

Publications

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Motivation and Treatment Interventions

This module begins by describing the process of moving an individual from assessment and diagnosis into treatment intervention. The first section discusses non-adherence and ways to enhance client adherence. Interventions are discussed as they relate to the technique of motivational interviewing. As mentioned in Module 5, the process of motivational interviewing actually begins in the Assessment and Diagnosis phase.

The second section of this module addresses the empirical support for various types of alcohol treatment interventions. These include:

- Brief Interventions (for at-risk drinkers)
- Motivational Enhancement Therapy, Cognitive Behavioral Therapy
- Relationship Enhancement Therapy
- Pharmacotherapy

It is important for social workers to understand the premises that underlie these interventions, and to become familiar with the empirical support for applying these approaches with different types of client populations.

Learning Objectives

By the end of this module, learners should be able to:

- A. Recognize barriers and facilitators to client adherence with treatment
- B. Become familiar with principles and practices of motivational interviewing
- C. Understand issues and aspects of treatment planning
- D. Analyze a number of treatment interventions from an empirical base
- E. Recognize the basic elements and principles of treatment matching

Treatment Adherence

Treatment must be acceptable before an individual will make the considerable commitments of time, energy, money, and willingness to endure difficult or distressing experiences in the service of making change and improving life. Previous negative treatment experiences, negative relationship expectancies, external barriers to care, culture, attitudes, and ideological comments may all have an impact on clients' readiness to accept help for alcohol problems (Zweben & Zuckoff, 2002). A multitude of potential sources of non-adherence to treatment exist among individuals seeking help for alcohol problems. First among these is the possibility that the client holds reservations about the nature, extent, and severity of their alcohol problems.

Associated with this is the possibility of misperceptions concerning treatment needs. For example, an individual may be interested in medication while the practitioner is interested in providing "talk" therapy. At the very least, an individual must perceive that the proposed treatment would not be harmful before making a tentative commitment to following a particular change strategy.

Individuals who do not believe that they have a problem that needs changing, and who are placed in a treatment program that they do not believe will be helpful, are most susceptible to having adherence problems.

In general, individuals who do not believe that they have a problem that needs changing, and who are placed in a treatment program that they do not believe will be helpful, are most susceptible to having adherence problems. The client may be ambivalent about whether the drinking behavior really needs changing, since the perceived costs of drinking may not yet outweigh the familiar benefits. Clients also differ in terms of their expectancies and level of self-efficacy for handling treatment demands. Low self-efficacy may translate into low adherence.

Clients may experience high barriers to care, including financial problems, cultural differences, family hardships, conflicting demands, and mandate treatment conditions. Everyday concerns may be overwhelming to the extent that the task demands of a specific treatment plan may become unmanageable. An example might be trying to follow a complex pill-dosing regimen when there is no daily routine around which to anchor the schedule (e.g., no set meal times, irregular sleep preparations). As indicated above, clients may have barriers resulting from previous unsatisfactory or otherwise negative treatment experiences. Or, the current practitioner may have set into operation outcome expectancies with which the client is uncomfortable. For still others, the stigma that might be attached to seeking help for alcohol problems may interfere with entering or continuing in a treatment program.

Individuals with adherence problems are often categorized as being "hard to reach," "treatment resistant," and "unmotivated." These labels result in clients being deterred or deferred from treatment programs. However, new evidence, and the resulting insights, have shifted the focus from a trait perspective that promotes labeling and client-blaming, toward an interactional perspective. Social workers are developing and implementing practices that facilitate client adherence. Considerable research supports the efficacy of planning and delivering treatment that incorporates the stages of change and motivation/ readiness processes. One promising example is the practice of Motivational Interviewing.

Motivational Interviewing (MI)

Motivational Interviewing is a critical element for facilitating treatment adherence and outcomes. Mounting evidence suggests a strong, positive relationship between treatment adherence and treatment outcome (Zweben & Zuckoff, 2002). In the field of substance abuse treatment, significant relationships have been found between treatment retention and symptom improvement, life functioning and patient well-being (Westerberg, 1998). In short, among substance abusing patients, the chances of success in both pharmacological and psychotherapy interventions are higher for those who adhere to the treatment regimen. For these reasons, alcohol treatment providers have increasingly given systemic and administrative attention to moderating adherence problems.

Motivational interviewing (MI) techniques have been shown to be effective in addressing adherence problems in individuals with alcohol problems. MI addresses both drinking and adherence by employing strategies aimed at producing motivational readiness. More specifically, MI attempts to modify unrealistic treatment expectations, resolve client ambivalence, and enhance client self-efficacy, in order to ensure and maintain participation in the treatment situation.

MI is a general concept or style of working with a client, not a specific set of techniques. MI has been employed both as an add-on to treatment and as an intermittent co-therapy with pharmacological intervention (Pettinati, Volpicelli, Pierce, & O'Brien, 2000) or conventional alcohol treatments (Brown & Miller, 1993). In these cases, MI has been shown to facilitate treatment retention and participation along with changing drinking behavior. MI has also been used as a stand-alone treatment specifically designed to address drinking problems (Project MATCH, 1997).

STAGES OF CHANGE
(DiClemente & Prochaska, 1998)

- *Precontemplation*
- *Contemplation*
- *Preparation*
- *Action*
- *Maintenance*

MI employs certain strategies to improve alcohol treatment adherence. These include issues of interview style that are culturally competent and appropriate, such as:

- Asking open-ended questions
- Conducting empathetic assessments
- Discovering the client's beliefs
- Reflective listening (rather than asking for more information)

MI techniques also include strategies for motivating individuals toward making changes in their alcohol use practices:

- Normalizing client uncertainties
- Amplifying client doubts
- Deploying discrepancy (fostering cognitive dissonance)
- Supporting self-efficacy
- Reviewing past treatment experiences
- Providing relevant feedback (e.g., results of own tests motivates people)
- Summarizing and reviewing potential sources of non-adherence
- Negotiating proximal goals (i.e., opportunity to achieve "quick successes")
- Discovering potential roadblocks
- Displaying optimism
- Involving supportive significant others

Treatment Selection Processes

The selection of a treatment package is a negotiated decision between the client and social worker. The decisions are based, in part, on the clients' recognition of their own treatment needs, stated preferences, and outcome expectancies about the approach. Thus, to facilitate client involvement in this process, the social worker must explore the client's own views about defining the drinking problem and treatment expectations. Social workers should ask clients open-ended questions concerning the chain of events that brought them to the program. Inquire about the clients' perceptions of how they might change their drinking behavior.

Sharing information from the assessment battery will clarify any misconceptions, beliefs, or perceptions by the clients about their drinking problems and will increase their awareness of the extent and severity of their problems. Scores on standardized measures, such as the Inventory of Drinking Situations (Annis, Graham, & Davis, 1987) and the Desired Effects of Drinking (Simpson, Little, & Arroyo, 1996) have been used for these purposes. During the information exchange, the social worker empathetically reflects client concerns, frustrations, and differences. This discussion helps individuals to develop and recognize the discrepancy between their

behavior, problems, or concerns and their personally-held goals and values. This method of deploying discrepancy highlights the gap between "where they are" and "where they want to be". For example, a client might wish to change his drinking practices without altering a lifestyle that involves visiting the local tavern after work. A summary by the social worker about potential reasons for non-adherence follows this process of inquiry. The practitioner recapitulates what the client has said about current and future obstacles to change (e.g., believing that "medication will change everything".)

Once a consensus is reached concerning problem definitions, treatment goals, and treatment expectations, an action plan is developed. The social worker presents a menu of treatment options. This provides clients with the opportunity to choose treatment plans that are most appropriate to their needs and capacities.

For individuals with lingering doubts about treatment, a tentative or incremental plan may be developed. This might entail having the person attend treatment sessions on a trial basis. Other clients may need to break down a long-term goal such as obtaining a commitment to permanent abstinence. In these cases, such a commitment could be overwhelming and cause extreme anxiety. Instead, the commitment could be broken down into manageable tasks, such as sustaining abstinence for four days during the week. The social work practitioner then conveys confidence in the clients' ability to make their own decisions, and expresses optimism about the potential for change.

The session closes with a "nonperfectionistic" message about change (Daley & Zuckoff, 1999). Here, the practitioner communicates that stumbling, negative reactions, second thoughts, setbacks, and delayed negative responses are naturally occurring events and, as such, are not unexpected. Clients are asked to view these occasions as learning opportunities in the change process. Unfortunately, there is a danger of reacting negatively to these events and becoming extremely self-critical. In many cases, extreme self-criticism changes a "slipup" into a full-blown relapse. This summary exercise serves the purpose of inoculating clients against reacting impulsively to their disappointment by leaving treatment prematurely.

Brief Interventions for At-Risk (Non-Dependent) Drinkers

Within the past two decades, there has been a growing awareness that individuals with alcohol use problems are a diverse population with differing levels of severity of alcohol or drug-related problems, and varying levels of capabilities and resources to cope with these problem behaviors. Within this vulnerable population, there is a sizeable proportion of individuals who occasionally drink in a manner that could potentially cause serious harm to themselves and others but, as yet, have only experienced mild or moderate consequences. Such consequences may entail missing a few days of work each month, arguing with a spouse, and intrapersonal problems such as guilt or anxiety about drinking. Other individuals are more seriously afflicted with substance-related problems such as medical complications, psychiatric disorders (e.g., depression) physiological difficulties (e.g., withdrawal symptoms) and legal difficulties (cf., Institute of Medicine, 1990; Heather, 1995; Skinner & Allen, 1982). Thus, persons with mild or moderate difficulties stemming from drinking or drug use can be differentiated from persons with severe problems by their patterns of use (e.g., quantity and frequency of consumption) and the numbers and kinds of biopsychosocial consequences stemming from the problem behaviors (e.g., dependence symptoms).

As the definitions of alcohol and drug abuse have expanded, so have the boundaries of alcohol treatment services. Consequently, more persons with alcohol use problems are being identified at earlier stages and treated by a wide variety of community resources (Rose, Zweben, & Stoffel, 1999). Individuals with lower levels of severity are receiving formal help in emergency rooms of general hospitals, public schools, child protection agencies, legal services, and employee assistance programs (Zweben & Rose, 1999). Public health policy has expanded the focus of

attention to include individuals with mild or moderate problems as well as those with severe problems (cf., Institute of Medicine, 1990; Higgins-Biddle & Babor, 1996).

It is in this context that *brief intervention* has been devised and utilized with individuals who experience early or at-risk/non-dependent alcohol use. With the budgetary restrictions placed on alcohol treatment services, a premium has been placed on developing cost-effective treatment technology. Brief intervention represents a low-cost, effective treatment alternative for addressing alcohol problems. Based on research involving nicotine abusers (Ockene, Kristeller, Goldberg, Amick, Pekow, Hosmer, et al., 1991; Richmond & Heather, 1990) and alcohol studies conducted primarily in Europe (Bien, Miller, & Tonigan, 1993), brief interventions have been employed differentially in different settings with various kinds of clients. While initially employed as a minimal or control treatment condition (Orford & Edwards, 1997), brief interventions have become, by virtue of their effectiveness, a viable alternative to more intensive approaches in treating alcohol problems.

Application of Brief Interventions (BI) in Nonspecialized Treatment Settings

Brief interventions are time-limited, self-help prevention/intervention strategies that focus on reducing alcohol use in the non-dependent or at-risk drinker. The primary function of brief interventions is to influence motivation for behavior change. Brief interventions do not teach specific cognitive behavioral skills, nor do they devote much time toward attempting to change a client's social environment.

The components of the brief intervention typically comprise a 15-30 minute interview involving a brief screening and assessment, feedback on personal risk, advice about how to change the drinking behavior, assessing motivation for change, establishing drinking goals, a self-help pamphlet, and a referral for further counseling if warranted and desired (Heather, 1995; Anderson & Scott, 1992; Wallace, Cutler, & Haines, 1988; Fleming, Barry, Manwell, Johnson & London, 1997; NIAAA, 1995). Booster sessions or a referral for additional counseling is sometimes offered (Fleming, et al, 1997; Elvy, Wells, & Baird, 1988). Follow-up is also part of the process (Babor, 1990; Chick, Ritson, Connaughton, Stewart, & Chick, 1988; Edwards, Orford, Egert, Guthrie, Hawker, Hensmen., et al., 1977; Fleming, 1995; Miller & Sovereign, 1989; Sanchez-Craig, 1990). These methods are particularly applicable to general clinical settings where alcohol treatment must fit into the context of a busy, high volume practice with multiple competing prevention agendas. The techniques can be used by a number of health care and non-health care specialists, including primary care practitioners, medical specialists, advanced nurse practitioners, physician assistants, dentists, social workers, psychologists, and marriage and family counselors.

Components of Brief Intervention (BI):

- *Screening and assessment*
- *Direct feedback on personal risk*
- *Advice for change*
- *Assessing motivation for change*
- *Contracting and goal setting*
- *Self-help techniques*
- *Bibliotherapy*
- *Referral if warranted*
- *Follow-up*

Treatment goals are mostly geared toward reducing drinking, rather than abstinence. Feedback is aimed at increasing a client's awareness of the negative consequences of the drinking behavior (Fleming et al., 1997). This helps to change misperceptions or misunderstandings of the severity of the alcohol problems. Advice is focused on identifying action steps to change the drinking pattern. This is followed by formulating goals about the drinking pattern (e.g., establishing criteria or cutting points for daily/weekly consumption level), and making plans for achieving them. Together these strategies help to mobilize the patients' coping resources and stimulate positive change.

Screening:

Query the individual's typical drinking practices:

"On average, how many days a week do you drink?"
"On a day when you drink alcohol, how many drinks do you have?"
"What is the maximum number of drinks you consumed on any given occasion during the past month?"

A "Standard" Drink:

12 oz. of beer or cooler  12 oz.	8-9 oz. of malt liquor 8.5 oz. shown in a 12-oz. glass that, if full, would hold about 1.5 standard drinks of malt liquor  8.5 oz.	5 oz. of table wine  5 oz.	3-4 oz. of fortified wine (such as sherry or port) 3.5 oz. shown  3.5 oz.	2-3 oz. of cordial, liqueur, or aperitif 2.5 oz. shown  2.5 oz.	1.5 oz. of brandy (a single jigger)  1.5 oz.	1.5 oz. of spirits (a single jigger of 80-proof gin, vodka, whiskey, etc.) Shown straight and in a highball glass with ice to show level before adding mixer  1.5 oz.
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Note: People buy many of these drinks in containers that hold multiple standard drinks. For example, malt liquor is often sold in 16-, 22- or 40 oz. containers that hold between two and five standard drinks, and table wine is typically sold in 25 oz (750ml.) bottles that hold five standard drinks.

Cut-off limits for these questions are based on scientific data that examined the relationship of specific levels of alcohol use and health problems. For example, women who drink more than 7 standard drinks per week or more than 3 drinks per occasion, and men who drink more than 14 standard drinks per week or more than 4 drinks per occasion, are considered as "screening positive." A positive screen means that the individual should be assessed for problems related to alcohol use and symptoms of dependence.

Assessment:

Ask about alcohol-related health problems.
Is there a history of...

- Liver dysfunction
- Headaches

<ul style="list-style-type: none"> • Hypertension • Chronic abdominal pain • Depression • Sexually transmitted disease 	<ul style="list-style-type: none"> • Suicide ideation • Trauma • Anxiety or panic attacks • Sleeping problems • Pancreatitis
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Assess for family, social and employment problems:
<ul style="list-style-type: none"> • Have you ever been arrested for driving while under the influence of alcohol? • Have any family members, friends, or people at work ever asked you to change your drinking habits? • Has your drinking caused problems in your life? • Have you ever participated in a work-related alcohol treatment program? • Have you ever had a problem with your job because of drinking?

The last area of the assessment is to ask about symptoms of alcohol dependence, such as loss of control and withdrawal. Persons who show evidence of alcohol dependence are referred to specialist practitioners.

Assess for evidence of dependence:
<ul style="list-style-type: none"> • Do you ever drink in the morning to get over a bad hangover? • Do you develop shakes when you stop drinking for more than a day? • Have you ever been in DTs, been detoxed, or had an alcohol withdrawal seizure? • Have you ever been treated for alcohol or drug withdrawal? • How many days a week do you drink in the morning?

Advice-giving:

The practitioner states his or her concern about the client's alcohol use, provides personalized feedback about how drinking affects health (e.g., sleeping patterns, family problems, headaches, recent trauma, and accidents), and advises the client to change drinking behaviors. Some individuals will need to reduce drinking while others may need to become abstinent. The latter group includes individuals with extensive health problems, pregnant women, women intending to become pregnant, individuals using certain prescription drugs, and those who exhibit symptoms of alcohol dependence.

Assessing motivation for change:

Clients are asked about their readiness for change and then placed in the following five categories: 1) not interested; 2) considering change; 3) ready for action; 4) initiating action; and 5) already acting. Such categories are useful to determine what kinds of action steps need to be taken in relation to the drinking. For example, clients who are not interested in changing may be asked to just "think about" their drinking practices, rather than to cut down. Matching the intervention level to the client's readiness status is an important element in assuring compliance and adherence.

Establishing specific drinking goals:

Social workers and clients need to establish feasible and suitable drinking goals based on:

- the severity of the drinking problems
- performance demands (e.g., bus driver)
- readiness to change

Social workers negotiate specific drinking patterns, develop a written contract, and offer the patient a self-help manual or reading materials. Specific dates are scheduled for modifying the drinking pattern. A workbook may be provided with exercises for the client to complete such as maintaining a diary of drinking behaviors.

Date _____
I, _____ agree to the following drinking goal:
_____ Number of drinks _____ Frequency OR _____ Abstinence
Starting date: _____
Participant signature: _____
Clinician signature: _____

Conducting follow-up:

Providers may offer follow-up services to review the drinking goals, assess any ongoing problems, and support ongoing change efforts. It may also become necessary to conduct an assessment of additional problems that might emerge-particularly problems that might have been masked by the drinking pattern (e.g., mental health concerns, marital difficulties, etc.).

State of Knowledge Concerning Brief Intervention (BI)

Multiple trials in multiple settings have shown that brief intervention can reduce alcohol use for at least one year (Bien et al, 1993; Kahan, Wilson, & Becker, 1995; WHO, 1996; Wilk, Jensen, & Havighurst, 1997; Fleming et al., 1977; Fleming, Manwell, Barry, Adams, & Stauffacher, 1999; Marlatt, Baer, Kivlaahan, et al., 1998; Ockene, Adams, Hurley, Wheeler, & Hebert, 1999; Gentilello, Rivara, Donovan, Jurkovich, Daranciang, & Dunn, et al., 1999). Several trials found changes in alcohol use among women (Babor & Grant, 1992; Fleming et al., 1997; Wallace et al., 1988; Chang, Goetz, Wilkins-Haug, & Berman, 2000; Manwell, Fleming, Mundt, Stauffacher, & Barry, 2000). Four trials found decreases in health care utilization: emergency room visits and hospital days (Fleming et al, 1997; Fleming, Mundt, French, Manwell, Stauffacher, & Barry, 2000 & 2002; Kristenson, Ohlin, Hulten-Nosslin, Trel, & Hood, 1983); hospital readmissions

(Gentilello et al., 1999); and physician office visits (Israel, Hollander, Sanchez-Craig, Booker, Miller, Gingrich, et al., 1996).

Brief intervention can also reduce:

- GGT levels (Kristenson et al, 1983; Wallace et al, 1988; Nilssen, 1991)
- Sick days (Kristenson et al., 1983; Chick, Lloyd, & Crombie, 1985)
- Drinking and driving (Chick, Lloyd, & Crombie, 1985)
- Mortality (Kristenson et al., 1983; Fleming et al., 2002)
- Health care and societal costs (Holder, Miller, & Carina, 1995; Fleming et al, 2002)

The brief advice intervention procedures varied by trial with most interventions consisting of a single, 15-20 minute counseling session and a variable number of booster sessions. Physicians were the primary interventionists in most trials. In positive trials, the reduction in alcohol use varied from 10-30% between the intervention and control groups. Methodological limitations in many trials included small sample sizes, low follow-up rates, variations in the quality of the practitioner-delivered interventions, and lack of "blinding" of the control subjects.

Motivational Enhancement Therapy (MET)

The brief intervention approach discussed above is primarily dedicated to non-problem, non-dependent drinkers. It is also necessary to consider approaches that might be effective with dependent drinkers. Motivational Enhancement Therapy (MET) was developed in Project MATCH as one of three study treatment modalities (the other two were Cognitive Behavior Therapy and Twelve-Step Facilitation). MATCH is a multi-site collaborative patient-treatment matching study involving 10 clinical research units and 1,726 patients who were seen in treatment over a period of 12 weeks. The primary assumption underlying MET is that motivation is a dynamic "state," not a static "trait" for the individual with an addiction. The level of motivation can vary over time and can be influenced by factors such as social interactions and clinician style. Motivation is relevant to behavior change efforts in that it is related to the probability that a client will engage in a particular behavior. MET development was influenced by empirically-based evidence from motivational psychology and social learning theory, stages of change, and motivational interviewing. [Note that MET is not synonymous with Motivational Interviewing.]

MET was derived from the FRAMES model of alcoholism treatment (Miller & Sanchez, 1993) which includes six components found to be efficacious with alcohol patients:

- **F**eedback about personal risk or impairment
- **R**esponsibility for change lies with the individual (client)
- **A**dvice on changing the drinking
- **M**enu of alternatives and change options
- **E**mpathy on the part of the practitioner
- **S**elf-efficacy or optimism on the part of client, facilitated by practitioner

MET was designed as a brief intervention to increase a client's motivation to change and receptiveness to "help." In Project MATCH, MET involved four sessions. The first provided structured feedback. The second enhanced commitment for change by developing a treatment plan. The last two sessions continued reinforcement of the commitment to change and monitored progress. Based on principles of motivational psychology, and grounded in research concerning processes of change, MET attempts to improve drinking outcomes by employing five strategies to rapidly enhance motivational readiness to change: 1) express empathy, 2) develop discrepancy, 3) avoid argumentation, 4) roll with resistance, 5) support self-efficacy.

Expressing Empathy:

Empathy occurs when the social worker accurately reflects what the individual is feeling and experiencing. To engage in a therapeutic relationship, clients must perceive their practitioner as a person who deeply understands their circumstances. A client's sense of acceptance can facilitate change. Skillful reflective listening by the social worker is fundamental.

**5 Elements
Involved in
MET:**

- *Expressing empathy*
- *Developing discrepancy*
- *Avoiding argument*
- *Rolling with resistance*
- *Supporting self-efficacy*

Developing Discrepancy:

At the same time, the practitioners help clients to develop and recognize the discrepancy between their drinking behaviors and their personally held goals and values. This involves highlighting the gap between "where they are" and "where they actually are" (developing discrepancy). For example, the practitioner externalizes the client's ambivalence about addressing drinking behavior by pointing out the discrepancy between a desire to be a better spouse and parent, and the amount of time spent at the local bar with "buddies." A significant first step in this process is to discover the client's personal values and goals. As a result, the client will be able to present and "own" the best arguments to support change. The practitioner's role is to evoke self-motivational statements from the client.

Avoiding Argumentation, Rolling with Resistance, Supporting Self-Efficacy:

In addition, emphasis is placed on avoiding disagreements with clients about the severity of their alcohol problems. Argumentation is counterproductive to the change process and defending positions may breed client defensiveness. Rather, disagreements are met by empathically reflecting the clients' negative reactions to the treatment situation. No efforts are made to persuade clients about the seriousness of their problems or their helplessness, or in getting them to accept the "alcoholic" label-aspects of many traditional therapies.

Resistance is a signal to change or shift strategies. Rolling with resistance means:

- acknowledging that a disagreement exists
- admitting to limitations of the assessments
- emphasizing client responsibility for choices and change
- encouraging contemplation
- redirection

Throughout the sessions, the practitioner attempts to convey confidence in the client's abilities and capacities for change. All efforts to change the drinking behavior are affirmed by the practitioner. The client is the most valuable resource for finding solutions to the problems and is responsible for choosing and executing the change strategies. It is important for the team to build on the client's strengths, existing resources, and past successes.

An important ingredient of the motivational model is client choice. Emphasis is placed on obtaining client agreement about the severity of drinking problems and the kinds of strategies to be used for changing the drinking behavior. A client may leave treatment prematurely due to a lack of correspondence with the practitioner concerning the level of harm associated with the drinking, beliefs about the etiology of the problems, and methods for addressing the problems (Zweben, Bonner, Chaim, & Santon, 1988a). To this end, clients are offered a variety of options-including doing nothing. Better outcomes have been associated with the extent to which the individual freely chooses the course of action and is optimistic about the prospects for success (Donovan & Rosengren, 1999). Client commitment can be enhanced by facilitating the belief that there is "a way out" of the problem and by enabling the individual to "do something" about it. In practice, MET is structured in two phases...

Phase I:

- Establish rapport by exploring the chain of events that led to help seeking. Determine the client's view of the problem...
- "What brought you here today?" or "What happened that you are seeking treatment?"
- "How do you see your drinking?" or "What do you like about drinking?" or "What are your concerns?"
- Provide personal feedback:
 - " Share information from the screening and assessment processes (i.e., MAST, CAGE, TWEAK, AUDIT, S-MAST, RAPS, DAST results)
 - " Neutrally compare client scores to normative data
 - " Elicit client's reaction to the feedback
- Build motivation
 - " Raise awareness of personal harm/risk associated with the alcohol use pattern
 - " Address barriers to change
 - " Identify client strengths, resources, and successes

Phase II:

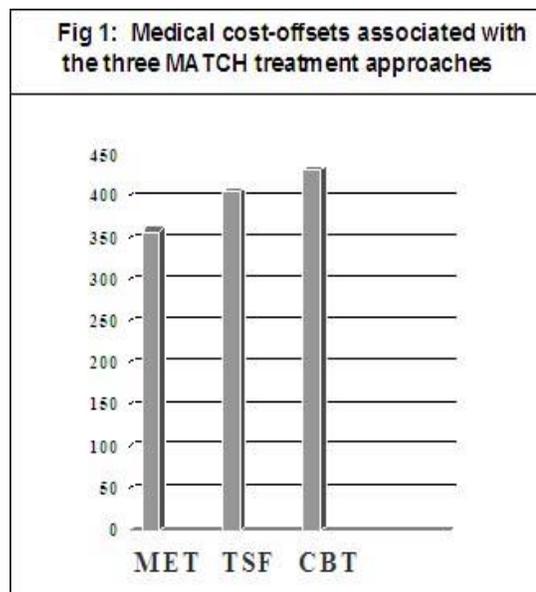
- Strengthen motivation
- Develop a specific change plan:
 - "The changes that I want to make are..."
 - "The reasons that I want to make them are..."
 - "The steps that I will take are..."
 - "The ones who can help me are..."
 - "The things that can get in the way of my success are..."
- Ask for a commitment to the change process and plan
 - Link the change process to personal goals and aspirations held by the client
 - Identify a series of "next steps" that are proximal and/or facilitative goals
 - Ask directly for a commitment
 - Attempt to envision a future that includes the desired changes

- Move to action

- Educate the client about change strategies
- Marshall support from friends and family
- Anticipate difficulties
- Provide structure and assistance
- Monitor for unexpected symptoms/problems masked by the alcohol use disorder

Motivational approaches are at least as effective as more intensive or conventional strategies (Bien et al., 1993). In Project MATCH, few clinically significant differences were found between Motivational Enhancement Therapy (MET) and the more intensive Cognitive Behavioral Therapy (CBT) or Twelve-Step Facilitation (TSF). [Twelve-Step Facilitation is about getting a client to attend AA, not about providing the program directly.] While TSF and CBT treatments yielded slightly greater (2 days/month or 5%) reduction in alcohol consumption, post-treatment follow-up drinking rates did not differ significantly among these three treatment groups (Project MATCH, 1997).

The Project MATCH Cost Evaluation Study (Holder, Cisler, Longabaugh, Stout, Treno, & Zweben, 2000) looked at medical cost-offsets associated with the three MATCH treatment approaches (see Figure 1). No significant differences were found among the three MATCH treatments in total health care costs in the post-treatment period. The mean estimated monthly post-treatment costs for the three treatment conditions ranged from \$359 for MET to \$433 for CBT and \$407 for TSF. MET had a clear cost advantage over CBT and TSF (Cisler et al, 1998). The cost savings associated with MET may place pressure on health care or managed care providers to adopt such methods in settings where individuals with alcohol problems are typically seen.



Motivational Enhancement Therapy & Treatment Matching

Treatment mismatching is a source of treatment failure and client drop-out. Many treatment modalities are founded on the assumption that the client is ready to take action, ignoring all other stages of the change cycle (precontemplation, contemplation, preparation, and maintenance). Treatment mismatching occurs when treatments offered are inconsistent with the client's stage of readiness. It also occurs when more treatment is given than a client wants or when barriers to treatment are ignored.

Treatment matching allows for varied responses to be matched to client readiness. For example, in response to precontemplation processes, an intervention can increase

[d](#) awareness and raise doubts about the problematic behavior. In response to contemplation, the interventions are designed to help tip the decisional balance toward action and away from inaction. In preparation, intervention should involve the negotiation of a concrete and workable plan for change. Action interventions, the ones with which we are generally most familiar, assist the client

in behavior change through achieving a series of small, progressive steps toward a goal. Maintenance interventions are critical in that they help to prevent relapse and help support ongoing lifestyle change.

Findings from Project MATCH suggest that individuals high in anger fared better in MET than in the other two MATCH treatments (CBT and TSF; Project MATCH, 1998). Subjects in the highest third of the anger variable treated in MET had an average of 76.4% abstinent days, whereas their counterparts in CBT and TSF treatments had an average of 66% abstinent days. For angry clients, a non-confrontational approach such as MET may work more effectively to defuse anger or resistance than modalities that are typically more directive.

Cognitive Behavioral Therapy

Cognitive Behavioral Therapy (CBT) is based on principles of social learning theory, indicating that the problem behaviors are determined by factors in the social environment. As such, the behaviors can be "unlearned" in the same ways that they were first acquired and are now maintained. CBT focuses on learning alternative coping strategies, rather than alcohol use, to deal with potentially high-risk situations.

A functional analysis is conducted to determine target areas for intervention. A wide range of goals are identified and prioritized, and a sequence of interventions is employed to achieve them. Interventions might include assertiveness training, mood management, job seeking skills, anger control, communication training, and planning of leisure-time activities. Opportunities are provided to practice skills inside and outside the sessions (i.e., homework).

To build the individual's confidence, easily attainable "quick win" goals are given priority in the treatment plan. Typical objectives associated with CBT include social skills training, reduced psychiatric symptoms, anger reduction, social support, and job finding.

CBT sessions follow a 20-20-20 rule (Carroll, 1999). The first third of each session is devoted to evaluating and discussing drinking behavior during the past week. Other concerns that might affect drinking behavior, such as marital or family conflict, are also reviewed. The second third of the session is devoted to skills training and rehearsal. For example, a role-play might be used to develop or improve drink refusal skills. The final third deals with planning for the week ahead, including a discussion of relapse prevention techniques. For example, one client spent the latter part of the session practicing how to deal with criticism on the job without drinking. A role-play was used to teach assertiveness skills to defuse the negative moods that result from such criticism.

CBT: The 20-20-20 Rule

First 1/3 of each session devoted to:

- *Reviewing drinking during past week*
- *Identifying other concerns that affect drinking behavior*

Second 1/3 of each session devoted to:

- *Skills training and rehearsal*

Final 1/3 of each session devoted to:

- *Planning for the week ahead*
- *Relapse prevention techniques*

CBT has demonstrated efficacy when it is delivered as part of a comprehensive treatment program, rather than as a stand-alone approach. Longabaugh and Morgenstern (1999) reviewed the CBT outcome literature and concluded that CBT was more effective than other treatments when it was delivered within the context of a program to change an individuals' social environment. The latter involved creating alternative lifestyles that would be incompatible with drinking. For example, an individual might choose to regularly attend church services with family members, find stable employment, focus on healthy nutrition, save money, and so on. Similar results have

been reported in pharmacotherapy trials where CBT has been added to the medication regimen and compared to other add-on approaches (O'Malley, Jaffe, Chang, Schottenfeld, Meyer, & Rounsaville, 1992).

Cognitive Behavioral Therapy and Treatment Matching

In Project MATCH, individuals in aftercare with low alcohol dependence symptoms fared better in CBT than in TSF. Those with more alcohol dependence symptoms fared better in TSF. These differences were observed across a number of outcomes pertaining to drinking and health care costs (Project MATCH, 1997; Holder et al., 2000). Other studies reported that individuals with a higher degree of psychiatric severity (Kadden, Cooney, Getter, & Litt, 1989) did better in CBT than in interactional therapy, but these matching results have not been confirmed in subsequent research. One study showed that clients with high support for drinking performed better in CBT than in relationship enhanced therapy (Longabaugh, Wirtz, Beattie, Noel, & Stout, 1995). This also has not been confirmed by subsequent research.

Relationship Enhancement Therapy (RET)

Relationship Enhancement Therapy has found increasing support in the alcoholism treatment literature. RET involves a variety of different, but related approaches, all aimed at increasing social support for abstinence, buttressing motivational readiness, improving interactional patterns that promote and reinforce sobriety, and establishing and maintaining emotional ties with members of the social network.

RET efforts include:

- Involving a supportive significant other (SSO) in brief treatment (Zweben & Barrett, 1993)
- Providing behavioral marital or family therapy (O'Farrell, 1995; Miller, Meyers, & Tonigan, 1999)
- Offering mutual help opportunities (Tonigan & Toscova, 1998; Project MATCH, 1997).

Although there are conceptual differences among these approaches (systems theory versus social learning theory versus Alcoholics Anonymous philosophy), each involves the promotion and active involvement of a supportive significant other in treatment. The SSO could be a child, parent, friend, clergyman, or member of a self-help group (e.g., sponsor). Toward this end, methods are used to enhance communication patterns that reinforce social support for sobriety.

More specifically, RET can help to: (1) increase the individual's level of awareness about the alcohol problems, (2) enable the individual to accept responsibility for changing the alcohol problems, and (3) generally enhance the individual's readiness to change. With regard to mutual help (i.e., AA involvement), facilitating a spiritual experience can become a source of emotional comfort for individuals who struggle with decisions about initiating and sustaining abstinence. RET enables the individual to obtain ongoing social support for abstinence. This is an important ingredient of change, especially for those whose natural social networks are not supportive of abstinence. Interestingly, RET has been used effectively to enhance clients' abilities to cope effectively with drinking problems, even if they are unwilling to seek help themselves (Miller, et al., 1999).

In RET, efforts are devoted to reducing interaction patterns that inadvertently reinforce problem drinking. RET helps non-drinking partners to identify behaviors that trigger or reward problem drinking. It teaches the non-drinking partner (or SSO) about withdrawing positive reinforcement when the client is using alcohol, and about

RET Goals and Objectives:

- *Facilitating medication and treatment compliance*
- *Buttressing motivation*

providing positive reinforcement for nonuse. Examples of the former include not making excuses to an employer for the alcohol use problems (i.e., showing up late for work), not cleaning up after a drinking episode, and avoiding drinking-related events, such as bowling, ball games and parties. Examples of the latter include verbally acknowledging nonuse and sharing in activities associated with nonuse, such as attending church services together, exercising, going to movies, gardening, photography, or pursuing other active hobbies.

- *Increasing interaction patterns that promote and reinforce sobriety*
- *Strengthening emotional ties*
- *Increasing social support networks for abstinence*
- *Improving coping capacities*
- *Facilitating spirituality*

Some of the common goals and objectives associated with RET include: (1) the facilitation of medication and treatment compliance, (2) buttressing motivation, (3) increasing interaction patterns that promote and reinforce sobriety, (4) strengthening emotional ties, (5) increasing social support networks for abstinence, (6) improving coping capacities, and (7) facilitating spirituality (e.g., AA fellowship). It is important to note that effective SSO involved therapy requires that both drinking and relationship issues be addressed during the course of treatment. Interventions that include minimal SSO-involvement (i.e., the SSO is merely a "witness" or is not actively engaged in the sessions) do not perform nearly as well as approaches that actively involve SSO's in all phases of treatment (McCrary, Stout, Noel, Abrams, Nelson, 1991). Ideal candidates for SSO's are those who are: (1) genuinely supportive of the client's sobriety, (2) highly valued by the client, and (3) not experiencing severe alcohol-related hardships themselves.

Studies on RET have reported favorable outcomes, regardless of theoretical orientation (systems theory, social learning theory, or AA philosophy), especially if positive ties have existed between partners prior to the initiation of treatment (O'Farrell, 1995; Sisson & Azrin, 1986; Zweben, Pearlman, & Li, 1988b; Longabaugh et al., 1995; Miller, et al 1998). Long-term results demonstrate the advantages of RET approaches over individual-focused alcohol therapy in terms of increasing length of stay (Zweben et al., 1983) and improving the marital relationship (O'Farrell & Fals-Stewart, 1999). Both factors are associated with sustaining sobriety. In addition, RET has been used effectively to enhance motivation for change, which is an important factor in reducing hazardous alcohol use (Miller, Andrews, Wilbourne, & Bennett, 1998). In summary, RET studies show superior results over control groups on a number of outcome measures including drinking, marital stability, motivation, and compliance.

Concerning mutual help, it is often unclear whether it is AA attendance or AA participation (e.g., having a sponsor, reading the Big Book, practicing the 12 steps, etc.) that becomes the most salient contributor to improved drinking outcomes (Tonigan & Toscova, 1998). Some researchers (Emrick, Tonigan, Montgomery, & Little, 1993) have proposed that active participation in AA (i.e., reaching out for help, having an AA sponsor, and doing the first step) is more important for sustaining abstinence than AA attendance. However, Project MATCH was unable to determine if AA attendance or AA involvement was more important for achieving sobriety. Both were found to be positively related to abstinence (Tonigan, et al, in press). The latter finding was replicated in the VA comparison alcohol treatment outcome study (Ouimette, Finney, & Moos, 1997).

Relationship Enhancement Therapy and Treatment Matching

A major finding in Project MATCH dealt with network support for drinking and AA attendance (Longabaugh, Wirtz, Zweben, & Stout, 1998). Individuals whose social networks were supportive of drinking fared better in TSF than in MET. Because AA attendance was encouraged or promoted, TSF patients were more likely to attend AA meetings than were their counterparts in MET. This was fortunate because involvement in AA seemed to "immunize" those TSF patients (i.e., those whose networks were supportive of drinking) from experiencing relapse. At the 3-year follow-up, among patients with higher scores on the network support for drinking variable, there was a 16% difference in the number of abstinent days (74% vs. 58%) between TSF and MET

conditions. These findings offer additional support for mutual help involvement. This may be why some researchers suggest that all clients be routinely encouraged (not required) to attend mutual help groups, especially those clients who lack a support system for abstinence (Westerberg, 1998).

Limitations of Treatment Outcome Studies Maintaining the Purity of the Treatment Models

A major limitation of treatments employed in clinical studies has been the necessity to maintain the purity or integrity of the treatment model. Greater emphasis has been placed on adhering to the integrity of the particular treatment (i.e., internal validity) than addressing the differential needs or capacities of individual clients. Unlike "real world" clinical settings, no attempt is made to integrate components of different models to address client problems. In other words, a person in a CBT skill building program would not have motivation enhancement, while a person in MET would not acquire skills training. The models described here are "pure" models, but the clients are not, and the process in reality is far more eclectic. For example, in Project MATCH, to maintain a distinction or contrast between the different approaches, motivational issues were emphasized only in MET, AA involvement was promoted mainly in TSF, and coping skills training was provided primarily in CBT. This means that individuals might have had the ability to improve their coping capacities in CBT, but did not have the requisite motivation to use them. Others might have needed the support of AA Fellowship following exposure to MET, but were not encouraged to participate in AA. In short, the MATCH treatment outcomes were limited by the need to reduce similarities across the three modalities. At the same time, traditional alcoholism treatment programs have not been responsive to the diverse needs and capacities of the broad spectrum of clients seen in these clinical settings (Tucker, 1999). The "one size fits all" approach has often been the primary method of treating individuals with alcohol problems. However, the evidence suggests that to best serve individuals with alcohol problems, a repertoire of interventions should be developed, tailored to the differential needs and capacities of a heterogeneous client population, and delivered in a manner that is responsive to the complex problems or issues confronting this group (Tucker, 1999). A phase model of matching may be the means by which this is accomplished-see below.

Need To Develop A More Comprehensive Theory Of Matching

One of the inferences drawn from Project MATCH was that the a priori primary hypotheses were overly simplistic (Project MATCH, 1998). The fact that few matching hypotheses were supported, and that some contrasts were in the direction opposite of what was predicted, suggest that current matching theory is under specified. A more adequate theory should specify the circumstances and conditions under which matching effects might appear. Thus, higher order a priori matching hypotheses await testing. Based on the findings emerging from Project MATCH, it is conceivable that individuals with a profile of high self-efficacy, high motivational readiness for change, and high social support for drinking would benefit most from CBT, whereas those with low self-efficacy, low motivational readiness for change and high support for drinking would benefit most from TSF. To adequately test the effectiveness of matching clients to treatment condition based on motivation/readiness to change status, a much wider continuum of interventions need to be evaluated.

Use of a Phase Model of Matching

Evidence has shown that individuals vary in patterns of alcohol use and related consequences over the course of relapse and recovery (Babor, Longabaugh, Zweben, Fuller, Stout, Anton, et al., 1994). Some individuals are able to sustain long periods of abstinence, while others may move in and out of sobriety over a lifetime. Some individuals may continue to experience serious negative consequences, despite achieving abstinence, while others may demonstrate major improvements in various areas of life following abstinence. Thus, a phase model of intervention matching (Howard, Lueger, Maling, & Martinovich, 1993) offers a heuristic model for testing methods of enhancing treatment effectiveness. In this model, a broad array of assessment measures is employed. They

deal with individual, interactional, and situational factors. These measures might address various domains such as motivational readiness, aspects of life functioning, vocational functioning, social/family/marital functioning, spirituality, physical functioning, emotional adjustment, and residential status. These measures are examined in terms of how alcohol use might be directly or indirectly associated with these different areas. For example, is marital conflict a precipitant or consequence of excessive alcohol use? Can we expect an improvement in the marital relationship to be followed by a reduction of alcohol use or vice versa?

Decisions about the kinds of strategies to be employed are based on an understanding of how these individual, interactional, and contextual variables interact with the treatment variables to produce good treatment outcomes. For example, in Project MATCH, the causal chain analysis for the social support hypotheses suggested the following: For those clients whose environments were highly supportive of drinking, positive change in treatment was predicated on consequent changes occurring outside of treatment—namely, AA involvement. MATCH treatments may have helped to initiate change, but AA participation was necessary to maintain or consolidate its benefits (Longabaugh, et al., 1998). Thus, in "phase model" terminology, symptom improvement (i.e., reduction in drinking) was followed by a change in the social environment (AA attendance) in order to achieve sobriety. In sum, a phase model might offer us some guidance to determine what kinds of strategies might address special problems linked with the drinking, and how best to deliver these strategies to maximize treatment benefits. Nevertheless, phase model matching requires an ongoing, dynamic process of assessment to work.

Pharmacological Interventions

Within the past eight years, the National Institute of Alcohol Abuse and Alcoholism (NIAAA) supported several studies involving the use of medications for the treatment of alcohol problems (Litten, Fertig, & Allen, 1999). One of the studied medications is *naltrexone*, a long-acting opioid antagonist that reduces craving caused by missing the reinforcing effects of alcohol (Volpicelli, Rhines, Rhines, Volpicelli, Alterman, & O'Brien, 1977; Volpicelli, Alterman, Hayashida, & O'Brien, 1992). The benefits of naltrexone for abstinence have been linked with a sustained period of abstinence and in preventing a "slipup" or "set-back" from turning into a full-blown relapse. In one study (O'Malley, Jaffe, Chang, Schottenfeld, Meyer, & Rounsaville, 1992), naltrexone was found to be superior to a placebo in increasing abstinent days when combined with either coping skills or supportive therapy. In the same study, the likelihood of returning to heavy drinking following an initial drink was lower for individuals who received 50 mg daily of naltrexone than for placebo treated clients (O'Malley, Jaffe, Chang, Rode, Schottenfeld, Meyer, et al., 1996). However, these benefits did not persist beyond the four-month follow-up after the 12 weeks of active treatment (O'Malley, et al., 1996). This raises important questions about how to extend the benefits of naltrexone so that: 1) longer periods of abstinence are achieved, and 2) relapses can be further delayed.

Another promising medication, *acamprosate*, is a glutamate antagonistic that addresses the negative effects of protracted withdrawal. Acamprosate has been shown to be effective in a multi-center, randomized control trial conducted in Europe. This large scale clinical trial (more than 4,000 patients) combined acamprosate with routine psychosocial treatment (cf., Aubin, 1996 ; Sass, Soyka, Mann, Ziegelgansberger, 1996; Soyka, 1996). Ten of the eleven treatment centers involved with the trial demonstrated superior results of acamprosate compared with the control group (Soyka, 1996). More specifically, acamprosate recipients had a total abstinence rate of 43% as compared to 21% for individuals receiving a placebo (Sass, et al, 1996). This translates into a 2-to-1 abstinence enhancement rate. Similar results were detected in the U.S. multi-site acamprosate trial. The acamprosate group had 70% abstinence days vs. 58% abstinence days for the placebo group. However, enthusiasm for these findings is tempered by several limitations. The European study suffered from a high attrition rate (60-70% of the acamprosate recipients terminated treatment prematurely), the lack of standardized criteria for diagnosing alcoholism, and the failure

to standardize and specify the psychosocial treatment. The U.S. study failed to monitor psychosocial treatment.

Future Directions and Conclusions

The empirical literature on alcohol use disorders suggests that no single treatment has been proven to be superior. Instead, it should be remembered that treatment options each have associated advantages and disadvantages. This module has examined several promising approaches to the treatment of alcohol use disorders. An additional strategy that warrants examination is the combination of approaches to maximize benefits and treatment efficacy.

Both clinical experience and research evidence remind us of the benefits gained by integrating pharmacotherapy and psychosocial interventions for the treatment of alcohol problems. Evidence suggests that combining a medication with a moderate intensity psychosocial intervention may produce outcomes beyond those generated by each of these approaches alone (Carroll, 1997). In a recent study, O'Malley and colleagues (1996) demonstrated the advantages of combining naltrexone with cognitive behavioral therapy. In an earlier trial (O'Malley, et al., 1992), subjects with no more than two days of heavy drinking during the last four weeks, and who took naltrexone at least 60% of the time, were identified as treatment responders. These treatment responders were randomized to one of two conditions over a six-month period: (1) continued administration of naltrexone, or (2) placebo. Subjects who had received primary care counseling (brief advice and support) during the earlier study, and were placed on the placebo, drank more often and had more heavy drinking days than did the naltrexone-treated subjects. However, it is interesting to note that subjects who received CBT in the earlier study were able to maintain treatment gains throughout the six-month period, regardless of whether they were assigned to a placebo or naltrexone condition.

Thus, medications such as acamprosate and naltrexone have the potential for reducing the unpleasant effects of craving during the first three months of treatment—a particularly vulnerable period for alcohol dependent clients—thus culminating in a sustained period of abstinence. This can help practitioners to work more successfully at increasing motivational readiness, enhancing self-efficacy, and mobilizing appropriate individual and social coping resources.

Social work practitioners need to gain familiarity with these new medications, along with the state-of-the-art techniques for motivational interviewing, cognitive behavioral treatment, and relationship enhancement therapies in order to better serve their alcohol dependent patients. Knowledge of these pharmacological and psychosocial methods should be integrated into the curricula offered by schools of social work, along with recent evidence demonstrating their utility with individuals who have alcohol use disorders.

Finally, it is important to address non-treatment as an option. This module has focused on various types of interventions designed to enhance motivation and treat alcohol use disorders. However, some clients do make changes without participation in professional intervention. The processes of change that individuals employ when making change on their own are remarkably similar to the formalized help processes discussed here (Sobell & Sobell, 1992).

The study of the natural history of change (Prochaska, DiClemente & Norcross, 1992) indicates that a certain degree of natural change or "spontaneous remission" does occur—possibly anywhere from 3-13 times as often as recovery through formal treatment. However, the term "spontaneous remission" is something of a misnomer, as it fails to convey the depth and breadth of the intensive effort required to make lasting behavior changes.

For those who do enter into formal treatment endeavors, it is possible that the most effective treatment is simply to facilitate natural change processes by:

- Removing barriers to change
- Instilling hope and optimism
- Addressing and resolving ambivalence
- Exploring solutions and problem resolutions

CLASSROOM ACTIVITIES

1. Have each student locate, review, and critically analyze a published research report concerning the effectiveness of either motivational interviewing techniques, cognitive behavioral therapy, relation enhancement therapy, or pharmacotherapy for individuals with alcohol abuse and/or alcohol dependency problems. Have students share their analyses.
2. Participate in a motivational interview process with a peer regarding something about yourself that you would like to change. (Select something that is not too personal or threatening for self-disclosure!) Then discuss what the experience or receiving this type of intervention did and did not achieve for you and your change effort. Also, incorporate your peer's critique of your application of motivational interviewing and try again.
3. Explore the range of alcohol-related treatment options available in your community. Identify the pros and cons, strengths and weaknesses, costs and benefits associated with each. Remember that you will need to be armed with this information in order to present clients with a full array of their treatment options in the negotiation process!

DISCUSSION TOPICS

1. What modifications of the motivational interviewing approach should be considered in order to apply them in a culturally competent fashion with diverse populations?
2. Discuss the ways in which the module contents relate to the Social Work Code of Ethics regarding client self-determination issues.
3. Discuss the principles of "spontaneous remission" and "natural change" as they apply to alcohol use disorders. What are the implications of these terms? Where can you find out more about how this happens, how often it happens, for whom it happens? Why doesn't it happen for everyone?

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