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The BRENDA Model: Integrating Psychosocial Treatment and Pharmacotherapy for the Treatment of Alcohol Use Disorders

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Abstract

While the U. S. Food and Drug Administration has approved several medications for the treatment of alcohol-related problems, their use has not gained wide acceptance in the United States. Typically, patients with alcohol use disorders are only referred to psychosocial support (e.g., Alcoholics Anonymous). However, the use of pharmacotherapy may complement psychosocial treatments, as evidence shows that pharmacotherapy can improve treatment outcomes. The effectiveness of pharmacotherapy depends on patient compliance with taking the medication and the context in which the medication is administered. BRENDA is a psychosocial program designed specifically to be used by many types of healthcare providers, including primary care clinicians. Designed to enhance medication and treatment compliance, BRENDA is an ideal approach for use in conjunction with pharmacotherapy. The BRENDA approach has 6 components: 1) a biopsychosocial evaluation; 2) a report of findings from the evaluation given to the patient; 3) empathy; 4) addressing patient needs; 5) providing direct advice; and 6) assessing patient reaction to advice and adjusting the treatment plan as needed. This paper describes these components and discusses how the empirical support for each component is linked to the enhancement of medication compliance and the improvement of treatment outcomes.

Keywords

alcohol use disorder; BRENDA program; treatment compliance; acamprosate; disulfiram; naltrexone

An estimated 18.7 million Americans can be diagnosed as abusing and/or being dependent on alcohol.¹ Yet, according to estimates, in 2004 only 9.5% of individuals diagnosed with dependence or abuse of either illicit drugs or alcohol and only 19.3% of those diagnosed with both illicit drug and alcohol abuse/dependence received any kind of substance use treatment.

¹ Traditionally, treatment for alcohol abuse and dependence has been psychosocial in nature.

² While psychosocial treatments brief enough to be amenable to clinical practice are available, ^{3–6} physicians have not played an active role in the treatment of alcohol use disorders. Research shows that relatively few physicians intervene or even screen their patients for alcohol problems. ^{7–9}

Among those physicians who screen for alcohol problems, prescriptions for pharmacotherapy are rare as well. Harris et al. ¹⁰ recently conducted a 3-year study (2000–2002) of paid claims

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submitted to a large health-insurer in the mid-Atlantic region of the United States and found that fewer than 10% of members who were receiving any kind of alcohol treatment filled prescriptions for naltrexone, a medication approved by the U.S. Food and Drug Administration (FDA) for the treatment of alcoholism. Among those who filled at least one prescription for naltrexone, the medication was used for a shorter time period than recommended in the clinical guidelines. The authors also reported no evidence that naltrexone use increased over the 3 years of their study.¹⁰

The preponderance of evidence suggests that naltrexone, acamprosate, and disulfiram, the only three medications approved by the FDA for the treatment of alcohol use disorders (AUDs), are all efficacious.^{2, 11-18} For instance, in a recent meta-analysis, Srisurapanont and Jarusuraisin¹⁴ assessed findings from more than two dozen trials of naltrexone for alcohol dependence. They found that naltrexone use was associated with a significantly lower likelihood of relapse (38%) than placebo (60%) in short-term (12-week) trials. However, these findings are not reflected in clinical practice, with low rates of prescriptions for these drugs to treat AUDs as noted above.

When asked why naltrexone prescribing rates were not higher, one physician focus group cited concerns about low compliance.¹⁹ Patient compliance has been a concern in the pharmacological treatment of many chronic illnesses, including diabetes mellitus (less than 60% full compliance) as well as hypertension and asthma (less than 40% compliance for both). Adherence to behavioral regimens for these three conditions is even worse, averaging less than 30%.²⁰ Compliance with alcohol addiction treatment is equally poor.

Overall, participants in Project MATCH (Matching Alcoholism Treatments to Client Heterogeneity), a randomized clinical trial designed to compare the efficacy of three psychosocial treatment modalities, attended only about two thirds of the treatment sessions that were offered.²¹

Compliance has also been an important factor in assessing the efficacy of naltrexone.²² Streeton and Whelan¹⁵ suggested that, in some studies, low compliance undermines the treatment effects of naltrexone. For instance, in two trials in which naltrexone treatment compliance was confirmed with urine samples positive for the drug marker riboflavin, negative results were seen in one trial with only 66% compliance rates,²³ while the other trial, with 92% compliance rates, yielded positive results.²⁴ These findings strongly suggest the importance of compliance in attaining positive treatment outcomes.

Since successful use of medications depends on the participation of both the provider who prescribes the medication and the patient who takes the medication, psychosocial treatments need to be developed that can be effectively used by medical practitioners and that will enhance medication compliance. This is recognized by the package inserts for medications that state that the medication is most effective when used in conjunction with a psychosocial intervention. BRENDA²⁵ (an acronym delineated below) is the first psychosocial therapy designed expressly for use in combination with addiction pharmacotherapy. It has been combined effectively with clinical trials of naltrexone,^{26,27} including a recent major multisite trial of long-acting (depot) naltrexone²⁸ and the safety and tolerability pilot study that preceded it.²⁹

COMPONENTS OF BRENDA AND EMPIRICAL SUPPORT

BRENDA therapy consists of six components:

1. Biopsychosocial evaluation
2. Report to the patient on assessment

3. Empathic understanding of the patient's situation
4. Needs collaboratively identified by the patient and treatment provider
5. Direct advice to the patient on how to meet those needs
6. Assess reaction of the patient to advice and adjust as necessary for best care

An explanation of the six components and a discussion of empirical support for each are presented in the following sections.

Biopsychosocial Evaluation

The medication model for physicians is a basic screening process with no set structure, which varies widely from provider to provider. Patients may be asked questions pertaining to their overall health, rapport may be established, and medication and follow-up may be prescribed to treat any medical problems. While the information collected may be thorough and cover a wide variety of topics, it is often strictly biological in nature and does not address psychological or social factors. Subjective Objective Assessment and Plan (SOAP) notes are one example of a commonly used, focused, structured interview that has been found to be more thorough than traditional physicians' progress notes.³⁰ Even so, SOAP components really only cover the biological and report parts of BRENDA therapy.

The assessment of psychological health and social functioning is important in a variety of medical disorders, and this is especially true for alcohol use disorders. Comorbid psychiatric conditions (e.g., mood disorders such as depression) are common in individuals with alcohol use disorders and such comorbidity has important treatment implications. Grant et al.³⁰ recently reported that 28% of alcohol-dependent individuals in a nationally representative sample had suffered from a comorbid mood disorder (e.g., major depression) and 23% had suffered from an anxiety disorder (e.g., social phobia) in the previous 12 months. Comorbidity is associated with less successful treatment outcomes and poorer adherence to treatment. However, medications that reduce comorbid psychiatric disorders are effective in reducing both psychological distress and alcohol craving and drinking.^{32–34} Furthermore, the inclusion of social and coping skills training has been found to be effective in the treatment of substance abusers with comorbid anxiety disorders.³⁵ These findings suggest that a psychological assessment is crucial because the presence or absence of psychiatric comorbidity influences the treatment plan for a given patient.

The degree to which the patient's social network supports continued drinking or drinking reduction also influences treatment outcomes. Individuals receiving strong social support from even one person tend to have better treatment outcomes than those without this type of support.³⁶ However, most frequent drinkers have social networks comprised of several fellow drinkers. The presence of even one fellow drinker in the social network has been found to increase the likelihood of relapse following treatment.³⁶

These findings regarding comorbidity, social factors, and their effect on treatment outcomes strongly suggest that questions about the patient's psychiatric and social network should be added to the typical strictly biological evaluation.

Report to the Patient on Assessment

The second component of BRENDA, the Report, is designed to give feedback to patients based on findings from the biopsychosocial assessment. There is extensive literature on the efficacy of brief interventions in treating alcohol abuse.³⁷ Typically, these brief interventions consist of an evaluation followed by a report to the patient of findings from this evaluation and warnings about the ramifications of future drinking.³⁸ The efficacy of brief interventions

constitutes support for the “B” and “R” components of BRENDA, which contain the same key elements.

Research findings suggest that even if physicians conduct evaluations that reveal problem drinking, they may not consistently report these findings to or discuss them with patients. In one study in a depressed population, for example, only 13.9% of patients who reported hazardous drinking received any counseling for alcohol abuse from primary care physicians.³⁹ Moreover, reported rates of counseling were low across all populations, with young adolescents receiving the lowest rates of screening and counseling.⁸ Given the low proportion of patients who receive counseling, it is likely that many heavy drinkers may not even be aware that they have a problem. Patients unaware of their drinking problem obviously will not consider seeking addiction treatment. Thus, contact with the primary care physician or emergency healthcare provider may be the only opportunity for these individuals to receive counseling, since these providers see 80% of the general population each year.⁵

There is evidence that healthcare providers can lead adolescent patients to ask more questions by simply raising the topic of drinking at a single, isolated visit.⁴⁰ A study in adult patients found that individuals who recalled their physician’s alcohol-related warnings at their intake visit showed reduced alcohol consumption 2 years later compared with those who did not recall such warnings.⁴¹ This study provides evidence that a physician’s report on the dangers of alcohol abuse can encourage positive outcomes, even if contact with the patient is limited.

Other studies show that regular screenings and interventions for individuals with elevated gamma-glutamyltransferase (GGT) levels lead to significant benefits. In a study conducted by Kristenson et al.,⁴² a report of the patient’s liver GGT levels was used as a component of counseling aimed at encouraging lower levels of alcohol consumption. The individuals in the experimental group were repeatedly encouraged to reduce overall alcohol consumption, with GGT levels used as a biofeedback method. The controls were informed by letter that they had elevated GGT enzymes and were advised to restrict their alcohol consumption. The letter also informed them that they would be invited to have their liver enzymes measured again after 2, 4, and 6 years. Both groups reduced overall alcohol consumption. However, compared with the control group, patients in the experimental group reported 80% fewer sick days after 4 years, 60% fewer hospitalizations after 5 years, and a 50% decrease in mortality rates after 6 years. This finding underscores the importance of healthcare professionals’ providing patients with a clear and understandable explanation of report results.

Empathic Understanding of the Patient’s Situation

Empathy has been shown to enhance treatment compliance and outcomes. It plays a considerable role in helping patients form the perception of a positive therapeutic alliance, which is associated with better treatment retention and outcomes.⁴³

Studies comparing the efficacy of various active approaches to psychotherapy typically fail to show significant differences.⁴⁴ This pattern has also held true for psychotherapy aimed at addiction.⁴⁵ For example, Project MATCH, which compared three active, standalone psychotherapies for the treatment of alcoholism (cognitive-behavioral, 12-step, and motivational enhancement therapy), yielded no evidence that any one of the three was more efficacious than the others overall.⁴⁶ This uniformity suggests that common elements shared by all effective psychotherapies—including therapist empathy toward the patient and formation of a strong therapeutic alliance—have an impact on both compliance and positive outcomes.⁴⁷ A study involving problem drinkers conducted by Miller et al.⁴⁸ showed that therapist empathy had a 0.82 correlation with improved drinking outcomes at 6-month follow-up. Empathy is thought to facilitate formation of a therapeutic alliance, defined by Connors et al.⁴⁹ as “a collaborative relationship that consists of an emotional bond and shared attitudes regarding the

tasks and goals of the treatment endeavor.” Specifically, empathy on the part of the therapist is strongly correlated with the bond-formation aspect of the alliance.⁵⁰ Among a sample of 77 methadone-maintained, drug-dependent patients, there was a strong correlation between patient-rated therapeutic alliance and reduced drug use 7 months after treatment onset ($r = 0.72$).⁵¹ In an analysis of data from Project MATCH, Connors et al.^{46,49} found small but significant correlations between a strong alliance and drinking outcomes, both during treatment and at 12-month follow-up (r values for percentage of days abstinent ranged from 0.12 to 0.17). Another study showed a 50% increase in sessions attended when there was a strong therapeutic alliance and empathic bond between patient and physician.⁵² Furthermore, 76% of patients reporting a strong alliance completed the study, compared with only 31% of those reporting a weak alliance. A strong therapeutic alliance also has been shown to increase the likelihood of treatment compliance.⁵³ In the analysis of Project MATCH data by Connors et al.,⁵⁴ there were small but significant correlations between perceived alliance and compliance with treatment (r values between compliance and both patient and therapist alliance ratings were approximately 0.10).

The use of empathy is further supported by the documented negative relationship between use of a confrontational approach and outcomes in addiction therapy. Miller et al.⁵⁵ compared confrontational and empathic approaches to addiction treatment and found that participants who received the confrontational approach were significantly more likely to argue with and interrupt the therapist and to deny that they had a problem. There was, in fact, a strong positive correlation ($r = 0.65$) between the number of times the therapist confronted the participants and their quantity of weekly alcohol consumption 1 year later. Further support for an empathic approach comes from a comprehensive review of 48 psychotropic and psychosocial treatment approaches for alcoholism. In evaluating 363 studies, Miller et al.³⁷ found no evidence for the efficacy of any confrontational approach.

Given empathy’s key role in helping forge the therapeutically powerful doctor-patient alliance and foster treatment compliance, it is particularly beneficial that BRENDA calls for early implementation of empathy by the physician.

Needs Collaboratively Identified by the Patient and Treatment Provider

There is a long tradition in the treatment of psychological disorders of respecting patients’ individual needs.⁵⁶ While this patient-centered model of therapy is favored by a number of experts in the field,^{57–59} there is little empirical evidence in the addiction literature that individualized treatment is superior to the standard “one-size-fits-all” approach taken by most addiction treatment programs. However, some indirect evidence for the importance of orienting treatment to patient needs was offered by McCaul et al.,⁶⁰ who found that gender, race, and employment status were better predictors of the number of sessions attended and time spent in treatment than alcohol/drug use status. In another study analyzing Project MATCH data, Donovan et al.⁶¹ found a moderate but significant positive correlation between treatment satisfaction (one component of which was a belief that one’s needs have been met in therapy) and session attendance ($r = 0.15$).

Further support for the importance of addressing patients’ needs in therapy can be drawn from the literature in other fields such as depression treatment. In a multisite study of depression treatment in managed care practices, Wells et al.⁶² tested an intervention in which patients were encouraged to relay their treatment preferences to physicians and nurses, who were also instructed to elicit these preferences and follow them to the extent possible.⁶³ At 6-month follow-up, the researchers found that a significantly higher percentage of patients receiving the intervention (50.9%) than patients receiving treatment as usual (39.7%) had either been involved in counseling or taken antidepressant medication at proper doses, with a similar pattern at 12-month follow-up. In terms of outcomes, patients receiving the intervention were

significantly less likely than treatment-as-usual patients to currently meet criteria for depressive disorder after 6 months (39.9% versus 49.9%, respectively), with a similar pattern after 12 months. An important caveat to these findings is that these two conditions differed on more than just the issue of patient preference. The intervention treatment was likely of higher quality overall, yet these findings are nonetheless suggestive of the impact of integrating patient preferences into treatment.

Direct Advice to the Patient on How to Meet Those Needs

Two strengths of the BRENDA model are the unique attention given to patients' needs in psychotherapy and the integrated use of prescribed medication. This integration gives patients a platform to consider all treatment options and find the best interventions to address their specific needs. There is no single method of therapy that performs better than all others for patients regardless of their individual characteristics. Based on their comprehensive review of treatment approaches, Miller et al.^{37,59} concluded that the relatively high number of treatment methods that have shown evidence of efficacy is a strength of the field. According to their evaluation, research on the ten most efficacious treatments yielded a pooled efficacy rating of 72%. With so many efficacious pharmacologic and psychosocial treatments to choose from, there is no need to direct all patients to a particular one, although this is what often happens in addiction treatment.

In the BRENDA model, "direct advice" is given only after a therapeutic relationship is established with the patient, which occurs during the first four BRENDA steps. Waiting to give direct advice to the patient until this stage of treatment increases the likelihood that the patient will accept and follow that advice. Evidence suggests that better outcomes are achieved when this process of identifying needs and setting goals occurs during rather than before or after the treatment process.⁶⁴ This approach offers an effective solution to the challenge of addressing the patient's needs and achieving goal-directed planning that leads to improved outcomes.⁶⁵

An important component of the BRENDA direct advice is a discussion with the patient about how a particular intervention or medication would help him or her based on the results of the biopsychosocial evaluation performed at Step 1 of BRENDA. This discussion allows the BRENDA provider to evaluate the patient's level of motivation.

Assess Reaction of Patient to Advice and Adjust as Necessary for Best Care

As the findings from Project MATCH show, the initial level of motivation to change predicts drinking outcome over time.^{21,66,67} The BRENDA model incorporates motivational status after the clinician offers the patient direct advice. The assessment of motivational level after the advice is given allows the clinician to deal with issues related to resistance and noncompliance before the patient leaves the session. So, for example, if the clinician advises the patient to completely abstain from alcohol and the patient seems unwilling to comply with the recommendation, the issue can be addressed immediately rather than waiting for the next session, which could take a week or longer. There are several strategies to help improve a patient's level of motivation (see Volpicelli et al.²⁵). In fact, the overall strategy of using the BRENDA method is designed around motivation enhancement. The practitioner's primary goal is always to work with the patient's needs, not the needs that the practitioner perceives. This patient-centered goal setting empowers patients into taking control and responsibility for their own treatment. Consequently, this ownership of treatment helps to motivate patients for success, since the patients are only working to meet their own needs. Even if a patient starts with very small goals (e.g., drink one fewer drink each day), the motivation to succeed is high, since the goal is one that the patient views as achievable. Successful accomplishment of each goal then further motivates the patient into setting further achievable goals, until a healthy outcome is achieved.

Additional motivation enhancement is achieved through the Biopsychosocial component of the BRENDA model. In patients who have little interest in substance abuse rehabilitation, but significant legal or medical concerns, motivation to follow-through with prescribed treatment will be high only if the practitioner focuses on managing the legal or medical issues, without making the alcohol component a key feature of treatment. By focusing on the issues that the patient believes to be the root of the problem instead of the substance abuse, the patient is motivated to comply with the treatment goals rather than worry about being labeled or treated like an “alcoholic.” It is likely that many individuals with this mindset are aware of their disorder, but are not willing to seek treatment for a variety of reasons. However, once they can address the social or medical consequences of their disorder without feeling that they will be labeled, they are more likely over time to perceive alcohol abuse as an issue that needs to be managed and to be motivated to work with the practitioner to complete this treatment. Thus, the patient is likely to eventually recognize the role of alcohol in the treatment in a nonjudgmental way, and become motivated to seek treatment for alcohol abuse and stay in treatment to completion. Even if, although this scenario is very unlikely, alcohol is never directly addressed in the treatment, a motivated person receiving appropriate long-term alcohol treatment, regardless of how it is framed, will still have an excellent probability of a successful outcome. Regardless of the strategy selected, it is important before the patient leaves the office that the clinician and patient are “on the same page” and have an agreement on the goals of treatment and interventions to achieve those goals.

Moreover, the motivational assessment component of BRENDA highlights the assumption that treatment can begin with patients who have various levels of motivation, not only with those highly motivated to change (e.g., people who have hit rock bottom). The motivational level of the patient is not only a patient characteristic that predicts treatment outcome, but also an outcome measure that should be addressed in treatment. Therefore, an assessment of the patient’s motivation to change his or her behavior helps the clinician evaluate the usefulness of various treatment recommendations, plays a key role in developing an initial treatment plan for the patient, and helps the clinician make adjustments to the overall treatment plan as needed.⁶⁸

Correctly matching the patient’s readiness to change with his or her treatment will result in better treatment compliance and outcomes.⁶⁹ Specifically, patients who were rated low in terms of their readiness to change responded better to a brief advice intervention, rather than a more involved psychotherapy session.

One of the strengths of the BRENDA method is that it was designed to address many of the issues that arise in the pharmacologic treatment of drug and alcohol dependence. For instance, patients may struggle to integrate medication use into their daily routine and, as a result, fail to comply with their prescribed dosage. As part of the assessment, the BRENDA therapist can help the patient brainstorm about ways to take medication consistently at given times of the day. Another issue that may arise during the assessment phase of BRENDA concerns side effects. In a multisite safety trial of naltrexone, it was found that 15% of the sample dropped out of the study because of adverse effects, with nausea being the most common.⁷⁰ However, many of the side effects of naltrexone are either fleeting or can be alleviated or even prevented by ensuring that patients take the medication properly. Thoroughly assessing and educating patients about the medication allows the BRENDA provider to keep patients in treatment and helps to avoid noncompliance with medication in a way that could significantly improve patients’ chances of recovery.

USING BRENDA IN CLINICAL PRACTICE

Clinicians may be concerned that it would be laborious to learn a new psychosocial intervention and time consuming to administer it. However, this is not the case with the BRENDA technique. There are a number of excellent articles that discuss the BRENDA;^{26,27} the best training resource, however, is *Combining Medication and Psychosocial Treatments for Addictions; The BRENDA Approach*,²⁵ a book that covers the technique in a manual style format and includes step-by-step detailed descriptions and case studies to help practitioners learn how to use the technique. Moreover, many professionals in the nursing sector will recognize many of the same tools and approaches as those they are already familiar with in treating their patients. The manual serves to formalize this process of interaction with the patient and outlines a strategy of therapeutic care that is comprehensive but also focuses on the individual patient's medical and psychological needs. Once mastered, the BRENDA approach can be administered in as little as 15 minutes, although it can also take a few minutes longer when patients first begin to address issues with the practitioner that they may not have previously felt the need to manage or pursue treatment for. The early sessions may also take more time as the practitioner builds a treatment alliance with the patient.

While the BRENDA was designed with addiction treatment in mind, this method of eliciting patient-driven needs and feedback can be used across almost any type of medical/therapy environment, since none of the components of the technique is specific to any one illness, and the motivational and psychosocial benefits of the BRENDA will likely increase therapeutic alliance and outcomes for a variety of conditions.

CASE STUDY

Michael, a 39-year-old male executive, came for treatment unsure if he had a problem with alcohol drinking. He reported that he drank daily but only after work, when he would have 5 to 7 drinks in the evening. He denied that drinking was a significant problem for him, but he did admit that on occasions he would drink more than he intended and that he had difficulty going a whole day without some alcohol to "wind down." When Michael first presented for treatment, he was initially evaluated by a nurse practitioner and a psychiatrist, who found that, except for some mild elevation in blood pressure and difficulty sleeping, Michael was quite healthy. As part of the biopsychosocial evaluation, it was discovered that Michael's drinking did take away time from his wife, who was very concerned that his drinking was getting out of control. Michael was also increasingly concerned that he had difficulty controlling his drinking.

During the first session, the doctor reviewed various treatment options with Michael, including residential treatment, 12-step group support, pharmacotherapy, and cognitive-behavioral treatments designed to reduce the risk for relapse. Since Michael did not see himself as an alcoholic and had no intention of ever giving up drinking alcohol, the doctor suggested that Michael attempt a program of controlled drinking with the use of medications. Michael enthusiastically endorsed this approach since it addressed his primary concern that he felt his drinking was not controlled and he wanted to avoid future problems. The doctor advised Michael to completely abstain from drinking for a couple of days before beginning to take a medication, naltrexone, to help control his alcohol craving and limit excessive drinking. The doctor advised Michael that the medication works best after a period of 3 or more days of complete abstinence. It was agreed that any days in which alcohol drinking exceeded 5 drinks would indicate that Michael was not able to control his drinking and the treatment goals of controlled drinking would have to be reassessed. To help relieve any withdrawal symptoms, the doctor also prescribed oxazepam to be taken as needed. After 3 days, Michael returned to the program and was prescribed naltrexone.

For the next 12 weeks, Michael met with the doctor once a month to review medications and met with the nurse practitioner each week, who reviewed his symptoms and monitored his use of alcohol. Michael reported that the naltrexone reduced his desire to drink and that, on days when he did drink, it was generally limited to 2 drinks or less. He felt much more in control of his drinking. As the nurse practitioner reviewed Michael's physical and psychological health and his social functioning, she pointed out to Michael how his productivity at work and improved relations with his wife correlated with his adherence to attending treatment sessions and taking his medication and his reduced drinking. The nurse practitioner also discussed his view of his treatment with Michael, who stated that he felt very satisfied with his progress.

After 12 weeks, Michael reduced his visits to once every 2 weeks and, after 3 months, to just one visit per month with either the nurse or doctor. Six months into treatment, Michael canceled an appointment, which was rescheduled. When Michael met with the nurse after the missed appointment, she discovered that he had quit taking his medication and had begun drinking again. Evaluating his pattern of drinking since the last visit, the nurse discovered that, about 3 days after stopping the naltrexone, Michael's pattern of drinking about 2 drinks per day escalated so that in about a week's time he was drinking about 7 drinks per day every day. Michael had felt too embarrassed to come for his last appointment and remained quite upset with himself for drinking again. The nurse reassured Michael that she could understand his feelings of shame but that such relapses are common. She reported that she was happy he was back in treatment. The nurse reviewed Michael's current biopsychosocial level of functioning and discovered that Michael now saw that drinking had a more profound effect than he had previously realized on his work performance, sleep patterns, and, most important to Michael, his relationship with his wife. This time Michael decided that alcohol drinking, even controlled drinking, was simply not worth it and he, together with the nurse, agreed on a treatment goal of abstinence and resuming his naltrexone use. After completing an ambulatory alcohol detoxification program, Michael began meeting with the nurse weekly for about a month. After a month of continuous abstinence, Michael continued to meet with either the nurse or doctor at monthly intervals. For the past 12 months, Michael has remained on the naltrexone and, except for a slip on his birthday, has remained abstinent.

CONCLUSIONS

Although psychosocial therapies are still the most popular approach to treating alcoholism, in recent years, pharmacotherapies have been shown to be both safe and effective. Acamprosate, disulfiram, and naltrexone have all been approved by the FDA for the treatment of alcohol dependence. Despite empirical findings supporting the use of these drugs, they are not routinely used in addiction treatment programs. This underutilization stems from several factors, among them concerns about patient compliance and the misconception that patients with alcohol use disorders require referral to specialized addiction treatment programs. Neither assumption is compelling. Given the significant costs to society of untreated alcoholism and the growing evidence that addiction treatment is safe and effective, there is little excuse for alcohol use disorders to go unrecognized and untreated.

In a recent open-label naltrexone trial, O'Malley et al.⁷¹ randomized patients with alcohol dependence to receive either cognitive-behavioral therapy (involving a 1.25-hour initial session, followed by weekly 50-minute sessions) or a more brief primary care management program (involving an initial 45-minute visit, followed by seven 15- to 20-minute sessions spread out over 10 weeks) in addition to medication. The method of brief therapy used in this trial resembled BRENDA in a number of respects (e.g., a treatment plan developed together by the treatment provider and patient, reviews of issues related to medication use such as compliance and side effects). The researchers found comparable success rates in the two groups

of patients, with over 80% of patients in both groups reporting fewer than 2 heavy-drinking days during the last 4 weeks of the study.

BRENDA is an effective approach for combining psychosocial intervention with medication in order to treat alcohol abuse and dependence for several reasons:

1. It is uniquely designed to be used in conjunction with medication for the treatment of addiction.
2. It is a relatively brief and simple approach that can be administered by nurses or any trained healthcare professional staff.
3. It is standardized and supported by a comprehensive manual.
4. The biopsychosocial approach forming the backbone of BRENDA is based on strong and growing empirical evidence.

In conclusion, pharmacotherapy for alcoholism is safe and can be quite effective. Its full benefit will fall short, however, without concomitant psychosocial intervention. BRENDA was specifically designed to be implemented alongside addiction pharmacotherapy, and the combination has been shown to be successful in clinical trials.^{26–29} Composed of six components supported by strong empirical evidence, BRENDA offers a simple, efficient, and easily implemented approach to addiction therapy that fosters treatment compliance, thus leading to better outcomes.

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