Enhancing Patient Outcomes: Treatment Adherence

Ellen Frank, Ph.D.

Barriers to patient adherence to antidepressant therapy include lack of knowledge in several important areas, including the nature of depression, the nature of treatments and how they can be expected to work, and the efficacy of pretreatment education. Other obstacles include unpleasant side effects of medications and negative attitudes and beliefs about medication on the part of patients and their families and treating physicians. Such barriers can be surmounted by approaches based on principles of good medical management, including: use of a multidisciplinary treatment team; education of patients and their families regarding the nature of depression and its treatments; the formation of an alliance among clinicians, patients, and family members; and the establishing of a clinic atmosphere that fosters such an alliance. Strategies to promote adherence should also address issues in practitioner disposition and training and barriers that arise as a result of the direct effects of depressive illness on the patient. In addition, such strategies must include measures appropriate to the different stages of depression treatment, including increased frequency of contact and intensity of support during acute treatment, regular monitoring during ongoing treatment, and the establishment of long-term relationships with those patients who have a history suggesting vulnerability to relapse.

(J Clin Psychiatry 1997;58[suppl 1]:11-14)

A dherence to antidepressant treatment is necessary for positive patient outcome; it is critical both to identifying an effective treatment and to maintaining the effect of the treatment. Numerous barriers to treatment adherence exist, with most being related to deficits in knowledge on the part of both clinicians and patients regarding the nature of depression and its treatment. Treatment adherence and overall clinical outcome can be improved by creation of an alliance among health care workers, patients, and patients' families and by implementation of programs designed to overcome barriers specific to different stages of therapy.

BARRIERS TO TREATMENT ADHERENCE

The importance of treatment adherence in acute treatment for depression is fairly obvious; without compliance, it is difficult, if not impossible, to determine whether the antidepressant treatment is effective in the individual patient. The importance of adherence to therapy in prevention of depression recurrence has been demonstrated in the 3-year outcomes in the Pittsburgh Study of Maintenance Therapies in Recurrent Depression.¹ In this study, patients who received active pharmacologic therapy (imipramine) were much more likely to remain recurrence-free after 3 years (Figure 1). Analysis of factors associated with recurrence among the patients receiving pharmacotherapy showed that noncompliance with the regimen was the sole factor significantly predictive of recurrence.²

In our experience, lack of knowledge regarding the nature of both depression and its treatment is a major contributor to noncompliance with treatment regimens. A fuller understanding of the nature of the illness on the part of the patient, the patient's family members or other social support system, and the physician serves to clarify the rationale for prescribed regimens and establish the basis of a support system in encouraging compliance.³ Part of this education must concern the nature of treatments, whether pharmacologic or psychotherapeutic or both, and how the treatments can be expected to work. Currently, deriving optimal results from existing educational programs is hampered by the absence of information about the comparative efficacies of pretreatment education modules.

Lack of knowledge regarding the nature of depression and its treatment can contribute to poor compliance in its own right, i.e., for patients and physicians who lack the education or skills required for appropriate management

From the Departments of Psychiatry and Psychology, University of Pittsburgh School of Medicine, and Western Psychiatric Institute and Clinic, Pittsburgh, Pennsylvania. Supported by an unrestricted educational grant from the Roerig Division of the U.S. Pharmaceuticals Group, Pfizer Inc.

Roerig Division of the U.S. Pharmaceuticals Group, Pfizer Inc. Presented at the symposium "Management of Depression: A Successful Continuum of Care" of the American Psychiatric Association, May 8, 1996, New York, New York.

Reprint requests to: Ellen Frank, Ph.D., Department of Psychiatry, University of Pittsburgh School of Medicine, and Western Psychiatric Institute and Clinic, 3811 O'Hara Street, Pittsburgh, PA 15213.



Figure 1. Three-Year Outcomes for Maintenance Therapies in Recurrent Depression*

*Reprinted from reference 1, with permission. Patients responding to initial antidepressant treatment were assigned to one of five treatment groups for maintenance therapy: medication clinic plus imipramine; interpersonal psychotherapy-maintenance form (IPT-M) plus imipramine; IPT-M alone; IPT-M plus placebo; and medication clinic plus placebo. The figure shows cumulative proportion of patients with no recurrence of depression over 3 years of maintenance treatment.

of this disease. However, we would argue that attitudes toward medicating on the part of patients, families, and physicians also contribute to reduced compliance. To a large degree, well-designed educational programs will address attitudinal barriers to taking and adhering to medication regimens by providing information concerning the nature of disease and its treatment.

Finally, the side effects of medication are clearly a barrier to adherence.⁴ Side effects in this regard, however, can be dramatically minimized through both patient and physician education. On one hand, management of actual side effects often is suboptimal, with few clear standards of practice at present. In addition, not enough is done in the way of educating patients with regard to the distinction between "nuisance" side effects (e.g., dry mouth, mild nausea) and potentially dangerous toxic reactions (e.g., heart block, serotonin syndrome) or in establishing a cooperative approach to managing adverse effects when they do occur.

OVERCOMING BARRIERS TO TREATMENT ADHERENCE

General Principles of Good Medication Management

Problems with adherence to treatment can be addressed by attention to the general principles of good medication management.⁵ For purposes of treating depression, we believe that these principles should include: (1) use of multidisciplinary treatment teams; (2) education of patient and family members about the depressive disorder and its treatments; (3) a philosophy of alliance rather than compliance among health care workers, patients, and patients' families; and (4) presentation and maintenance of an office or clinic atmosphere that reflects and supports the spirit of alliance.

Use of a multidisciplinary team approach allows for a more effective division of labor and increases the accessibility of the health care provider to the patient. It must be taken into account in formulating such an approach that nonphysicians in the clinical setting have a variety of skills that can be applied to managing depressed patients. In particular, the roles that are increasingly being performed by nonphysician team members include monitoring of psychiatric symptoms, monitoring of psychosocial functioning, monitoring of medication therapeutic effects and adverse effects, and providing information both to the physician and to patients and their families. In the multidisciplinary approach, physicians continue to review physical and psychiatric symptoms and changes in symptoms and to titrate medication and make other modifications of the medication regimen.

Patient education should include education of patients' families and/or friends. Critical aspects of such education include what to expect from treatment and when to expect it, as well as what not to expect from treatment. Patients and their relatives or friends should be given accurate information regarding likelihood and nature of treatment response and time required for treatment response.

The education process must be ongoing; it cannot be accomplished in a single presentation or with a single handout or discussion. The best programs currently available for patient education cover issues in a sequential manner appropriate to the patient's stage of treatment and clinical status. Programs can use a variety of media, including workshops or other kinds of verbal formats, printed materials, audiotapes, and videotapes.

A number of programs that provide information and support to patients and their families throughout the course of illness and treatment have resulted from interaction or collaboration of mental health specialists with the pharmaceutical industry and other organizations. One of these programs is "Rhythms: A Timed Approach to Patient Care," sponsored by Pfizer, Inc. The program includes a physician's source book and patient videotapes, written materials, and other educational components in a kit format. Another such program is "Propartners: Working Together to Treat Depression," sponsored by Eli Lilly and Company, which also includes videotape and text resources. In addition to the organized programs currently available, a number of support organizations have published quality written material that can be used in an educational program; a notable example is the series of booklets on major depression published by the National Alliance for the Mentally Ill (NAMI).

Changes in the clinic environment and the forging of an alliance among patients, patients' families, and health care workers go hand in hand. Indeed, many clinics today are enriched environments where there are videotapes and written material available and questionnaires to be completed and where there is an opportunity to interact with and talk to staff before the face-to-face encounter with the physician. Such environments foster a sense of partnership. This type of alliance, we believe, is an integral component of the successful treatment of depression and should reflect efforts to bring the patients' family and/or friends into the treatment process; we have found, in particular, that this sense of alliance serves to promote adherence to the prolonged treatment regimens common in therapy for depression.⁶

Treatment Phase-Specific Measures for Promoting Adherence

We find that specific problems with treatment adherence arise at particular stages of antidepressant treatment; these problems can be anticipated and measures taken to prevent or address them. During the critical first weeks of therapy, the patient requires more intensive contact with the physician or staff than after response to treatment has been noted. Patients require particularly strong support during this period in a number of respects, including being reminded that their feelings of hopelessness are an integral part of their depressive illness, that they need to continue to take the prescribed medication despite the absence of immediate noticeable effect, and that chances are very good that they will be feeling better soon. Acute onset of side effects is a major obstacle to adherence, particularly if no benefit has yet been felt by the patient; thus, proactive strategies for managing side effects should be in place and should be readily triggered when the patient communicates bothersome effects. It is also important that the patient takes some responsibility for treatment, e.g., in the sense that the patient has a role to perform in administering the medication and in taking care of himself or herself throughout the course of the medical illness.

During the middle phase of treatment, after an initial response has been achieved, patients need continued support in assiduously adhering to a regimen that may no longer seem necessary because they are feeling better. Patients who have a relapse while taking treatment need additional support throughout the subsequent dosage modification or treatment alteration. Other issues that arise during this phase of treatment include use of other prescribed or over-the-counter medications, as well as alcohol and nicotine use. Early in treatment, when antidepressant medication is new to the patient, he or she typically remembers not to take other medications without checking with the physician and is usually willing to abstain from alcohol. As the depression remits and patients feel more normal and their antidepressant treatment becomes a habit, they may forget their doctor's early warnings, which can lead to uncomfortable and sometimes dangerous drug-drug interactions.

Some patients are candidates for long-term maintenance therapy, which is beset with its own problems in terms of adherence to treatment regimens. Education of patients with early-onset depression, a family history of depression, or recurrent depressive disorder regarding the likelihood that they will require long-term maintenance should be begun early in the treatment process. Such patients should be made to feel confident that they will be able to maintain a long-term relationship with the physician and staff and should receive appropriate support throughout the course of treatment.

OTHER ISSUES IN PROMOTING ADHERENCE

Other barriers to treatment adherence derive from issues that must be confronted by physicians regarding their own training or disposition. One example is that of confidentiality versus sharing of information with the patient's family. It has become clear that involvement of the patient's social support system in treatment and management enhances adherence to treatment.³ Physicians also must confront the issue of "resistances" in treatment. We often rationalize our failure to engage patients on the basis of such resistances. Instead, we should be exploring the basis of the resistance. For example, a history of extreme "sensitivity" or frequent "allergy" to medications may represent a subtle expression of a panic disorder diathesis.⁷

Other barriers to adherence on the patient side have to do with the nature of the disease itself. Problems with memory and concentration, hopelessness, and focus on somatic symptoms interfere with the patient's involvement in therapy; the potential for such interference should be anticipated and addressed before adherence becomes a problem. It should also be noted that there are particular challenges to treatment in clinic populations comprising patients of lower socioeconomic status and that different ethnic groups have different attitudes toward both depression and its treatment that need to be considered in efforts to maximize treatment adherence.

CONCLUSION

The successful treatment of depressive disorders with pharmacotherapy requires considerable thought and effort on the part of the clinician or treatment team. Most of this effort consists of maneuvers that in one way or another enhance the patient's adherence to the prescribed treatment regimen: building an alliance with the patient, involving the patient's family, educating the patient and family regarding depression and its treatment, and actively managing uncomfortable side effects. Once adherence is ensured, the clinician can make an accurate assessment of the efficacy of the treatment regimen and has a firm basis upon which to make adjustments in that regimen when indicated.

Drug name: imipramine (Tofranil and others).

REFERENCES

- 1. Frank E, Kupfer DJ, Perel JM, et al. Three year outcomes for maintenance therapies in recurrent depression. Arch Gen Psychiatry 1990;47:1093-1099
- 2 Frank E, Perel JM, Mallinger AG, et al. Relationship of pharmacologic compliance to long-term prophylaxis in recurrent depression. Psychopharmacol Bull 1992;28:231-235

- 3. Jacob M, Frank E, Kupfer DJ, et al. A psychoeducational workshop for depressed patients, family and friends: description and evaluation. Hosp Community Psychiatry 1987;38:968-972
- 4. Dunbar-Jacob J. Compliance with antihypertensive regimen: a review of the research in the 1980s. Annals of Behavioral Medicine 1991;13:31-39
- Public Health Service Agency for Health Care Policy and Research. De-5. pression in Primary Care: Treatment of Major Depression. Rockville, MD: US Department of Health and Human Services; 1993 (AHCPR publication 93-051)
- 6. Frank E, Kupfer DJ, Siegel LR. Alliance not compliance: a philosophy of outpatient care. J Clin Psychiatry 1995;56(suppl 1):11-17
- Cassand GB, Savino M. Symptomatology of panic disorder: an attempt to 7 define the panic agoraphobic spectrum phenomenology. In: Montgomery S, ed. Psychopharmacology of Panic. Oxford, England: Oxford Medical