success of the alliance, however, is ensured by allowing the goals of the patient to direct the specific components that make up the ensuing treatment program. Such a patient-directed approach reflects the observation that individuals with mental disorders increasingly prefer to view themselves as active consumers of medical services rather than passive recipients of care.<sup>3</sup>

### Drug Treatment and the Goals of the Rehabilitation Alliance

When and how does the use of psychotropic drugs fit into this broad, long-range plan for treating patients with schizophrenia? First, pharmacotherapy is used to reduce and hopefully eliminate primary psychotic symptoms. The reversal of these primary symptoms is a necessary preliminary for intervening on other levels.<sup>1</sup>

Beyond initial treatment of primary psychotic symptoms, medication can be—and should be presented to patients as—a catalyst in helping patients meeting life goals such as securing housing and employment and developing friendships. Again, however, patients meet these goals within the context of interpersonal relationships that form the rehabilitation alliance. For example, psychiatrists can

introduce patients to peers further along the recovery continuum who serve as role models for what can be achieved through adherence to treatment. When patients understand drug treatment as a means for achieving life goals, they will be less likely to view psychiatric interventions such as medication adjustments as setbacks or failures.

### COMPLIANCE AND THE REHABILITATION ALLIANCE

Whatever adverse side effects are associated with antipsychotic drugs, and wherever antipsychotic drugs fit into the larger treatment plan, patients receive no benefit from these medications if they refuse to take them. Compliance with pharmacotherapy, then, is vital to the success of treatment regimens.

#### Noncompliance and Treatment Response

Unfortunately, noncompliance with antipsychotic medication is widespread. Thirty percent to 60% of patients who are discharged from the hospital on treatment with traditional antipsychotic medications do not show up for their first outpatient appointment. In addition, 50% of patients are noncompliant with traditional antipsychotics 1 year after being discharged.<sup>2</sup>

Patients are noncompliant with their medications for several reasons. As mentioned above, lack of efficacy and presence of adverse side effects lead many patients to stop taking their medications. Indeed, the traditional antipsychotics have a narrow window between inadequate efficacy and intolerable side effects.<sup>10</sup> In particular, dystonic reactions can be frightening to patients and may lead to conditioned avoidance responses: patients may remember dystonia as an allergic reaction that is to be avoided. Patients also may stop treatment with traditional antipsychotics because of the feelings of being out of touch or dissociated with their surroundings triggered by medication and because of the social stigma attached to the appearance of being a psychiatric patient, an appearance exacerbated by EPS. In addition, the traditional antipsychotics can produce elevations in prolactin levels that in turn can lead to side effects such as amenorrhea in women and erectile impotence and loss of libido in men.<sup>11</sup> Furthermore, although anticholinergic medications can be used to reduce EPS, they are associated with side effects of their own and also with cognitive deficits and exacerbation of positive symptoms, all of which can cause patients to stop taking medications.<sup>11</sup> Finally, some patients simply deny that they are ill and refuse to take their medications.

#### Other Factors That Hinder Treatment Response

When a patient relapses, physicians too often assume that noncompliance is the sole culprit. Relapse does not necessarily mean noncompliance. In fact, of all cases of relapse that occur within 1 year after patients are dis-

charged from the hospital, 40% are attributable to non-compliance, whereas 60% are due to loss of medication efficacy and other factors.<sup>2</sup> Additionally, noncompliance should not be considered in a vacuum, but must be understood in relation to inefficacy of medications as well as other factors, such as adverse medication side effects and comorbid substance abuse. Moreover, noncompliance and loss of efficacy seem to have a combined detrimental effect on relapse greater than either of the factors has alone.<sup>2</sup> Thus, physicians should consider the efficacy of the medication used in treating a particular patient as well as whether or not the patient is taking the medication. Cognitive impairment is another significant hindrance for rehabilitation. The cause of cognitive impairments is still unclear, and it has long been debated in the literature whether they are due to schizophrenia itself or are compounded by the effects of the traditional antipsychotics. One review found that it is probably a combination of both.<sup>4</sup>

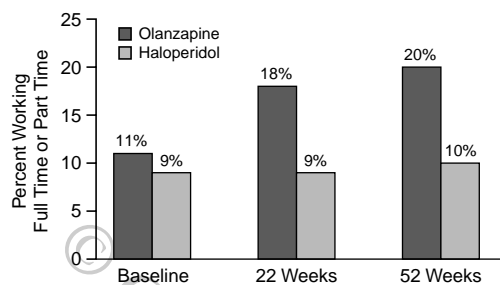
Physicians must also determine if undermedication and/or substance abuse has contributed to relapse in a given case. The risk of adverse effects that accompanies the use of traditional antipsychotic agents often prevents patients from receiving therapeutic doses.<sup>12</sup> In addition, although substance abuse contributes both to noncompliance and to worsening of positive symptoms, it often remains undiagnosed in patients with schizophrenia. Physicians should therefore consider the relative contributions of inadequate dosing, adverse effects, substance abuse, and other factors<sup>13</sup> when assessing medication non-compliance.

### IMPROVING COMPLIANCE WITHIN THE REHABILITATION ALLIANCE

An essential component of successful pharmacotherapy within the rehabilitation alliance is choosing efficacious antipsychotic medications that patients will keep taking. Depot injections of traditional antipsychotics can provide consistent treatment for patients who otherwise might refuse to swallow pills. As noted previously, though, therapeutic doses of traditional antipsychotics can lead to adverse side effects that threaten compliance and diminish the overall quality of life of patients with schizophrenia. Although lower doses of these agents produce fewer adverse effects, they are also associated with decreased efficacy.

The atypical antipsychotics show greater efficacy and have a much lower risk for adverse effects such as tardive dyskinesia and EPS than do the traditional agents.<sup>5</sup> These advantages over the traditional medications can lead to greater compliance and greater reduction of psychotic symptoms. More importantly, such improvements thus help patients meet their larger treatment goals. For example, patients taking the atypical antipsychotic olanzapine were found to be twice as likely to be working part time or full time 1 year after beginning treatment as were

**Figure 1. Employment Status of Patients After 1 Year of Treatment With Olanzapine or Haloperidol<sup>a</sup>**



<sup>a</sup>Data from reference 14.

patients taking the traditional antipsychotic haloperidol (Figure 1).<sup>14</sup> With the advent of the atypical antipsychotics and increased familiarity with the principles of rehabilitation, we can approach the road to recovery with the old adage of “Ready, SET (safety, efficacy, and tolerability), Go” for reintegration.

The better side effect profile that atypicals provide does not guarantee, however, that the medications will be taken, hence the need for an integrated approach for persons with serious and persistent mental illness that stresses supportive relationships among all members of the rehabilitation alliance. Compliance therapy, one such approach that incorporates motivational interviewing and cognitive approaches to psychotic symptoms, helped a group of patients with psychosis in Great Britain improve their social abilities and functioning within the community.<sup>15</sup> Furthermore, even regular use of atypical antipsychotics is not problem free: these medications have side effects of their own that must be addressed. Weight gain, for example, can occur with atypical antipsychotics and thus increase the need for nutritional interventions for patients with schizophrenia. Sedation as well as anticholinergic and sexual side effects are also associated with the use of atypical agents.

The involvement of family members in the alliance is especially important. Although the families of patients with schizophrenia have sometimes been seen as barriers to recovery, they should be potent allies in working toward rehabilitation and can actually help reduce noncompliance. Specifically, families should be offered a psychosocial intervention that includes education, problem solving, and crisis intervention (Table 1).<sup>6</sup>

Physicians can also work to create a nonconfrontational atmosphere that encourages compliance. For instance, physicians should strive to maintain a supportive tone in assessing compliance in patients, especially those who deny their illness. Instead of focusing on the illness itself, interview questions should target symptoms, especially the ways that symptoms affect task-related or daily life activities. Also, instead of asking patients threatening questions about delusions or voices, physicians can often learn

**Table 1. Compliance Tips for Psychoeducation Sessions With Families of Patients With Schizophrenia**

Ongoing contact with involved families is essential
Do not use confidentiality as an excuse to avoid making contact with the family
Do not oversell medication as a cure
Family should think of noncompliance as expectable and understandable (just as with other chronic diseases)
Listen carefully for concerns about extrapyramidal symptoms; visible extrapyramidal symptoms often erode support of medication
Family should avoid confrontations over medications—these can be dangerous
Find out if any family members are opposed to medication and try to elicit their support
Find out who influences the patient the most; have that person participate
Family should avoid saying anything that could be experienced as humiliating
Families can be part of the solution, not the problem

about symptoms by asking how patients are doing at work or in their rehabilitation programs. Finally, physicians should take into account the distress that patients can feel at the prospect of having to take medications indefinitely, and they should be understanding and forgiving rather than harshly judgmental when a patient accidentally misses an occasional dose of a medication. Within such a supportive treatment alliance, patients will be able to view medication not as an end in itself but as a means to meeting specific recovery goals.

## CONCLUSION

Hope—real hope—is the driving force behind our attempts to bridge the gap between the psychiatric world and the rehabilitation world and thus provide the maximum opportunities for patients with serious, long-term mental illness. Truly effective pharmacotherapy, in which patients faithfully comply with drug treatments that indeed lead to recovery, occurs when drug treatment is not seen as an end in itself, but instead is part of a broader program that adopts the life goals of patients as its goals. Such programs improve the likelihood that patients will comply with medication regimens. The programs then provide a supportive framework for helping the improved patients begin to achieve some of their long-term treatment goals.

*Drug names:* haloperidol (Haldol and others), olanzapine (Zyprexa).

*Disclosure of off-label usage:* The authors of this article have determined that, to the best of their knowledge, no investigational information about pharmaceutical agents has been presented herein that is outside Food and Drug Administration–approved labeling.

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