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Adapting Motivational Interventions for Comorbid Schizophrenia and Alcohol Use Disorders

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Abstract

The co-occurrence of schizophrenia and alcohol use disorders often leads to poor treatment retention and adherence. Both empirical research and statements of best practices suggest that interventions including motivational interviewing principles can enhance treatment engagement and improve outcomes. This article describes a set of exercises used within a motivational enhancement protocol for outpatients with schizophrenia-spectrum and alcohol use disorders. We describe how each exercise was tailored to the target population, and how it is designed to enhance motivation to change and treatment engagement. Examples from clinical transcripts are used to demonstrate how motivational interviewing is adapted to the cognitive, social, and environmental circumstances associated with schizophrenia.

Keywords

alcohol use disorder; comorbidity; motivational interventions; schizophronia

Psychiatric and substance use disorders often co-occur. Having any mental disorder increases the odds of having substance abuse or dependence, and comorbidity increases chronicity and treatment resistance (Kessler et al., 1996). Patients with comorbid disorders tend to be difficult to engage and retain in outpatient treatment (Broome, Flynn, & Simpson, 1999), and frequent relapses and hospitalizations are typical (Haywood et al., 1995; Swofford, Kasckow, Scheller-Gilkey, & Inderbitzin, 1996). Furthermore, co-occurring substance use disorders can exacerbate features of serious and persistent mental disorders, such as poor self-esteem, passivity, and lack of optimism for change. Carey (1996) suggested that adopting harm reduction goals for substance use and incorporating motivational enhancement techniques into treatment for patients with comorbid psychiatric and substance use disorders might improve outcomes. These notions have since been adopted in several statements of “best practices” for

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comorbid disorders (Drake et al., 2001; Minkoff, 2001; Ziedonis et al., 2005). Accumulating evidence indicates that interventions using motivational interviewing principles can increase initial treatment engagement (Martino, Carroll, O'Malley, & Rounsaville, 2000; Swanson, Pantalon, & Cohen, 1999), retention and attendance (Bellack, Bennett, Gearon, Brown, & Yang, 2006; Daley, Salloum, Zuckoff, Kirisci, & Thase, 1998), and substance use outcomes (Barrowclough et al., 2001; Bellack et al., 2006; Graeber, Moyers, Griffith, Guajardo, & Tonigan, 2003; Hulse & Tait, 2002).

Motivational interviewing (MI) consists of both "spirit" and technique (Miller & Rollnick, 2002). MI spirit is characterized by a therapeutic relationship that is collaborative, respectful, evocative, and client centered. A therapist encourages the patient's active participation, expresses optimism that change is possible, elicits rather than imposes reasons for and methods of change, and supports the patient's autonomy as an active change agent. A fundamental MI assumption is that people may be ambivalent about changing a problem behavior. Such ambivalence may be manifested by behavioral inconsistencies and perceived resistance if the patient is pushed to change either faster or in a direction other than she or he desires.

Consistent with the spirit of MI and the assumption of fundamental ambivalence about change are the following guiding principles for interventions: (a) express empathy, (b) develop discrepancy, (c) roll with resistance, and (d) support self-efficacy (Miller & Rollnick, 2002). Specific techniques characterize MI-style interventions. Strategies that can help to initiate and maintain discussion include open-ended questions, affirmations, reflective listening, and summaries (summarized in the acronym OARS). Additional MI strategies focus on evoking change talk, defined as language reflecting desires for, ability to, reasons to, need for, and commitment to change (summarized by DARN-C). Examples of these strategies include asking evocative questions, using an importance ruler, engaging a patient in a decisional balance exercise, asking for elaboration, and exploring goals and values (for additional details, see Miller & Rollnick, 2002, pp. 78–83). A specific form of change talk, namely statements reflecting commitment to change, is associated with successful reduction of substance use (Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003).

In sum, interventionists practicing MI accept patients' ambivalence about change and engage them in a process that allows them to identify their own goals for change by exploring how and why they are ambivalent. Often patients with comorbid disorders have very strong desires for life to be better, but have an equally strong reliance on substance use to cope with social and psychiatric problems. Because of cognitive impairments associated with serious mental illness, they may lack the understanding of cause-and-effect links between their substance use and psychiatric instability, and/or the skills to develop other coping strategies to replace substance use. They are essentially "stuck" in maladaptive behavior patterns. It is for these reasons that interventions using MI can be a useful part of the treatment toolbox for clinicians working with patients having comorbid disorders.

Carey, Purnine, Maisto, and Carey (2001) developed a four-session manual that translated MI spirit and techniques for use with psychiatric outpatients who have comorbid substance use disorders. The goal of the intervention was to engage patients in discussion about their substance use and to engage their active participation in treatment. This manual provided examples for adapting MI strategies to elicit change talk, for the purpose of developing harm reduction treatment plans. Adaptations designed to accommodate the cognitive, social, and motivational impairments often present in this population include (a) use of structured exercises that integrate both verbal and visual modalities of information processing, (b) willingness to use prompts, provide examples, and give lists of options as needed, (c) frequent review and reminders of past topics of discussion and assistance in making connections as needed, (d) reliance on concrete language and short-term goals, and (e) active seeking of opportunities to

support self-efficacy and personal agency relevant to the change process. An uncontrolled evaluation of the four-session individualized intervention confirmed that it was feasible and that completion of the intervention was associated with increased readiness-to-change, a higher level of involvement in treatment unrelated to the research, and reductions in use of primary substances of abuse (Carey, Carey, Maisto, & Purnine, 2002).

This four-session protocol continues to be developed and improved, and recently it has been modified into a 12-session motivational intervention for alcohol use. In this article, we describe the context and rationale for these modifications and the structure of the 12-session intervention. We next describe the key features of the intervention and provide examples of how MI techniques have been adapted for persons with schizophrenia-spectrum disorders, representing a wide range of cognitive and psychiatric function. Finally, we highlight lessons learned about using MI with severely and persistently mentally ill outpatients.

INTERVENTION OVERVIEW

The opportunity to implement and refine a revised MI came in the context of a National Institute on Alcohol Abuse and Alcoholism–funded (NIAAA) study evaluating the efficacy of naltrexone versus placebo for treating alcohol use disorders and schizophrenia-spectrum disorders (Batki, 2006). Persons with these co-occurring disorders tend to be noncompliant with medication (Olfson et al., 2000; Owen, Fischer, Booth, & Cuffel, 1996), but effective treatment with naltrexone requires consistent dosing. The study protocol designed by Batki and colleagues involves three dosing visits per week over a 12-week treatment phase, allowing direct observation of medication administration at each visit to ensure treatment adherence. The MI protocol was expanded to 12 sessions to correspond with the active phase of pharmacotherapy. The goals of the MI component were twofold: (a) to enhance engagement and attendance of participants in the naltrexone trial, and (b) to complement the pharmacotherapy with psychosocial therapy as recommended (Center for Substance Abuse Treatment, 1998). At this writing, 60 outpatient participants have been enrolled in the study.

Although the expansion of the original 4 sessions to 12 sessions was dictated by the research protocol, we have noted several advantages of the extended intervention. First, most patients tolerate the shorter sessions (20–30 min) better than longer sessions. Some patients with schizophrenia have a difficult time focusing for an extended period of time, especially if the session requires their active involvement, or if the topics discussed are sensitive or emotionally challenging. Second, a protocol with more sessions is advantageous because it takes some time for patients to learn how to respond to MI-style therapy. In this regard, patients may fail to volunteer information about their substance use so as not to disrupt their psychiatric treatment, perhaps fearful of disappointing their treatment provider or losing access to medications and other services. As a result, sometimes a few sessions are needed before a patient reveals much information about his or her relationship with alcohol and related thoughts and feelings. The third advantage of a longer protocol is that it allows for more repetition and elaboration of content, which are strongly advised when working with patients with schizophrenia (Bellack & DiClemente, 1999). Fourth, engaging a patient in a motivational enhancement intervention over time allows for better integration of real-life events into the discussions. Often the language and behavioral intentions expressed in a therapy session can be sincere but are undermined when the patient is reintroduced to a high-risk environment. Unrealistic optimism is more likely to be addressed adequately in a longer-term relationship as the intervening events of the week are discussed. The fifth advantage of a longer protocol is that the inevitable “bad day” is likely to have less of an impact on treatment. Persons with co-occurring psychiatric and substance use disorders experience considerable psychiatric instability and often have to deal with very stressful life events. Accordingly, it is beneficial to incorporate flex or crisis management sessions into a therapy protocol.

Table 1 contains a summary of the 12-session protocol derived from Carey, Purnine, et al. (2001) with associated exercises, which are explained in the next sections. Each session is designed to last 20–30 min, although when a patient responds positively to a particular topic a session can easily last longer. Flexible, nonstructured sessions can be used anytime they are needed; common reasons for doing so include (a) completing an exercise that was started but not finished the session before, and (b) addressing a patient's pressing concerns related to substance use that do not fit in a structured session. The latter type of flex session may be unstructured by a protocol-driven exercise, but the therapist always maintains an MI therapeutic style.

We recognize that the development of motivation for change and the ability to move from intentions to actions vary among individuals in any population of substance abusers. The intervention described here was designed initially to enhance motivation in persons who were ambivalent about the need (or their ability) to make a change. Nonetheless, some participants have entered the study ready to change and eager to move into action-oriented steps. When this is apparent, the protocol can be adapted in three ways. First, during the initial exercises, therapists can shift emphasis from creating discrepancies that motivate change to reinforcing the decision to change. Patients who are earnestly trying to reduce or quit drinking often benefit from being able to articulate their reasons, and getting support and affirmation for their efforts. Second, flex sessions can be used to individualize the intervention; they may be "saved" for use later in the sequence, to devote more time to developing and evaluating change plans in Next Steps I and II. Third, we have occasionally restructured the sequence to move the Next Steps I and II closer to the middle of the intervention, moving the Personal Strivings and even the Expectancy Scales review *after* Next Steps. In this way, the patient can make concrete steps toward change earlier, and the exercises that follow help to maintain motivation and momentum for change. Thus, even though this protocol was designed for patients early in the stages of change, it can be adapted to those who enter the intervention in later stages of change.

The next sections in this article describe several of the exercises used in our protocol. We illustrate how MI techniques have been adapted to the cognitive, social, and environmental circumstances of persons with schizophrenia and provide clinical examples of responses to the exercises. In each case, we suggest how each exercise has clinical utility for engaging active participation of outpatients with schizophrenia-spectrum disorders in alcohol treatment.

SESSION 1: IMPORTANCE AND CONFIDENCE SCALES

Description

These scales are modifications of the importance and confidence rulers described in manuals by Miller and Rollnick (2002, p. 53), Rollnick, Mason, and Butler (1999, p. 63), and Sobell and Sobell (1993, p. 82). Consistent with our original protocol, we use graphical representations of thermometers to represent importance and confidence. Both are labeled from 1 (not at all important/confident) to 10 (extremely important/very confident). Thermometers are familiar to most people and clearly represent higher versus lower amounts of an idea or concept. We use two sets of importance and confidence thermometers: one for quitting and one for cutting down. Our previous research indicated that these were separate constructs that could reflect two different levels of readiness-to-change (Carey et al., 2002). In our clinical study, some patients realized that quitting drinking is the best and perhaps only viable goal for them and assign that goal a high rating of importance; others indicated that quitting is less important to them at the present time than cutting down. Consistent with the spirit of MI, we afford choice to the patient whenever possible. When presenting both sets of thermometers, we ask the patient, "Which would you like to start with?" When a patient has strong opinions about a change goal, it is helpful to know about them early in an intervention, for example, "I've had

a mind to quit altogether, so I'll start with that one." The explanation of why a given thermometer is chosen can be revealing.

Occasionally a patient expresses no explicit preference, but after completing both scales it becomes apparent that higher importance and/or confidence ratings are given to one goal. Observing such a discrepancy, the therapist may encourage the patient to articulate the reasoning behind the different ratings. This exercise is useful for eliciting thoughts and feelings related to the goals of quitting versus cutting down.

How Does This Exercise Enhance Motivation for Change?

The utility of the importance and confidence scales can be summarized as follows. First, this exercise establishes early in the intervention that the therapist is interested in the patient's perspective. Taking time to ask a substance user why she or he wants to quit or cut down avoids making assumptions about the person's motives. Similarly, asking the person how confident she or he is in being able to cut down or quit if she or he decides to do so allows the person to express doubts or concerns. Second, the use of this exercise helps the therapist to identify and support the patient's change goal(s). Third, this exercise can help to elicit change talk. When the patient circles a 10 on the importance thermometer, a response such as "A 10 is pretty high. Why is quitting so important to you?" can result in a personalized and revealing explanation of why the person wants to quit. The following is an excerpt from an MI session with a 56-year-old woman with schizoaffective disorder and a 26-year history of alcohol dependence.

T: You put a 10 for quitting, that it is extremely important to you. Why?

P: I don't want to be a drunk. I want to set an example for my grandkids, and my kids. To break the cycle in my family.

T: What else?

P: I want to stay active and healthy. I want to have a legacy … to take them to the park and fishing, so they remember that instead of remembering me as a drunk.

T: What else?

P: To feel good about myself, to feel a part of the world. Like I can contribute.

This next excerpt comes from a session with a 58-year-old man with schizoaffective disorder and a 44-year history of alcohol dependence, and reveals how much clinical information can be elicited in a first session using these simple prompts.

T: Why is it extremely important to stop drinking now? Why is it 10, not 5, or 6 or 1?

P: Because it's time to stop now—I drank for 44 years.

T: Why is it time to stop now?

P: Because my body cannot take much more …

T: Health problems?

P: I do not have them right now, but …

T: So, you are concerned that as you age, drinking can have consequences on your health.

P: Yeah … When I was in programs (alcohol treatment) I did not really want to stop drinking. I was there because somebody made me go there—employer, court.

T: Sounds like when you had to go to the programs because of employment, etc., you were not fully committed. How is it different now?

P: My priorities are different now. I want to do things in a sober frame of mind. I do a lot of things when drunk and I have no enjoyment out of it.

T: So, you are in the time in your life when you want to enjoy things?

P: Yeah, I want to be a graceful old man.

T: What do you want to do sober?

P: Oh, things that sound crazy—like go to the zoo, go on a train ride up in the country. I would not do that sober—like drunk, always looking for a bathroom, not remembering. It was a pain in the neck …

T: So, you did not enjoy them.

P: I was not ready then to stop drinking.

T: So, you are ready now.

P: Yes.

T: I am just curious, besides the study, is there something that is going on in your life that helps you to be ready now?

P: I am looking for a companion … I am sure that a companion that I will select will not be a drinker. I am sure that I will not go into a relationship if I stay drunk. I am looking for a relationship. I do not think if I present myself as a drunk it is the way to start a relationship …

Even if the circled importance or confidence rating is not high, the use of MI strategies can yield change talk. For example, “You circled a 6 for confidence. Why are you a 6 and not a 1?” can elicit statements of self-efficacy and shift the focus from the person’s deficits to his or her resources. The following reveals that even a person with a moderate level of confidence can identify personal and social strengths that give her some optimism for change.

T: You put a 5 for confidence. Why a 5 and not a 1?

P: Well, I keep praying, and people do help me. So I feel the door is open to it.

If the importance or confidence rating is rather low, the therapist can try to elicit conditions that might facilitate change, as in the following interchange with a 41-year-old man with schizoaffective disorder and a 22-year history of alcohol dependence:

T: What would it take for you to get from a 3 to, let’s say, a 6?

P: I’m not sure. I can’t imagine not needing alcohol. I’ve been drinking since I was 14.

T: That’s a big chunk of your life. All of your adult life.

P: I guess I’d have to find another way to get relaxation and that good feeling. Something that really works to replace it.

Starting with these exercises and throughout the intervention, the interventionist establishes the MI style using the OARS techniques described earlier. It is likely that the client-centered approach of MI is unfamiliar to patients with comorbid disorders, who may be more familiar with a question-and-answer style. Thus, using these exercises with an MI style can set the tone for a more collaborative therapeutic alliance early in the intervention. Regular use of reflections communicates to the patient that she or he is heard, and having a willing listener encourages elaborations. Reflections can also serve a unique role for some patients who need help in

organizing their thoughts. To the extent that the therapist organizes fragmented or disorganized thoughts into a reflection, the patient has a better chance to represent his or her thoughts in a more coherent manner. Some patients even express relief to have their own ideas stated briefly in a reflection. Similarly, frequent use of open-ended questions communicates an interest in the patient's ideas, encourages articulation of thoughts that might otherwise go unexpressed, and sets a tone for the patient's active participation.

SESSIONS 2 AND 3: PERSONALIZED FEEDBACK

Description

Personalized feedback is well established as a motivational enhancement tool. Feedback is a key component of Motivational Enhancement Therapy developed for Project MATCH (Matching Alcoholism Treatments to Client Heterogeneity; Miller, Zweben, DiClemente, & Rychtarik, 1992), and in brief MIs provided to primary-care patients (Maisto et al., 2001) and to risky college drinkers (Walters & Neighbors, 2005). The information used for personalized feedback can be obtained from structured or unstructured assessments and can vary according to the goals of the intervention. The feedback provided in our protocol is limited and concrete; it can be classified into four categories of (a) drinks consumed per week, (b) risky drinking patterns and health, (c) money spent on alcohol, and (d) alcohol-related problems. The feedback on drinking patterns and health is presented together in one session, and then the feedback on money and problems is presented in a second session. This pacing limits the amount of new information discussed in a single session and avoids fatigue.

The personalized feedback form used in our intervention with patients with schizophrenia first presents the number of standard drinks per week the patient reported upon entering the study. Below that appears a pie chart documenting the drinking patterns of men or women (matched to the patient's gender) in the United States, based on national survey data (The COMBINE Study Research Group, 2003). After an explanation of what the pie chart represents, the patient is encouraged to locate where his or her baseline drinking level would be found on the chart. This usually triggers discussion about (a) how few men/women drink at the same high level, (b) whether the patient is surprised by how extreme his or her drinking is relative to other men/women, (c) how many people actually drink at very low levels, or (d) where the patient would *like* to be on the chart. There is considerable variability in how patients relate to normative information, based on how cognitively impaired they may be. However, usually patients can be engaged in one or more of the discussion points listed earlier. For some, this part can challenge the assumption that "everybody drinks like I do." For others who realize that they are heavy drinkers, it gives them a concrete goal with regard to reducing or eliminating drinking: "I want to be in the 1–6 drinks a week section." The following is an excerpt from a feedback session with a 45-year-old man with schizoaffective disorder and a 28-year history of alcohol dependence.

P: I was really shocked by the pie chart.

T: You found it pretty surprising.

P: I didn't think I drank that much. I really believed that I had cut down so much I was in the normal —percentage-wise—range. I really thought that I had cut down so much that I was normal. It was enlightening.

T: Enlightening.

P: Very enlightening.

T: What kind of information does it provide?

P: I mean if somebody was to ask me a couple weeks ago prior to … doing this, if someone were to ask me, I would say … Oh, I don't drink that much. Or else I would say something to the effect that, Oh, I just sociably drink … but according to the … (points to pie chart)

T: So the additional information … brought you some awareness; you are now aware of some information that you were not aware of before.

P: I knew that there had to be some type of category, but I didn't think that I fit into a category that was … such a small percentage of people.

T: So what do you do with this awareness now?

P: It just makes me rethink … how much I drink.

Next the therapist re-creates the last week of drinking on a 7-day grid on the form, and places this more recent drinking estimate on the pie chart. Reductions from baseline are noted and the movement through drinking levels toward the "goal" can be noted. Based on the last week's drinking patterns, the therapist flags potentially risky drinking, operationalized as > 21 drinks in one week for men (> 14 for women), and > 5 drinks (> 4 drinks for women) on a single day (The COMBINE Study Research Group, 2003). These are described as risky drinking patterns that often lead to problems. The therapist presents an illustrated list of common medical problems related to excessive drinking as a way to elicit understanding of physical consequences, and to elicit personal concerns. Patients often have experienced—or know someone who has (often a family member)—complications of excessive drinking such as ulcers, high blood pressure and other cardiovascular complications, elevated blood sugar levels, or cirrhosis.

In the next feedback session, the patient is asked to estimate how much money in an average week she or he spends or spent on alcohol. If drinking has recently been curtailed, the therapist uses a recent heavy drinking period to obtain this estimate, for maximum effect. The therapist prompts thoughts about the impact of this weekly expenditure on alcohol when a person has a very limited income, as illustrated in this session excerpt.

T: How is it for you to give up $25 each week?

P: It isn't easy. Sometimes my bills don't get paid.

The amount of money spent per week is then translated to dollars per year, using a colorful bar chart; the patient is prompted to think of what she or he could buy with that amount of money spent on drinking if she or he had it today. The following example is from a session with a 56-year-old woman with schizoaffective disorder and a 26-year history of alcohol dependence.

P: That's how much I spent for a year? Let me write it down …

T: What do you make of that?

P: I think it's outrageous … Oh, Lord … Can you imagine? … It's a lot of money … I could of bought me a pickup truck long time ago.

T: That's what you want for yourself.

P: I want it for my business … That's a shame … What a waste of money … I did not know that …

T: What would you like to do with this money?

P: Buy a pickup truck, some more tools for my gardening, a gas card, and a pair of new shoes.

The personalized feedback sheet contains a short list of alcohol-related problems that the patient had endorsed on a baseline measure assessing frequent problems relating to alcohol occurring in the last three months. After reminding the person that these were problems she or he had endorsed, each problem is mentioned, and the patient is asked to explain or elaborate on that concern, using open-ended questions such as “Can you tell me more about that?” or “How has that been a problem for you?” This prompting procedure is useful because sometimes patients cannot *recall* in detail the many problems they have experienced but are able to *recognize* and endorse them on the problems assessment. Thus, the structured prompting provided in the personalized feedback exercise allows for a more extensive discussion of the effects of alcohol use on their life than an unstructured prompt.

How Does This Increase Motivation to Change?

Including personalized feedback in an MI serves multiple purposes. Personalized feedback can (a) raise awareness of the extent of current consumption and problems, (b) develop discrepancy, and (c) elicit change talk. Each of these therapeutic goals will be discussed briefly. First, the Transtheoretical Model suggests that awareness raising is one of the processes of change associated with movement from precontemplation to contemplation stages of change (Prochaska, DiClemente, & Norcross, 1992), thereby initiating the process leading to behavior change. In fact, the literature on assessment reactivity provides examples of behavior change prompted by participating in simple assessments (Clifford & Maisto, 2000). Reviewing assessment information collaboratively provides additional opportunities for people with severe mental illness to focus on their self-reported behaviors and to organize their thoughts and feelings about drinking and its consequences.

Second, developing discrepancy is a fundamental principle of motivational interventions; in this context, discrepancy means “to create and amplify, from the client’s perspective, a discrepancy between present behavior and his or her broader goals and values … a discrepancy between the present state of affairs and how one wants it to be” (Miller & Rollnick, 2002, p. 38). In the course of presenting the feedback described here, our team has noted multiple types of discrepancy may be triggered (a) between self and others (if the pie chart indicates that most people drink less than the patient), (b) between real self and ideal self (if the person acknowledges that the desired level of drinking is not the current level of drinking), and (c) between past self and current self (if the person had previously been drinking at much higher levels than presently). Additional forms of discrepancies that can be evoked by this exercise are (d) between the desire to be healthy and an awareness of health risks associated with continued excessive alcohol use, (e) between money available to spend on other things when drinking versus not drinking, and (f) between a state of having multiple life problems due to drinking and the desire to be happier and more content. At present, there is no reason to believe that any type of discrepancy produces better outcomes than others, nor that triggering more types produces more motivation. However, it may be helpful to the clinician to recognize these forms so that she or he can try to cultivate one or more (appropriate to the patient’s circumstances) in the course of a personalized feedback exercise.

Third, this personalized feedback exercise provides several opportunities to elicit change talk. Although not every patient will be equally affected by each form of personalized feedback, multiple sources of feedback are provided so that if one form fails to generate concern or develop meaningful discrepancy, then other forms may catch the person’s attention.

In sum, personalized feedback is grounded in the patient’s self-reports and emphasizes the personalized nature of the intervention. It serves to help the patient think about his or her own behaviors, elaborate on his or her thoughts and feelings regarding alcohol consumption and consequences, and evaluate them in new ways. Importantly, this exercise provides multiple

opportunities for the patient to express dissatisfaction with the status quo and articulate reasons for cutting down or quitting drinking.

SESSION 4: DECISIONAL BALANCE

Description

Decisional balance exercises are based on the theoretical notion that sound decision making comes from a thorough consideration of the advantages and disadvantages of each option (Janis & Mann, 1977). In MIs, decisional balance can be used to explore ambivalence about change, and to develop discrepancy between the advantages (pros) and disadvantages (cons) of continuing to drink (Center for Substance Abuse Treatment, 1999; Miller & Rollnick, 2002). Carey and colleagues have demonstrated that decisional balance content can be elicited from outpatients with comorbid disorders in both unstructured (Carey, Purnine, Maisto, Carey, & Barnes, 1999) and structured formats (Carey, Maisto, Carey, & Purnine, 2001).

Our exercise starts with a graphical illustration representing a balance (alternatively described as a “see-saw”). The concept of ambivalence is illustrated in terms of feeling two ways about drinking—sometimes leaning more one way and other times leaning more the other way. The participant is shown a two-by-two grid, with the top two boxes labeled “Good things about drinking” and “Not-so-good things about drinking,” and the bottom two boxes labeled “Good things about drinking less or quitting” and “Not-so-good things about drinking less or quitting” (see Table 2). To optimize positive expectancies about the task, the patient is told that people usually find this worksheet interesting, and the therapist offers to write the ideas in the boxes so that the patient can focus on his or her thoughts. The sheet can be folded in half horizontally for this part of the exercise, so that only the top two boxes are visible. This can help to restrict the patient’s focus and minimize the chance that she or he will feel overwhelmed by the task demands.

The therapist first prompts the patient to state the good things about drinking. If she or he is reluctant to admit that there is anything good about drinking, the therapist can use normalizing prompts such as “Every drinker must have some things they like about drinking, or they wouldn’t ever do it.” If necessary, the therapist probes to generate a couple of entries into this box, and asks for elaborations or uses reflections if the patient’s idea is not expressed clearly. Next, the patient is prompted to list the not-so-good things. The prompt is framed this way to avoid language such as “bad” or “negative” or “problems,” which may sound judgmental and discourage participation. The therapist writes down as many individual entries as possible, again asking for elaborations and/or clarifications to be sure that she or he understands the point the patient is making. “Why” or “how” questions can be useful to help to “unpack” cryptic statements and elicit relevant details from the patient. With the goal of generating an ample sampling of alcohol-related negative consequences, the therapist may prompt with additional problems that had been raised in previous discussions, using language such as “I remember you saying that …” Patients who speak abstractly or vaguely sometimes must be prompted repeatedly to articulate what is undesirable about drinking, such as in the following example with a 43-year-old man with schizophrenia, persistent thought disorder, and a 34-year history of alcohol dependence:

> T: All right, how about let’s switch gears now and talk about the not-so-good things about drinking.
>
> P: Well … sometimes I’m a binge drinker.
>
> T: So you … what would be a not-so-good thing about being a binge drinker?
>
> P: If someone said something to me that I had done something wrong, which I didn’t … then I would so that’s when I would drink.

T: OK, but when you drink, what's not good about drinking?

P: When I drink I'm not myself … I drink too much I … overdo it.

T: So when you start drinking you have a difficult time monitoring how much you drink?

P: Yeah.

T: OK … so you said binge drinker … So let me know if I have this right, when you start drinking you think that you want to have a certain amount … but once you start drinking you don't gauge yourself and you just continue to drink.

P: Yeah.

T: OK … and binge drinking is not a good thing for you.

P: No.

T: Why is that?

P: Because I end up drinking more than I should be drinking.

T: More than you should be drinking.

P: I would … keep buying and sometimes I would consume more … I would probably go get a keg or 4 or 5 cases … and just drink it.

T: And what's not good about drinking that much alcohol?

P: It makes my diabetes work harder … making it worse.

T: So it makes your diabetes worse. OK, and what do you mean by that, how does it make it worse?

P: It affects my liver.

T: OK.

P: It makes my liver work harder than it's supposed to.

T: OK, so it makes your liver work harder. So you have some health concerns here.

P: Yes.

Before unfolding the decisional balance form, the therapist and patient can stop to assess the information already inserted into the top two boxes. Affirmations for the patient's efforts can be offered, and the patient can be invited to share his or her observations about what has been written down. Any explicit statement of ambivalence or mixed feelings about drinking can be acknowledged by the therapist as understandable. More commonly, however, the patient notices that there are many more entries into the not-so-good-things box than in the box containing good things about drinking. Change talk is frequently offered by the patient, such as "What you are looking at here is why I'm trying to change my habits." The therapist can reflect upon and/or summarize this state of affairs before going on to the second half of the exercise. Table 2 contains representative entries into a decisional balance grid from patients in our study.

The bottom half of the page prompts the patient to think about the benefits or advantages of cutting down or quitting. These are the *approach* rather than the *avoidance* reasons for changing and can often reflect the type of person the patient hopes to be. The therapist can use reflections, ask for elaborations, and offer affirmations in an attempt to encourage deep processing of these items. For example, this excerpt is from discussion of the bottom two decisional balance boxes with a 40-year-old man with schizophrenia and a 4-year history of alcohol dependence:

T: What are some good things about making changes?

P: I have to start shaping up a positive image of myself … I feel like a fool for telling you that I was drinking since I was 13 … I need to improve my self-image …

T: So, if you make changes in your drinking it would help you think better about yourself.

P: Yeah. …

P: Change is difficult to make; it involves struggle …

T: So, you have to struggle to make changes.

P: I may have to struggle to change … I am afraid of going back to drinking. But I am afraid of the person I am gonna be if I do not drink …

T: What are those things you are afraid of?

P: It's been years since I've been serious about myself …

T: What could it lead to if you are serious about yourself?

P: I am afraid it's gonna kill my pleasure …

T: Somehow being serious about yourself is not associated with pleasure.

P: Yeah, that's what it is.

The last box prompts the patient to articulate what might be the costs or losses if she or he were to be successful and cut down or quit. This may be challenging for some patients who are cognitively limited and cannot imagine the full range of consequences if they were to make a change. However, most people can generate some entries that reflect a sense of loss of a familiar coping strategy or fears of new ways of being (see sample entries in Table 2). The discussion generated by this box can be extremely productive with regard to identifying targets for treatment planning. For example, the following excerpt comes from a session with a 39-year old woman with schizoaffective disorder and a 22-year history of alcohol dependence.

P: There's a person that comes when I drink and that person would probably have to die if I quit drinking, so …

T: So that uninhibited person, that more outgoing person may not appear as much.

P: Uh-huh. Exactly.

T: And how would that be for you?

P: It would be difficult. It's like losing—It's difficult to let a part of you die even when sometimes it's necessary to let that part of you die. You want to hold on to this part, you don't want to let this person in you die but sometimes it's the only choice. So, it's just difficult.

T: Maybe you could hold on to this more uninhibited, outgoing person without alcohol.

P: I think with time that would happen. I think after a few months, the longer I went without alcohol, the more I would be able to be vivacious and outgoing without it. But it would take some getting used to not having that [alcohol] to change me, my personality. And eventually I would be every bit as outgoing as I was with the alcohol. But, it's a matter of time, so waiting—getting there is somewhat difficult sometimes.

T: So getting there could be the hard part, but you wouldn't have to let go completely of that person that you like being, that confident person.

P: I don't think so, maybe not entirely, no, I might be able to just let go of the bad qualities of that person, you know, and keep the good ones maybe.

T: So, some of the good qualities of that person would be what? I mean, what's the best thing about that person?

P: Full of life. And optimistic. And very loving.

T: Right. So that's something that would definitely you would want to keep. And the things that you would want to let go are what?

P: My lack of conscience when it comes to sexual relationships. You know, kind of a promiscuity, kind of a lack of inhibition.

T: Uh-huh. So that would go out the window?

P: Not necessarily …

T: It would be toned down, maybe.

P: Maybe toned down, just toned down a little bit.

Our therapists occasionally make modifications to the decisional balance exercise to accommodate cognitive limitations. One option is to divide the exercise over two sessions, if completion of the top two boxes (good things and not-so-good things about drinking) proves to be taxing for a patient. If the decisional balance is completed over two sessions, the second session may be started with a brief review of the person's entries in the top boxes before proceeding to consider the good and not-so-good things about cutting down or quitting. Another option is to forgo the two-by-two grid and write individual entries on index cards that are placed in four piles. This strategy allows a person to manipulate the cards, and see large versus small piles, which is an alternate way to visualize the sense of imbalance in one's life created by drinking.

How Does This Enhance Motivation?

Engaging in a decisional balance exercise provides a structured method of organizing and integrating information. Because this exercise is so structured and lends itself to visualization in the form of the balance (or even more simply, which box has the most writing in it), all but the most disorganized patients have been able to complete it. Furthermore, many patients refer to the exercise with the boxes as a particularly informative part of the intervention. Not only does it maintain a focus on the patient's idiosyncratic concerns, but seeing the pros and cons of drinking and changing written out also seems to be a useful reminder of all the reasons why patients are trying to quit or cut down. At patients' requests, we have made copies of the decisional balance grid for them.

Motivationally, the decisional balance accomplishes several goals. First, it prompts cause-and-effect thinking, which patients with comorbid psychiatric and substance use disorders often do not express regarding their alcohol use and its consequences. Second, the decisional balance exercise acknowledges ambivalence about behavior change, both publicly to the therapist and privately to the patient him- or herself. It is then possible to consider whether the pros outweigh the cons or vice versa. Third, it elicits statements of problem recognition and a broad range of change talk. Fourth, the decisional balance exercise helps to develop discrepancies, which can instigate motivation for change. Two forms of discrepancy frequently observed are (a) between the pros and cons of continuing to drink, and (b) between the advantages of continuing to drink and the advantages (or gains to be achieved) of quitting or cutting down. Although it does not always occur, the typical imbalance in the entries into the top two boxes of the grid makes it very clear that the costs of continuing to drink outweigh the benefits. The therapist can help to develop this discrepancy by using the balance metaphor and stating how, if the patient continues

to drink as she or he does now, the "weight" seems to tip toward the "not-so-good things." In addition, once the grid is completed, the therapist can draw attention to the two boxes on the left (cf. Table 2), asking the patient to comment on the advantages of continuing to drink relative to the advantages of quitting/cutting down.

A fifth function of the decisional balance exercise is that listing the advantages of quitting/cutting down draws attention to what the patient has to *gain* (i.e., something to work toward). This perspective complements the all-too-frequent focus in addictions treatment on alcohol-related problems that the patient wants to avoid. Finally, as mentioned before, this exercise leads the patient to consider the content of the last box, which can be construed as self-identified barriers to change. Although it is possible to elicit the patient's perspective on concerns, fears, and roadblocks associated with change in other ways, the decisional balance exercise reliably prepares the patient to articulate these. A therapist can be more helpful and proactive with treatment planning if she or he knows this information. For the change in alcohol use to be maintained successfully, these concerns must be either challenged or overcome.

SESSION 7: PERSONAL GOALS

Description

The personal goals exercise is based on the personal strivings assessment (Emmons, 1986), which was adapted to the substance use context by Simons and Carey (2003). Personal strivings are defined as goals that a person typically tries to achieve through his or her behavior. When personal strivings conflict with substance use, people report less use and fewer problems (Simons & Carey, 2003). We have adapted and simplified the exercise assessing goal-substance use conflict for treating individuals with co-occurring mental illness and substance use disorders (Carey, Purnine et al., 2001).

The exercise is introduced as follows: "Often people have goals in their lives—good things that they hope will happen to them in the future. Today it might be helpful to talk about your goals. I can write them down on this paper, so we can talk about them." The worksheet that is replicated in Table 3 can be folded vertically, so that only the goals column is visible during this first elicitation part of the exercise. As shown in Table 3, patients are prompted to think about "What are some things you want in the near future?" where near future is defined as the next few weeks or months. If the patient has difficulty thinking of goals, she or he is prompted with "Think of something you would like to get or do, or something you value and would like to keep." The goals of interests are specifically defined as something other than substance use goals, to expand the conversation beyond drinking alcohol with the intention of showing how alcohol use fits into the larger context of life goals.

The patient is prompted to generate 2–4 goals and to explain the importance of each goal. Then, she or he is prompted to consider "If you were to cut down or quit drinking, what effect would that have on reaching your goal?" The page can be unfolded and a check placed by one of the following options listed in the second column of Table 3: it would be easier to reach this goal, it would make no difference, and it would be harder to reach this goal. The interventionist is prepared to ask the patient to elaborate if necessary, so that she or he articulates clearly the relationship of continued drinking to goal attainment. Table 4 contains a set of representative personal goals generated by the patients in our current study. As is apparent from these examples, nearly all of the goals generated by this exercise would be *easier* to reach if the person were to quit or cut down on his or her drinking. As this pattern becomes apparent, the patient may remark on it, or the therapist can reflect on the fact that things that are important to the patient are much more likely to happen if and when changes in drinking occur.

How Does This Affect Motivation?

This exercise serves several functions within a motivational enhancement intervention. First, it continues to reinforce the philosophy established by other MI techniques that the patient is an important *collaborator* in the change process, and that the therapist can only be helpful if she or he understands what is important to the patient. The goals exercise differs from the others in that it is not alcohol focused, and the process of completing this reinforces an awareness that the patient is not defined only as a drinker, but also as a person with other goals, values, and needs. Second, consistent with other values clarification exercises (Miller & Rollnick, 2002), this exercise is designed to *develop discrepancy* by showing how drinking can be inconsistent with other life goals. Third, the process of identifying personal goals serves to validate the patient as a person, and communicates a confidence that some of these goals can be achieved. Thus, it provides opportunities to *support the patients' self-efficacy*, or their perception of themselves as capable people who can make changes in their lives. Many persons with severe and persistent mental illnesses have difficulty thinking of goals; they may exhibit difficulties with goal-directed activity due to avolition and anergia (Weinberger, 1987) and physical and social anhedonia (Blanchard, Mueser, & Bellack, 1998). However, the goal-setting exercise can be made very concrete and manageable, thereby setting the stage for the drinking reduction goals that will be addressed next.

SESSIONS 8 AND 9: NEXT STEPS

Description

The intervention activities described thus far have focused on enhancing motivation to change and eliciting change talk. The last set of exercises focuses on defining goals for change and eliciting commitment language. The Next Steps exercise is based on an extensive literature on the positive effects of goal setting on health behavior change (Strecher et al., 1995). Goals are most effective when they are specific, challenging yet attainable, and proximal (Miller, 1985). Furthermore, goal attainment and the resulting enhancement of self-efficacy is more likely when people are involved in selecting their goals (Bandura, 1997). These principles are followed as interventionists lead patients through the Next Steps exercise.

Next Steps is divided into two parts, so that each section is manageable within a 20–30-min time frame. Part I focuses on goal setting and identifying concrete steps to take that will help to achieve the goals. Participants are prompted to think of up to three alcohol-specific goals they would like to achieve in the next 30 days. Often the preceding sessions have provided ample opportunities to identify goals related to quitting and/or cutting down on alcohol use; however, when a patient has difficulty spontaneously generating goals, examples are provided, such as (a) drink less often (specify frequency); (b) drink smaller amounts (specify quantity); (c) set a drinking limit (never drink more than x drinks at a time); (d) stay sober for X days in a row; or (e) not to drink under certain conditions (specify). The therapist usually takes an active role to help the patient identify or reframe goals to be specific and attainable. After one to three short-term goals have been identified and written on the worksheet, the patient is asked to explain the reasons why these goals are important to him or her (see illustration in Table 5). This step is designed to enhance commitment to the goals through the process of making public statements about their importance. The final component of Next Steps Part I is a listing of "the steps I plan to take to reach my goals." Consistent with the evocative spirit of MI, the patient is asked to generate actions she or he can take to increase the chance that goals will be reached. However, if the patient has difficulty identifying interim steps that can support goal attainment, she or he is provided with several choices to consider in a menu of options. The menu consists of several generic activities that are likely to support alcohol reduction goals but that can be tailored to individual situations (e.g., avoid risky situations, go to self-help meetings, spend more time with sober friends, choose to spend time in healthy activities); this menu can be

supplemented by options suggested by the therapist that are likely to support the patient's self-identified goals.

The following is an example of steps identified to support the goal "to drink once per month" generated by a 40-year-old man with schizophrenia and a 4-year history of alcohol dependence:

T: What steps will you take to achieve this goal?

P: How can I achieve that?

T: Yeah, what kind of steps do you need to take to achieve that?

P: Entrust a certain amount of wine to my father so I only have it when I am there … because if there is a bottle of wine sitting there in my fridge, I might as well drink it.

T: So you will give the wine to your father so he has control over it.

P: Yeah.

T: What other steps you can do to drink less?

P: I can associate more with friends who do not drink.

T: How would you do that?

P: I have a friend who does not drink at all. I can call him. We can go places where people do not drink—to the mall, to the movies.

Next Steps Part II is generally introduced by a brief review of the previously identified goals and why these goals are important. The therapist can recognize steps taken toward goals and provide social reinforcement for efforts toward change. Often the days between sessions have revealed both successes and failures in patients' efforts. In order to better prepare the patient to achieve success in a short-term goal, Next Steps Part II proceeds with discussion of barriers to change and ways that people can help the patient to achieve his or her goals (see Table 5). First, barriers are introduced as "What are some things that might interfere with my plan?" This exercise is designed to help the patient to anticipate the psychological, social, or environmental conditions that can prevent him or her from reaching the identified alcohol-reduction goals. If the patient has difficulty thinking about barriers, the therapist might be able to use some of the ideas generated in the last box of the decisional balance exercise (not-so-good things about quitting or cutting down) to suggest potential barriers. Often, this leads to discussion of basic stimulus control techniques, such as when patients state that "having money in my pocket" or "someone coming over with a six-pack" would make it difficult for them to stick to their goals.

When discussing barriers, as in several other places throughout the intervention, opportunities arise for teaching moments that are linked to patient statements. The therapist takes advantage of such an opportunity to share information relevant to recovery in the following interchange. The teaching moment flows from a discussion of barriers to the goal of "exercising regularly."

T: What are some things that might interfere with your goal of exercising regularly?

P: Depression—it makes me not want to do anything.

T: What else?

P: Not getting proper nutrition. I noticed that when I exercise, I am starving, so if I do not eat before I go to bed, the next morning I do not feel like exercising at all.

T: Do you know what else could happen if you do not eat right? [patient shakes head] Your craving for alcohol could increase.

P: Really?

T: Yes. If somebody is hungry, the sugar level drops.

P: So your energy drops.

T: Right, and your craving for alcohol gets stronger.

P: Really?

T: Yes. So if somebody is hungry, there is a chance this person would crave alcohol more.

P: Really? I never knew that.

Some barriers require developing a coping plan, such as when patients identify high-risk situations such as "spending a lot of time alone" or "becoming anxious or upset and needing a way to calm down." Problem solving around overcoming barriers to change should be tailored to patients' abilities and circumstances. Often valuable are reminders that can be present during high-risk situations to remind a person about alcohol reduction goals; these have taken the form of writing down the patient's reasons for not drinking on a card to be kept in a shirt pocket, or posting a list of alternate activities visibly on the refrigerator.

Second, Next Steps Part II prompts patients to consider ways that other people can help them to meet their goals. This step de-emphasizes "go it alone" thinking, often described as relying on willpower, and instead emphasizes using social resources to supplement self-management efforts. Often this is an unfamiliar concept for patients who can be socially isolated, and who may have social skills deficits that prevent them from having extensive social supports. Some individuals can readily identify ways that family, neighbors, fellow Alcoholics Anonymous (AA) members, or sober peers can help them; however, for others, their networks may be limited to their therapist and/or case manager. Patient-generated suggestions are encouraged, such as in the following excerpt with a 40-year-old man with schizophrenia and a 4-year history of alcohol dependence.

T: What kind of things will interfere with your goal?

P: The home I am living in.

T: How will the house interfere?

P: It's like a cave … writings on the walls and [landlord] is a caveman.

T: So, it is emotional feelings you get from the house that …

P: … that causes me to drink. I have to move out.

T: Who can help you with that?

P: I guess to have better relationship with my therapist … Put things in perspective instead of just talking about [landlord].

T: You are planning to take a lead with what you need.

P: Yeah, my needs—I like that! Put my needs out there.

Alternately, the therapist can use information gleaned from previous sessions to suggest social supports that may exist but are not seen as such by the patient. For example,

T: Who can help you with this goal—to exercise regularly?

P: Nobody. It's just me, I have no friends …

T: What about your girlfriend who praised you in the past, and said, "What a man"?

P: Yeah, she still does praise me. She even praises me more for not having anxiety attacks. She does help me.

Because use of social supports tends to be unfamiliar, we provide a list to help patients identify some additional options for how people might be able to assist them in their recovery efforts. These include the following: help me get to meetings and therapy sessions, talk to me about how things are going, don't offer me alcohol or pressure me when I say no, help me to learn my triggers and avoid them. Similarly, developing plans to overcome barriers and mobilize social supports sometimes leads to opportunities to incorporate other therapeutic techniques. For example, brief role-plays can be productive ways to identify aspects of the change plan that could inform treatment planning.

How Does This Affect Motivation?

The focus of the Next Steps exercise is consistent with key MI activities described by Miller and Rollnick (2002), such as strengthening a commitment to change and developing a change plan. These exercises are in accord with the collaborative spirit of MI, because both change goals and the steps identified to reach them are client generated. The therapist's role is to help the patient to articulate his or her action plan, and to help shape the plan so that it is manageable within a few weeks' time. This often involves helping to break down long-term goals (e.g., to become a sober person) into specific short-term goals (e.g., to abstain from alcohol over the next weekend). Optimally, the identified goals and/or steps will create an immediate focus for behavior change efforts, so that specific steps can be taken before the next session (e.g., make a phone call to a friend, locate an AA meeting schedule). Whenever patients cannot self-generate steps toward goals, barriers, or ways that others can help, they are presented with a menu of options from which they can choose those that might work for them.

Research indicates that statements representing a commitment to behave differently are the best predictors of reductions in substance use (Amrhein et al., 2003). In our experience, behavioral intentions to limit or avoid alcohol use often fail to translate into behavior because of unanticipated barriers or failure to plan for success. The Next Steps exercise provides the patients with *modeling* on how to learn from past mistakes and to exert some control over their physical and social environment. Collaboration with the therapist on planning for barriers and mobilizing social supports can enhance positive expectancies for change and provide opportunities to *support self-efficacy*.

SUMMARY OF LESSONS LEARNED

Based on our experience adapting MI exercises for persons with comorbid schizophrenia-spectrum and alcohol use disorders, we offer the following recommendations to clinicians.

1. We advocate using the collaborative, respectful, evocative spirit of MI to guide interactions intended to enhance therapeutic engagement and adherence. This approach is consistent with trends supporting empowerment and self-determination in the treatment of persons with severe and persistent mental illness (Corrigan, 2002). In our experience, MI-style interventions can be adapted to most of the heterogeneous presentations characteristic of the schizophrenia spectrum, using the suggestions offered throughout this article. At the same time, we recognize that the optimal degree of structure versus client-centered technique in sessions will vary depending on the intrusiveness of symptoms of psychosis or thought disorder. As articulated by Bellack and DiClemente (1999), the cognitive and communication deficits characteristic of schizophrenia may require that an MI-style intervention be adapted to the abilities of the patient. The presence of active, often chronic, psychotic symptoms should not preclude consideration of MI techniques with stable outpatients.

Therapists can selectively reflect upon the relevant aspects of patient speech and redirect tangential statements back to the topic of drinking. Although it is tempting to forgo efforts to use MI with patients who are very concrete or display long response latencies, we have found that slowing the pace to wait for patient input is often rewarded. Similarly, soliciting patient input (even if it is limited) and providing some degree of choice (even if the options are provided by the therapist) can occur even when a fairly structured therapy is dictated by clinical considerations.

In our experience, the essential prerequisite for using MI is the ability to establish rapport and a shared clinical focus. When this has not emerged naturally out of the initial exercises, we have employed general MI spirit and technique in the context of brief, unstructured flex sessions with the aim of uncovering topics of interest to the patient to facilitate future conversations. Only two clinical presentations have presented significant challenges to our MI therapists. The first is the patient whose presentation is dominated by negative symptoms, such as poverty of speech and extreme passivity. In its strategic use of open-ended questions and reflections, MI relies on the power of language to enhance motivation for change (Amrhein, 2004). Thus, its therapeutic power is limited if the patient is verbally unproductive and/or cannot respond to reflections. The second is the patient whose thought disorder precludes a shared focus of conversation. Although it is rare that a patient enters a research protocol in a florid psychotic episode (due to the selection process inherent in obtaining informed consent), patients who are highly circumstantial and/or characterologically antagonistic have been challenging. The common theme in these difficult cases is the inability to engage a person verbally and failure to develop collaboration around a mutually agreeable topic of conversation.

MI as described here is designed to improve treatment engagement and adherence, and we encourage clinicians to consider the use of MI to advance these goals. MI would not be appropriate for clinical situations such as crisis management or reality orientation. MI is but one of the tools in a clinician's armamentarium.

2. Patients with comorbid disorders may talk about recovery efforts using language that has been learned from previous courses of alcohol treatment. When aphorisms such as "Just take it a day at a time" or "People, places, and things" emerge, MI techniques are quite useful to encourage elaboration and to ensure that the patient personalizes the meanings of such statements. Asking for a patient to explain what an AA slogan means or how it applies to him or her may reveal only a surface understanding of the concept; this presents an opportunity to help the patient make the link between the general principle and specific ways to apply it in his or her life.

3. Assessment feedback and structured exercises are useful for initiating discussion about substance use. These tools provide some structure around which to organize sessions and effectively trigger associations that can be explored in a less structured manner. Patients with schizophrenia or other major mental illnesses will vary in how comfortable they are in unstructured discussion about difficult aspects of their lives. When efforts to engage a person using only MI-style interviewing techniques (open-ended questions, reflections) result in limited success, we find that introducing a structured exercise often leads to productive conversation. Patients who have completed our protocol often specify the decisional balance and personal goals exercises as particularly helpful to them, and request copies of the worksheets to serve as concrete reminders.

4. We have also learned that it is relatively easy to elicit change talk from patients with comorbid disorders and multiple life problems. However, it is harder to achieve behavioral follow-through. Patients with severe and persistent mental illnesses may

have particular difficulties translating motivation into behavior change. Statements of verbal intentions to change may not generalize to behavior change if patients have skills deficits and/or low levels of self-efficacy. The exercises described herein reliably identify areas for treatment planning. Thus, we recommend using motivational enhancement techniques in concert with behavioral contracting and skills training to enhance alcohol reduction outcomes.

Empirical support for our first two recommendations comes from the growing body of controlled research demonstrating the efficacy of MI-based interventions for persons with comorbid schizophrenia and substance use disorders (Barrowclough et al., 2001; Graeber et al., 2003). Although this protocol has been tailored for out-patients with schizophrenia, research evidence supports adaptations of MI to more heterogeneous psychiatric inpatient and outpatient samples (Carey et al., 2002; Martino et al., 2000; Swanson et al., 1999) as well. With regard to the third recommendation, the incremental validity of the structured exercises is testable using dismantling designs (Lambert, 2003). As for the fourth, the value of merging MI and skills training is also a testable question, as is the optimal timing of transitions from client-centered, motivational enhancement techniques to more structured behavioral approaches. These represent promising directions for enhancing efficacy of alcohol use interventions with this population.

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Table 1

12-session motivational enhancement intervention

Session	Topic	Activity
1	Introduction to intervention	Administer Importance and Confidence Scales for (a) quitting and (b) cutting down
2	Personalized Feedback, Part I	Review self-reported use patterns with normative comparisons, and health risks
3	Personalized Feedback, Part II	Review money spent and alcohol problems
4	Pros and Cons of Use and Change	Complete Decisional Balance grid
5	Flex session	
6	Review	Readminister Importance and Confidence Scales
7	Personal Goals	Complete Personal Goals worksheet
8	Next Steps, Part I	Generate alcohol use/reduction goals, and concrete steps to reach them
9	Next Steps, Part II	Identify barriers to change and social supports available to help
10	Review	Discuss progress towards goals; revise as needed
11	Flex session	
12	Summary	Review progress and key activities; discuss plans to continue progress

Table 2

Sample decisional balance exercise

Good things about drinking Calms me down Takes away loneliness Takes away worry temporarily	**Not-so-good things about drinking** Leads to compulsive drinking Medicine doesn't work Afraid to take medicine Isolation Unable to maintain employment Bad physical effects
Good things about drinking less or quitting Better health Take pride in self Save money Be able to be employed Think clearer to make better decisions Improve sleep Be better role model for kids	**Not-so-good things about drinking less or quitting** Need to relearn how to be sociable Would have to learn new interests Might be bored or lonely

Table 3

Personal goals exercise

Goals: What are some things you want in the near future (next few weeks or months)?	**If you were to cut down or quit drinking, what effect would that have on reaching your goal?**
Goal #1:	__it would be easier to reach this goal __it would make no difference __it would be harder to reach this goal
Goal #2:	__it would be easier to reach this goal __it would make no difference __it would be harder to reach this goal
Goal #3:	__it would be easier to reach this goal __it would make no difference __it would be harder to reach this goal

Table 4

Representative personal goals

What are some things you want in the near future?
Go fishing
Get some clothes
Get a job
Get a better apartment
Get more physically fit
Earn visitation with children
Get custody of children
Want to have a girlfriend
Save money to visit sister out of state

Table 5

Sample entries into Next Steps Worksheets

Next Steps Worksheet, Part I	
Where do I want to be in the next 30 days?	
Goal #1:	Continue to be alcohol free—no drinking at all
The reasons this goal is important to me are:	
Goal #1:	I will think clearer
	I'll be able to figure out problems
	I like to be around people who aren't drinking and have good conversations
The steps I plan to take are:	
Goal #1:	Eat three meals a day
	Be around sober people
	Stay involved in craft activities
Next Steps Worksheet, Part II	
Some things that might interfere with my plan are:	
Goal #1:	Being around people who are still drinking, who may try to get me to join them
	Not following my own program
	Just giving up hope
How I could handle these barriers:	
Goal #1:	Ask them to leave
	Be determined to stick to my program
	Speak to counselor, therapist, and/or priest
The ways other people can help me are:	
Goal #1:	Not drinking around me
	Call my friend "X" who is a recovering alcoholic
	Talk with my mother who encourages me; she's my strongest supporter
	Talk with therapist who can help me identify risky situations