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Cognitive-Behavioral Coping Skills Treatment for Cocaine Dependence

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General Description of Approach

Cognitive-behavioral coping skills treatment (CBT) is a short-term, focused approach to helping cocaine-dependent individuals become abstinent from cocaine and other problematic substance use. Like other cognitive-behavioral approaches, CBT assumes that learning processes play an important role in the development and perpetuation of cocaine abuse and dependence. In other words, by watching other people use cocaine, being repeatedly reinforced or rewarded for cocaine use by the properties the drug itself, and using cocaine in a wide range of situations and settings; cocaine-dependent individuals have, in many ways, *learned* to become cocaine dependent. CBT posits that the same learning processes involved in the acquisition of drug using behavior can be used to help individuals reduce their drug use and become abstinent. Thus, it is a comparatively didactic approach, where patients are given specific, structured training in a range of coping skills.

CBT is intended to enhance self-control in individuals in whom impaired control over cocaine abuse may be a relatively unitary phenomenon or part of a more complex picture of psychiatric disorder or psychosocial disruption. Our approach to CBT focuses on specific treatment issues characteristic of the early phases of treatment of cocaine abusers, where abuse of cocaine is likely to be ongoing. Although in some cases CBT is conceived as preparation for longer-term treatment, the initial focus of this approach is on the inception and maintenance of abstinence from cocaine. As the attainment of abstinence is the initial single focus of the treatment, other target problems are either explored primarily as they relate to cocaine abuse or serve as examples of CBT principles until abstinence is firmly established (Carroll, Rounsaville & Keller, 1991).

To help cocaine-dependent individuals meet the treatment goal of abstinence, CBT treatment has two critical components: First, a thorough functional analysis of the role cocaine and other substances play in the individual's life. A *functional analysis* is simply an exploration of cocaine use with respect to its antecedents and consequences. For each instance of cocaine use the patient experiences during treatment, the therapist and patient will do a functional analysis, that is, identify the patient's thoughts, feelings, and circumstances before an episode of cocaine use, as well as the patient's thoughts, feelings, and circumstances after the cocaine use. Early in treatment, the functional analysis plays a critical role in helping the patient and therapist assess the determinants, or high risk situations, that are likely to lead to cocaine use, as well as shed light on some of the reasons the individual may be using cocaine (e.g., to cope with interpersonal difficulties, to experience risk or euphoria not otherwise readily available in his/her life). Later in treatment, functional analyses of episodes of cocaine use may identify those situations or states in which the individual still has difficulty coping.

The second critical component of CBT is skills training. In CBT, a substantial

portion of every session is devoted to teaching and practicing of coping skills; in fact, CBT can be thought of as a highly individualized training program that helps cocaine abusers unlearn old habits associated with cocaine abuse and learn or relearn more healthy skills and habits. The rationale for a focus on skills acquisition is several fold. By the time the cocaine abuser's* level of substance use is severe enough to warrant treatment, the individual is likely to be using cocaine as their single, overgeneralized means of coping with a wide range of interpersonal and intrapersonal problems. This may occur for several reasons. First, there may be deficits in coping skills because the individual never learned effective strategies to cope with the challenges and problems of adult life, as in cases of onset of substance use during early adolescence. Second, the individual may have acquired effective strategies at one time but these skills have decayed by repeatedly resorting to substance use as a primary means of coping, as in a case where the individual has essentially lost or forgotten effective strategies through chronic involvement in a drug-using lifestyle, where the bulk of their time is spent in acquiring, using, and then recovering from the effects of drug use. Finally, the individual's ability to use effective coping strategies may be undercut by other problems, as in the case of a cocaine abusers with such as concurrent Axis I or Axis II psychiatric disorders.

* In this manual, the term *cocaine abuser* or *cocaine-dependent individual* will be used to refer to individuals who meet DSM-IV criteria for cocaine abuse or depenendence.

While in-session focus on skills training is a major component of therapy, in CBT there is also extensive emphasis on implementation and practice of skills outside of sessions. Thus, as part of each session, patients are assigned a *homework* task intended to foster practice of the skill outside of the sessions. In order to foster mastery of skills rather than mere exposure to skills, it is essential that patients practice skills outside of sessions, as part of their daily lives, so they can become more comfortable with new, unfamiliar behaviors and ways of responding, learn what type of coping responses work best for them, and, importantly, have the opportunity to review problems in implementing skills in the comparatively safe environment of treatment.

As cocaine abusers are heterogeneous and typically come to treatment with a very wide range of problems, skills training in CBT is as broad as possible. Initial sessions focus on skills related to initial control of cocaine use (e.g., identification of high risk situations, coping with thoughts about cocaine use). Once these basic skills are mastered, skills training broadens to include a range of other problems the individual may have difficulty coping with (e.g., social isolation, unemployment). In addition, to strengthen and broaden the individual's range of coping styles, skills training focuses on both intrapersonal (e.g., coping with craving) and interpersonal skills (e.g., refusing offers of cocaine).

Recognizing that many cocaine abusers experience a multiplicity of problems in addition to cocaine use, the patient is taught these skills as both specific strategies (applicable in the here and now to control cocaine use), as well as *general* strategies that can be applied to a variety of problems in addition to cocaine abuse. CBT is thus geared to helping each patient reduce and eliminate substance use while in treatment; but also to impart skills s/he can benefit from long after leaving treatment.

Another important feature of CBT is that it addresses several critical tasks that are essential to successful substance abuse treatment (Rounsaville & Carroll, 1992).

FOSTERING THE MOTIVATION FOR ABSTINENCE. As will be described below, an important technique used to enhance the patient's motivation to stop cocaine use is to do a decisional analysis, which clarifies what the individual stands to lose or gain by continued cocaine use.

TEACHING COPING SKILLS. This is the core of CBT, to help the patient recognize the high risk situations in which they are most likely to use substances and develop other, more effective means of coping with them.

CHANGING REINFORCEMENT CONTINGENCIES. By the time treatment is sought, many patients spend the preponderance of their time involved in acquiring, using, and recovering from cocaine use, to the exclusion of other experiences and rewards. CBT focuses on identifying and reducing habits associated with a drug-using lifestyle by substituting more enduring, positive activities and rewards.

FOSTERING MANAGEMENT OF PAINFUL AFFECTS. In CBT, skills training also focuses on techniques to recognize and cope with urges to use cocaine, which is an excellent model for helping patients learn to tolerate other strong affects such as depression and anger.

IMPROVING INTERPERSONAL FUNCTIONING AND ENHANCING SOCIAL SUPPORTS. CBT includes a training in a number of important interpersonal skills and strategies to help patients expand their networks of social supports and build enduring, drug-free relationships.

Clinical Research Supporting CBT

Overview

Cognitive-behavioral treatments have been among the most frequently evaluated psychosocial approaches for the treatment of substance use disorders and have a comparatively strong level of empirical support (APA, 1995; GAO, 1996; Holder et al., 1991). To date, more than 24 randomized controlled trials have evaluated the effectiveness of cognitive-behavioral relapse prevention treatment on substance use outcomes among adult tobacco smokers, alcohol, cocaine, marijuana, opiate, and other types of substance abusers (Carroll, 1996). Overall, these studies suggest that the average effect size for CBT compared with control or comparison conditions is .36 (Feingold, unpublished data/APA presentation), which is consistent with a moderate effect. Review of this group of studies suggests that, across substances of abuse but most strongly for smoking, there is good evidence for the effectiveness of CBT compared with no-treatment controls (Carroll, 1996). However, the most stringent or rigorous level of testing, where CBT has been compared with other, active treatments (in effect asking the question, "Is CBT more effective than other, widely used treatments", rather than "Is CBT better than no treatment or minimal treatment?"), has led to less consistent results, with some studies pointing to the superiority of CBT, while others have indicated CBT is comparable to, but not more effective than

other approaches. This body of literature also suggests that outcomes in which CBT may hold particular promise include reducing severity of relapses when they occur, enhanced durability of effects, and patient-treatment matching, particularly for patients at higher levels of impairment along dimensions such as psychopathology or dependence severity. A review of this series of studies can be found in Carroll (1996).

As this manual focuses specifically on CBT for cocaine abuse, what follows is a brief review of the series of studies which have evaluated the CBT approach described in this manual with individuals meeting criteria for cocaine abuse or dependence. Moreover, because this manual is intended to provide practical strategies for therapists working with this population, this review will focus on what these studies may imply about means of more effectively applying these CBT strategies to cocaine-abusing populations.

CBT versus IPT

In our first study (Carroll, Rounsaville & Gawin, 1991), we directly compared CBT to another active psychotherapy, Interpersonal Psychotherapy, or IPT (Klerman et al.,1984). Because CBT had not previously been evaluated with a cocaine-dependent population, instead of comparing CBT to a no-treatment or minimal control condition, we compared CBT with IPT, a treatment that was in regular use at that time in our clinics. Essentially, we reasoned that when evaluating the effectiveness of a psychotherapy with little research support to a novel clinical population, the question "Is this treatment *at least as good* or better than other therapies in current use with this population" was more productively formulated than "Is this treatment better than no treatment at all?". Furthermore, the strategy of comparing two active treatments responded to several methodological and ethical questions associated with no treatment or nonspecific control groups, such as differences in demand characteristics and credibility of the offered treatments, lack of control for common factors in the therapies, and the problem of subjecting severely impaired treatment-seeking individuals, such as cocaine abusers, to minimal or no-treatment control conditions (Basham, 1986; Kazdin, 1986; O'Leary & Borkovec, 1978).

In this, as in all of our studies, we used a variety of methodological features that were intended to protect the integrity of the treatments evaluated and control other sources of variability. Thus, subjects were randomly assigned to treatments, all treatments were manual-guided, treatments were implemented by doctoral-level therapists who received extensive training in the treatments and ongoing supervision, and assessment of patient outcomes was conducted by independent evaluators who were blind to the subject's treatment assignment.

In this 12-week outpatient study, 42 subjects who met DSM-III criteria for cocaine dependence were randomly assigned to either CBT or IPT. We found that those assigned to CBT were more likely than subjects in IPT to complete treatment (67% versus 38%), attain three or more continuous weeks of abstinence (57% versus 33%), be continuously abstinent four or more weeks and at the point they left treatment (43% versus 19%). Although the sample size was

small and these differences did not reach statistical significance, significant differences by treatment group did emerge when subjects were stratified by severity of substance use. For example, among the subgroup of more severe cocaine users, subjects who received CBT were significantly more likely to achieve abstinence (54% versus 9%). Among the subgroups of subjects with lower severity of substance abuse, outcomes were comparable for both CBT and IPT (Carroll, Rounsaville & Gawin, 1991). The findings from this study suggested to us that more severe cocaine users may require the greater structure and direction offered by CBT, which emphasized learning and rehearsal of specific strategies to interrupt and control cocaine use, whereas for less severe cocaine abusers, the specific type of treatment offered may be less important.

CBT Compared with Supportive Therapy

Our next study was more complex, as it involved both psychotherapy and pharmacotherapy (Carroll et al., 1994). This time we compared CBT to Clinical Management (CM) (Fawcett et al., 1987), a nonspecific psychotherapy control condition, rather than another active therapy. In this study, the provision of Clinical Management was intended (1) to provide common elements of a psychotherapeutic relationship, including a supportive doctor-patient relationship, education, empathy, and the instillation of hope, without providing active ingredients specific to relapse prevention, (2) to provide medication management as well as opportunity to monitor patients' clinical status and treatment response, and (3) to provide a convincing therapeutic rationale and so foster greater retention in the protocol and compliance with medication. It is important to note that these features, although desirable in a psychotherapy control condition because they address many of the ethical and methodologic concerns noted above, may be powerfully therapeutic on their own and thus also act as much more stringent tests of active psychotherapies than would alternatives such as no-treatment or waiting list control conditions. In addition, all subjects received a medication, either desipramine (which at the time the study was conducted was the most promising medication for cocaine dependence), or placebo.

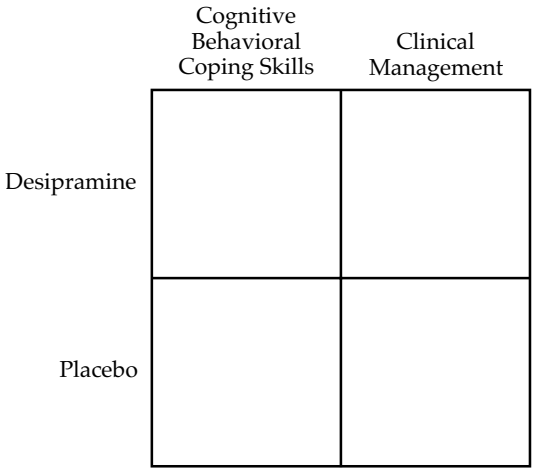

Figure 1.1 Patients meeting DSM-III-R criteria for cocaine dependence were randomly assigned to one of four treatment conditions.

In this study, 121 individuals meeting DSM-III-R criteria for cocaine dependence were randomly assigned to one of the four treatment conditions, as shown in Figure 1.1: (1) CBT in combination with desipramine, (2) CBT plus placebo, (3) CM plus desipramine, and (4) CM plus placebo. We hypothesized that both CBT and desipramine would be more effective than CM and placebo respectively. Moreover, this design allowed detection of combined effects of psychotherapy and pharmacotherapy if these were sufficiently strong.

Results indicated first, that after twelve weeks of treatment, subjects in all 4 groups showed significant reductions in cocaine use as well as improvement in several other problem areas, compared with their pretreatment levels. Second, significant main effects for medication or psychotherapy type were not found; that is, cocaine outcomes were comparable whether the patient received CBT or CM, or whether the patient received desipramine or placebo. Third, we did find an interaction effect similar to that found in our first study. That is, baseline severity of cocaine use was found to interact differently with the two forms of psychotherapy. As in the previous study, patients with more severe cocaine use were retained longer in treatment, attained longer periods of abstinence, and had fewer urine screens positive for cocaine when treated with CBT compared with CM, as illustrated in Figure 1.2. Again, this apparent matching effect suggests that cocaine abusers with more intense involvement with cocaine may benefit from the additional structure, intensity, or didactic content of CBT, which focused specifically on reducing access to cocaine and avoidance of high risk situations for relapse, while low intensity approaches may be effective for less severe users.

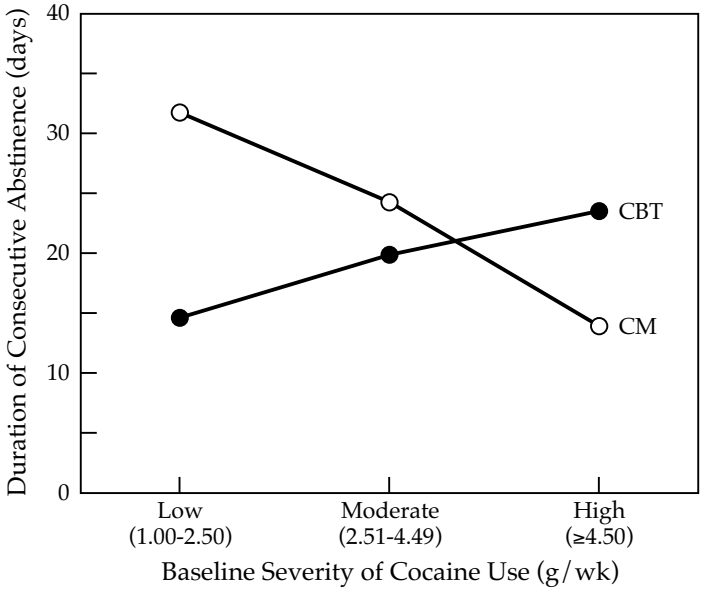

Figure 1.2 Severity of cocaine use and response to psychotherapy by subjects completing two or more psychotherapy sessions (n=110). CM = clinical management, CBT = cognitive-behavioral coping skills treatment.

Additional matching effects were found in subsequent analyses of data from this study. However, because these findings were based on exploratory, post hoc analyses, they should be interpreted with caution:

CBT AND DEPRESSIVE SYMPTOMS. First, because of the clinical importance of affective disorders among cocaine abusers, we evaluated the role of depressive symptoms in response to study treatments (Carroll, Nich & Rounsaville, 1995). We found that CBT was more effective than supportive CM in retaining depressed subjects in treatment and there was some evidence it was also more effective in reducing cocaine use. This may have occured because the depressed subjects experienced more distress, which may have enhanced their motivation for treatment, availability for psychotherapy, and ability to implement and benefit from coping skills. On the other hand, there was no evidence that CBT was more effective than CM in reducing depressive symptoms. While cognitive-behavioral treatments for depression have generally been found to be effective and comparable to antidepressant medication in reducing depressive symptoms (Elkin et al., 1989; Simons et al., 1986), our CBT approach focused almost exclusively on helping patients develop strategies to reduce their cocaine use during the early stages of treatment (including the relationship between negative affect and cocaine use), but did not specifically address depressive symptoms as a treatment target or seek to convey specific strategies for managing coexistent depression. A possible implication of these findings is the need for CBT therapists to more explicitly address depressive symptoms among patients who experience them (Carroll, Nich & Rounsaville, 1995).

In addition, we found that reductions in cocaine use and depression were closely associated throughout treatment, although the direction of these changes was not clear. For example, reduction in depressive symptoms might lead to reduction in cocaine use by reducing distress, enabling patients to make better use of their coping resources, helping patients become more available for psychotherapy, or reducing possible self-medication of depressive symptoms with cocaine. Conversely, reduction of cocaine use might lead to improvements in depressive symptoms by attenuating depression associated with cocaine withdrawal, reestablish normal sleep and eating patterns, and reduce exposure to other negative consequences of cocaine use, thereby decreasing depressive symptoms.

CBT AND ALEXITHYMIA. Alexithymia refers to a cognitive-affective style that results in specific disturbances in the expression and processing of emotions. Literally meaning “no words for feelings”, the term was coined by Nemiah and Sifneos (1970) to refer to psychosomatic patients who exhibited four specific affective/cognitive impairments: (1) difficulty in verbalizing affect states, (2) a tendency to focus primarily on the somatic/physiological components of affective arousal, (3) an impoverished fantasy life, and (4) a highly concrete cognitive style. As there was some interest in evaluating alexithymia in substance-abusing populations, we also evaluated the rates and significance of alexithymia among cocaine abusers in our study. We found that 39% of the cocaine abusers in our scored in the alexithymic range using the Toronto Alexithymia Scale (Taylor et al., 1985). We also found that while alexithymic subjects did not differ from non-alexithymics with respect to overall treatment retention or outcome, alexithymics did respond

differently to psychotherapy, as shown in Figure 1.3. Alexithymics had better retention and cocaine outcomes when treated with CM, whereas non-alexithymic subjects had better response when treated with CBT compared with CM.

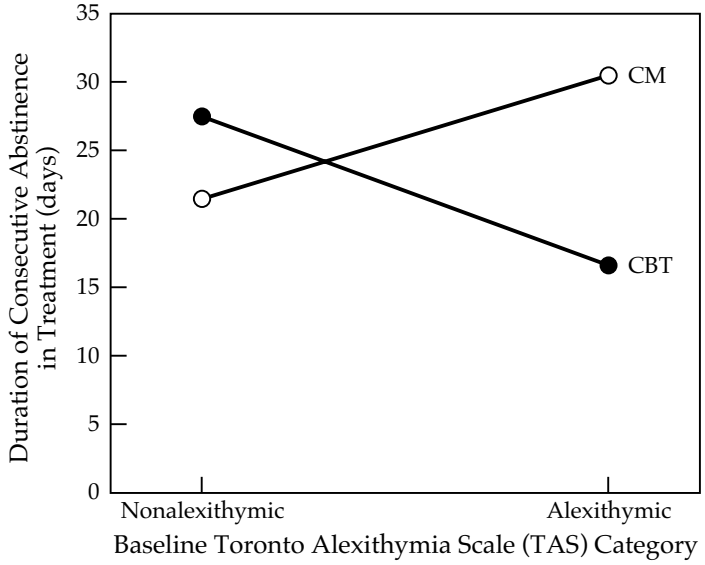

Figure 1.3 Cocaine outcomes by psychotherapy type for nonalexithymic compared with alexithymic patients (group means). CM = clinical management, CBT = cognitive-behavioral coping skills treatment.

The finding that cocaine abusers with alexithymia responded more poorly to CBT has several implications for therapists conducting this treatment. In particular, it is important to recognize that CBT asks patients to identify and articulate internal affect and cognitive states associated with cocaine use, which is precisely what alexithymics find difficult to do. Our approach to CBT encourages patients to identify, monitor, and analyze their craving, negative affects, and many subtle fleeting cognitions; that is, it requires patients to have good access to their internal world. These demands may be overwhelming for the alexithymic subjects. For example, one patient, as part of a self-monitoring assignment, was asked to note his feelings and their intensity in response to a variety of situations. Rather than describing feelings such *cheerful*, *irritable*, or *bored*, he consistently wrote either *yes* or *no*, suggesting he had some awareness of strong affects, but little ability to articulate them or relate them to his drug use. Thus, when conducting CBT with such patients, therapists may find it helpful to provide an initial preparatory phase of treatment before launching into monitoring of high risk situations and skill training, to prevent such patients from being overwhelmed and to help patients identify their feelings and affect states.

ONE-YEAR FOLLOW-UP FINDINGS. Some of the most intriguing findings from this study emerged from our follow-up of these 121 subjects one year after they left treatment (Carroll, Rounsaville, Nich et al., 1994). We found that, as a group, subjects' cocaine use decreased overall or remained stable with respect to posttreatment levels, rather than

rebounding to pretreatment levels. More importantly, there was consistent evidence of delayed emergence of effects for CBT compared with CM for cocaine outcomes. That is, after leaving treatments, subjects who had received CBT continued to reduce their cocaine use compared with subjects in the CM group, whose cocaine use remained relatively stable during follow up. This is illustrated in Figure 1.4.

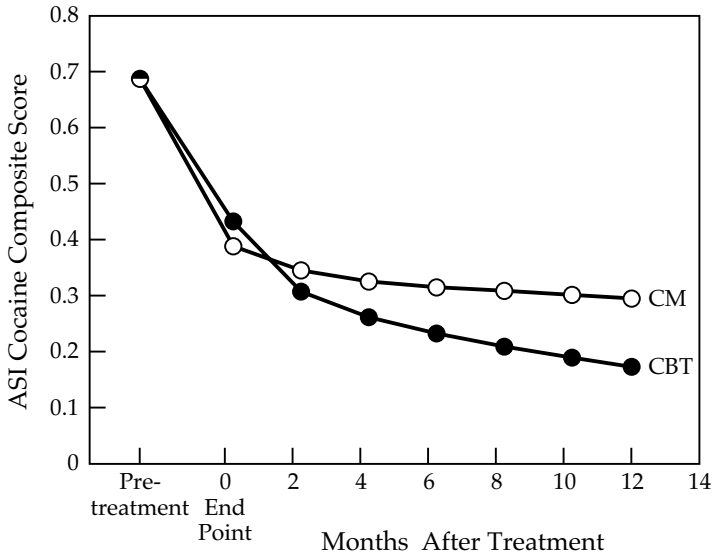

Figure 1.4 Cocaine use across time by treatment (n=97). Plots are of random regression anaylses. CM = clinical management, CBT = cognitive-behavioral coping skills treatment.

Because the emergence of psychotherapy effects at follow-up did not appear to be related to non-study treatment received during follow-up (that is, a proportion of patients did receive treatment during follow-up, but the finding of delayed emergence of CBT effects did not change when controlling for this), we hypothesize these effects may be due to delayed emergence of specific effects of CBT. That is, during the acute phase of treatment, subjects in all groups received a variety of nonspecific interventions, including weekly urine monitoring, frequent assessment of cocaine use and other symptoms, support and encouragement from therapists and research staff, and positive expectations for treatment effects. These common factors may have been powerfully therapeutic and overwhelmed treatment-specific effects. However, the cessation of these nonspecific interventions at termination may have provided the conditions under which the more durable and specific effects of CBT had an opportunity to emerge. That is, as discussed above, CBT is intended to impart generalizeable coping skills which can be implemented long after patients leave treatment, while supportive treatments such as CM may be effective during acute treatment but may provide patients with fewer enduring resources upon which they can draw after treatment termination (Carroll et al., 1994). Similarly, in other clinical populations, follow-up studies of cognitive-behavioral treatments have indicated their durability with some consistency. For example, cognitive-behavioral treatments have been found to be superior or comparable to acute or

continued tricyclic pharmacotherapy in preventing relapse of depressive and panic episodes (Kovacs et al., 1991; Miller et al., 1989; Simons et al., 1986). Moreover, some studies (Beutler et al., 1987), including a recent one with alcoholics (O'Malley et al., 1994), have also reported continuing improvement or delayed emergence of effects during follow-up after treatment with cognitive-behavioral therapy.

CBT and Other Treatments for Alcoholic Cocaine Abusers

Our clinical experience with cocaine abusers in these studies pointed to the significance of alcohol abuse and dependence which occurs quite frequently among clinical populations of cocaine abusers. In fact, in a large survey study of psychiatric disorders among 298 cocaine abusers, we found that alcohol dependence was the most frequently diagnosed comorbid disorder, with 62% of the sample meeting RDC criteria for lifetime alcohol dependence and almost 30% meeting current criteria (Carroll, Rounsaville & Bryant, 1993). This is consistent with reports from large-scale community samples, such as the ECA (Epidemiological Catchment Area) study, which found that 85% of individuals who met criteria for cocaine dependence also met criteria for alcohol abuse or dependence, a rate far higher than that of alcoholism among those meeting criteria for heroin-opioid (65%), cannabis (45%), or sedative-hypnotic-anxiolytic (71%) dependence (Regier et al., 1990). More importantly, comorbid alcohol-cocaine dependence has been associated with more severe dependence, poorer retention in treatment, and poorer outcome with respect to either disorder alone (Carroll, Powers et al., 1991; Brady et al. 1995; Walsh et al., 1991).

We then evaluated CBT and other psychosocial and pharmacologic treatments for this large and challenging population (Carroll et al., in press). In this study, we compared CBT to two other treatments, Twelve Step Facilitation (Nowinski, Baker & Carroll, 1992) (a individual approach that was consistent with the Twelve Steps of AA and which has the primary goal of fostering the patient's lasting involvement with the traditional fellowship activities of AA or CA), and a control psychotherapy, Clinical Management (which was identical to that used in our previous {1994} study). This study also evaluated disulfiram (antabuse), based on pilot data which suggested that reduction in alcohol use through disulfiram may be associated with reductions in cocaine use as well (Carroll, Ziedonis et al., 1993).

Preliminary data from this study suggests that the two active psychotherapies, Cognitive-Behavioral Therapy (CBT) and Twelve Step Facilitation (TSF), were more effective than Clinical Management in fostering longer periods of consecutive abstinence from cocaine, abstinence from both cocaine and alcohol simultaneously, as well as a higher percentage of cocaine-free urine specimens. Second, CBT or TSF, compared with CM, were associated with significant reductions in cocaine use across time, particularly for the subjects who received at least minimal exposure to treatment.

Finding that CBT and TSF were more effective than the psychotherapy control condition (CM) underlines the important role that well-defined, competently-delivered psychosocial interventions play in the treatment of cocaine

dependence. Again, because CM provided a control for general, nonspecific, aspects of psychotherapy (including a supportive doctor-patient relationship), it should be noted that this study provided a rigorous test of the specific, active ingredients of CBT and TSF above and beyond simple support and attention. Furthermore, the finding that CBT and TSF were more effective than CM in reducing cocaine use contrasts the finding from our previous clinical trial, which did not find overall differences between CBT and CM (Carroll et al., 1994). However, in that previous study, CBT was found to be more effective than CM for the subgroup of subjects who were more severely dependent on cocaine. Again, because concurrent cocaine-alcohol dependence has been associated with higher severity of cocaine use and poorer prognosis with respect to cocaine dependence alone, subjects in this study may be similar to the more severely dependent subsample from our earlier study. Thus, findings from these two studies taken together may suggest that more severe groups of cocaine-dependent individuals differentially benefit more from the comparatively intensive active ingredients of TSF or CBT, in contrast to the supportive but less structured and directive CM, which also made fewer demands on patients to carry out assignments outside of sessions.

It is also important to note that findings from this study did not point to significant differences between the two active psychotherapies, TSF and CBT, in either cocaine or alcohol outcomes. This suggests that, despite clear differences in theoretical basis of these treatments, specific interventions used by the therapists (as detected by independent raters blind to subjects' treatment assignment), as well as evidence that subjects demonstrated specific behavioral changes consistent with the theoretical mechanisms of action of their study treatments (changes in coping skills in CBT, more AA involvement in TSF), these two forms of treatment appeared to be comparable in effectiveness. This is consistent with other recent research with cocaine-dependent samples (Wells et al., 1994) (Carroll et al., in press).

Summary: Why CBT?

We believe there are several important features of CBT that make it particularly promising as a treatment for cocaine abuse and dependence:

1. CBT is a short-term, comparatively brief approach, and thus well-suited to the majority of clinical programs.

2. CBT has been extensively evaluated in rigorous clinical trials and has solid empirical support as treatment for cocaine abuse. In particular, there is evidence pointing to the durability of CBT's effects as well as its effectiveness with more severe subgroups of cocaine abusers.

3. CBT is structured, goal-oriented, and focuses on the immediate problems faced by cocaine abusers entering treatment who are struggling to gain or maintain control over their cocaine use.

4. CBT is a flexible, individualized approach that can be adapted to a wide range of individuals seeking treatment, as well as a variety of settings

(inpatient, outpatient) and formats (group, individual).

5. CBT is compatible with a range of other treatments the patient may receive, such as pharmacotherapy.

6. CBT is a broad approach, encompassing several important common tasks of any successful substance abuse treatment (addressing motivation, imparting new skills, changing reinforcement contingencies, enhancing interpersonal functioning and social support, fostering affect management).

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2. The CBT Conception of Cocaine Abuse/Dependence: The ABC's of CBT

Factors Associated with Acquisition and Maintenance of Cocaine Abuse

CBT is based on social learning theory; that is, the assumption that an important factor in how individuals begin to use and abuse substances is that they *learn* to do so. There are several ways individuals may learn to use substances:

MODELING. We learn new skills by watching other people and then trying it ourselves. Children learn language by listening to and then copying their parents. Adults learn to ski by watching skilled skiers and then imitating them. The same may be true for many substance abusers. Individuals may, from seeing their parents drink alcohol, learn to cope with problems or unwind by drinking. Teenagers often begin smoking cigarettes after watching their friends smoke. So, too, may some cocaine abusers begin to use after being *initiated* into drug use by watching their friends or family members use cocaine or other substances.

OPERANT CONDITIONING. There is a broad literature demonstrating that laboratory animals will work to obtain the same substances that many humans abuse (cocaine, opioids, and alcohol), because they find exposure to the substance pleasurable, that is, reinforcing. Drug use can also be seen as behavior that is reinforced, or strengthened, by its consequences. Some individuals may use drugs because of some of the consequences of drug use. Cocaine may be used because it changes a way a person feels (e.g., powerful, energetic, euphoric, stimulated, less depressed), the way a person thinks ("I can do anything", "I can only get through this if I'm high"), and the way a person behaves (less inhibited, more confident). The perceived positive (and negative) consequences of cocaine use varies widely from individual to individual. Individuals with particular vulnerabilities (e.g., family histories of substance use, high need for sensation seeking, or concurrent psychiatric disorder) may find cocaine particularly reinforcing. Thus, people may use cocaine for any number of reasons, but it is important that clinicians understand that any given individual uses cocaine for *important* and *particular* reasons.

CLASSICAL CONDITIONING. Just as Pavlov demonstrated that over time, repeated pairings of one stimulus (e.g., a bell ringing) with another (e.g., the presentation of food) could elicit a reliable response (e.g., a dog salivating), repeated pairings of particular events, states, or cues with substance use often produces powerful cravings or urges for that substance. Over time, cocaine use is often paired with cues such as money or cocaine paraphernalia, particular places (bars, places to buy drugs), particular people (drug-using associates, dealers), times of day (after work, weekends), affect states (feeling lonely, bored), and so on. Eventually, exposure to those *cues* alone is sufficient to elicit very intense cravings or urges for cocaine that are often followed by cocaine use.

Learning Strategies Aimed at the Cessation of Use

Just as CBT assumes that many individuals essentially *learn* to become cocaine abusers over time, through complex interplays of modeling, classical conditioning, or operant conditioning, each of these principles is invoked in CBT to help the patient stop using cocaine.

For example, *modeling* is used to help the patient learn new behaviors (e.g., how to refuse an offer of drugs, how to break off or limit a relationship with a drug-using associate) by having the patient participate in role plays with the therapist during the treatment. That is, the patient learns to respond in new, unfamiliar ways by first watching the therapist model those new strategies and then practicing those strategies within the supportive context of the therapy hour.

Operant conditioning concepts are used several ways in CBT. First, through a detailed examination of the antecedents and consequences of substance use, the therapist attempts to develop an understanding of the reasons the patient may be more likely to use in a given situation and to understand the role that cocaine plays in his/her life. This functional analysis of substance use is thus used to identify the high risk situations in which the patient is likely to use drugs and thus to provide the basis for learning more effective coping behaviors in those situations. Second, the therapist attempts to help the patient develop meaningful alternate reinforcers to drug use; that is, other activities and involvements (relationships, work, hobbies) that serve as viable alternatives to cocaine use and help the patient remain abstinent. Finally, a detailed examination of the consequences, both long- and short-term, of cocaine and other substance use, is used as a strategy to build or reinforce the patient's resolve to reduce or eliminate their substance use.

Classical conditioning concepts also play an important role in CBT, and particularly in interventions directed at reducing some forms of craving for cocaine. Just as Pavlov demonstrated that repeated pairings of a conditioned stimulus with an unconditioned stimulus could elicit a conditioned response, he also demonstrated that repeated exposure to the conditioned stimulus *without* the unconditioned stimulus would, overtime, result in extinction of the conditioned response. Thus, the therapist attempts to help the patient understand and recognize conditioned craving, identify his/her own idiosyncratic array of conditioned cues for craving, avoid exposure to those cues, and cope effectively with craving when it does occur without using cocaine so that conditioned craving is reduced and eliminated over time.

In fact, learning serves as an important metaphor for treatment process throughout. CBT therapists tell patients that a goal of the treatment is to help them *unlearn* old, ineffective behaviors and *learn* new ones. Patients, particularly those who are demoralized by their failure to change their cocaine use, or for whom the consequences of cocaine use have been high, are frequently surprised to think about cocaine use as a type of skill, as something they have learned to do over time. After all, they are surprised to think of themselves as having *learned* a complex set of skills that enabled them to acquire the money needed to buy cocaine (which often led to another set of licit or illicit skills), acquire cocaine without being arrested, how to use cocaine and avoid detection, and so on. Patients who can reframe their self-appraisals in terms of

being *skilled* in this way can often see that they also have the capacity to learn a new set of skills, this time, though, skills that will help them remain abstinent.

Conceptual Framework for Case Formulations

Very simply put, CBT attempts to help individual patients recognize, avoid, and cope. That is, *recognize* the situations in which they are most likely to use, *avoid* those situations when appropriate, and *cope* more effectively with a range of problems and problematic behaviors associated with substance use.

As noted in Chapter 1, CBT treatment has two critical components: First, a thorough functional analysis of the role cocaine and other substances play in the individual's life. For each instance of cocaine use the patient experiences during treatment, the therapist and patient will identify the patient's thoughts, feelings, and circumstances before the substance use, as well as the patient's thoughts, feelings, and circumstances after the cocaine use. Early in treatment, the functional analysis plays a critical role in helping the patient and therapist assess the determinants, or high risk situations, that are likely to lead to cocaine use, as well as shed light on some of the reasons the individual may be using cocaine. The second critical component of CBT is skills training. In CBT, this consists of a highly individualized training program that helps cocaine abusers unlearn old habits associated with cocaine abuse and learn or relearn more adaptive skills and habits. Thus, applying CBT effectively requires a thorough understanding of the following areas:

1. What are the particular determinants of this person's cocaine use? That is, what is his or her individual patterns of use (weekends only, every day, binge use?). What are his/her *triggers* for cocaine use? Does this person use cocaine by themselves or with other people? Where does this person buy and use cocaine? Where does s/he acquire the money to buy drugs? What has happened to (or within) this person before the most recent episodes of use? What circumstances were at play when cocaine use began or became problematic? How does this person describe cocaine and its effects on him/her? What roles, both positive and negative, does cocaine play in this person's life?

   In identifying the patient's determinants of drug use, it may be helpful for clinicians to focus their inquiries to cover at least the following general domains:

   SOCIAL: With whom does the individual spend most of her time? With whom does s/he use drugs? Does s/he have relationships with those individual outside of substance use? Does the individual live with someone who is a substance abuser? How has the patient's social network changed since drug use began or escalated?

   ENVIRONMENTAL: What are the particular environmental *cues* for this patient's drug use (e.g., money, alcohol use, particular times of day, particular neighborhoods)? What is the level of this person's

day-to-day exposure to these cues? Can some of these cues be easily avoided? Which are *fixed* in the individual's environment?

EMOTIONAL: Research has shown that affect states commonly precede substance use or craving. These include both negative (depression, anxiety, boredom, anger) and positive (excitement, joy) affect states. Because many patients initially have difficulty linking particular states to their substance use (or do so, but only at a surface level), affective antecedents of substance use typically are more difficult to identify in the initial stages of treatment.

COGNITIVE: Particular sets of thought or cognitions also frequently precede cocaine use (I need to escape", "I can't deal with this unless I'm high", "The hell with it", "I deserve to get high"). These cognitions are often charged and have a sense of urgency.

PHYSICAL: Desire for relief from uncomfortable physical states such as withdrawal has been implicated as a frequent antecedent of drug use. While controversy surrounding the nature of physical withdrawal symptoms from cocaine dependence continues, anecdotally, cocaine abusers frequently report particular physical sensations (such as tingling in their stomachs, fatigue or difficulty concentrating, thinking they smell cocaine) as precursors to substance use.

2. What skills or resources does the individual lack or may be obstacles to becoming abstinent? Has the individual been able to recognize the need to reduce availability of cocaine? Has the patient been able to recognize important cocaine cues? Has s/he been able to achieve even brief periods of abstinence? Has s/he recognized events which have led to relapse? Has s/he been able to tolerate periods of cocaine craving or emotional distress without resorting to drug use? Does s/he recognize the relationship of his or her other substance use (especially alcohol) in maintaining cocaine dependence? Are there people in the patient's social network who do not use or supply drugs? Does s/he have a concurrent psychiatric disorder or other problems that might confound his/her efforts to change behavior?

3. What skills and strengths does the individual have to help them stop using cocaine? What skills or strengths has the patient demonstrated during any previous periods of abstinence? Has s/he been able to maintain a job or positive relationships during substance use? Does s/he have social supports and resources to bolster the patient's efforts to become abstinent? How does s/he spend time when not using drugs or recovering from their effects? What was this person's highest level of functioning before using drugs? What brought this person to treatment now? How motivated is this patient?

Assessments

These issues can often be assessed in the first few sessions, through an open-ended exploration of the patient's substance use history, his/her view of what brought the patient to treatment, and goals for treatment. Standardized instruments may also be extremely useful in rounding out the therapist's understanding of the patient and in identifying treatment goals. In our research programs, assessments usually include the following:

Substance Use and Related Problems

DRUG USE AND PSYCHOSOCIAL PROBLEMS. The Addiction Severity Index (McLellan et al., 1992) which assesses frequency and severity of substance use, as well as type and severity of psychosocial problems which typically accompany substance use (e.g., medical, legal, family/social, employment, psychiatric).

CURRENT LEVEL OF MOTIVATION. As the patient's motivation, or readiness for change, may be an important predictor of response to substance abuse treatment (Prochaska et al., 1992), the Change Assessment Scale, (DiClemente & Hughes, 1990) (C.9), which assesses the patient's current position regarding readiness for change (e.g., precontemplation, contemplation, commitment), is used.

QUANTITY/FREQUENCY OF CURRENT SUBSTANCE USE. We obtain this information through modified Substance Use Calendars, which collect information on cocaine and other substance use day-by-day over the past 3 months. We also assess *severity* of cocaine dependence by the total number of dependence syndrome elements endorsed (from DSM-IV substance abuse criteria in SCID interviews).

TREATMENT EXPECTATIONS. Greater congruence of patients' expectations of treatment and beliefs regarding the causes and nature of substance use with those of the treatment they receive may result in improved outcome over subjects whose treatment expectations contrast with study treatment received (Hall et al., 1991). The Treatment Attitudes and Expectation form, a self-report of treatment attitudes, adapted from the NIMH TDCRP (Elkin et al., 1985), has been modified for use with cocaine abusers.

Psychiatric Diagnosis and Symptoms

We obtain DSM-IV diagnoses (for category of Axis I and II psychiatric diagnosis) on all patients through use of the Structured Clinical Interview for DSM-IV (SCID) and SCID-P (Spitzer et al., 1990).

To assess sociopathy, we also use the California Psychological Inventory Socialization Scale (CPI-So) (Magargee, 1972). The CPI-So has been found to be a valid continuous measure of sociopathy in alcoholics (Cooney, Kadden, & Litt, 1990) and an important variable for patient-treatment matching in alcoholics (Kadden et al., 1989).

To assess other current psychiatric symptomatology, we obtain frequent ratings of depression through both self-report, the Beck Depression Inventory (BDI) (Beck et al., 1961), and a clinician-rated instrument, the Hamilton Depression Rating Scale (Hamilton, 1960), as well as a broader range of symptoms through the Symptom Checklist (SCL-90) (Derogatis et al., 1973).

Baseline Level of Coping Skills and Self-efficacy

COPING SKILLS. Since coping skills training is effective when it is individualized and directed to the patient's specific type of coping deficits, we developed the Cocaine Competency Test (CCT), which is based on the Situational Competency Test (Chaney et al., 1978), a role-playing instrument intended to assess skill acquisition among alcoholics. Using the CCT, we found that treatment, including coping skills training, was associated with significant increases in number and quality of coping skills. Moreover, patients who had received CBT showed more increases in CBT-type copings skills than patients assigned to alternative types of treatment. Finally, patients' level of coping skills at the end of treatment was associated with reduced cocaine use both within and following treatment termination (Carroll et al., 1997).

SELF-EFFICACY. We use the Cocaine Use Situations Inventory, which is a self-report instrument intended to monitor changes in patient's self-efficacy and expectations of successful abstinence. The Cocaine Use Situations Inventory lists approximately 30 different types of high risk situations for cocaine use, and helps clinicians pinpoint the specific types of situations with which the patient may have difficulty coping effectively. This instrument was derived from the self-efficacy instrument developed by Condiotte and Lichtenstein (1981) for use with alcoholics.

Basic Principles of CBT

In CBT for cocaine abusers, there are a number of basic principles, or rules-of-thumb, for therapists:

Basic Skills First

The manual provides a sequence of sessions to be delivered to patients, each focusing an a single or related set of skills (e.g., craving, coping with emergencies). The order of presentation of these skills has evolved with experience with the type of problems most often presented by patients coming in to treatment. That is, early sessions focus on the fundamental skills of addressing ambivalence and fostering motivation to stop cocaine use, dealing with issues of drug availability and craving, and other skills intended to help the patient achieve initial abstinence or control over use. Later sessions build on these basic skills in order to help the patient achieve stronger control over cocaine use by dealing with more complex topics and skills (problem solving). For example, the skills the patient learns in achieving control over craving (urge control) serve as a model for helping the patient manage and tolerate other emotional states that may lead to cocaine use.

Match Material to Patient Needs

While structured and manualized, CBT is a highly individualized treatment. That is, rather than viewing CBT treatment as cookbook *psychoeducation*, the therapist carefully matches the *content*, *timing*, and *nature of presentation* of the material to the individual patient. The therapist attempts to provide skills training at the moments the patient is most in need of them. That is, the therapist does not belabor topics such as breaking ties with cocaine suppliers with a patient who is highly motivated and has been abstinent for several weeks. Similarly, the therapist does not race through material in an attempt to *cover* all of it in a few weeks; for some patients, it may take several weeks to truly master a basic skill. It is far better to slow down and work at a pace that is comfortable and productive for a particular individual than to risk the therapeutic alliance by too aggressive a pace.

Similarly, therapists should be careful to use language that is compatible with the patient's level of understanding and sophistication. For example, while some patients can readily understand concepts of conditioned craving in terms of Pavlov's experiments on classical conditioning, others require more simple, concrete examples, using language and terms that are familiar. Therapists should frequently check back with patients to be sure they understand a concept and that the material feels relevant to the patient. Therapist should also be alert to signals from the patient that s/he feels the material is not well suited to them. These include loss of eye contact and other forms of *drifting away*, overly brief responses, failure to come up with examples, failure to do homework, and so on.

An important strategy in matching material to patient needs (and providing treatment that feels patient-, rather than manual-driven) is to, whenever possible, use *specific examples* that the patient has provided, either through their history or relating events of the week. For example, rather than focussing on an abstract recitation of *Seemingly Irrelevant Decisions*, the therapist should emphasize a recent, specific example of a decision made by the patient that culminated in an episode of cocaine use or craving. Similarly, to make sure the patient understands a concept, the therapist should ask him/her to think of a specific experience or example that occurred in the past week that illustrates the concept or idea.

> T: "It sounds like you had a lot of difficulty this week, and wound up in some risky situations without quite knowing how you got there. That's exactly what I'd like to talk about this week, how by not paying attention to the little decisions we make all the time, we can land in some tough spots. Now, you started out talking about how you had nothing to do on Saturday and decided to hang out in the park, and two hours later you were driving into the city to score with Teddy. If we look carefully at what happened Saturday, I bet we can come up with a whole chain of decisions you made that seemed pretty innocent at the time, but eventually led to you being in the city. For example, how did it happen that you felt you had nothing to do on Saturday?..."

Repetition

Learning new skills and effective skill building requires time and repetition. By the time they seek treatment, cocaine users' habits around their drug use tend to be deeply ingrained. That is, any given patient's routine around acquiring, using and recovering from cocaine use is well-established and tends to feel comfortable to them, despite the negative consequences of cocaine use. It is important that therapists recognize how difficult, uncomfortable, and even threatening it is to change these established habits and try new behaviors. For most patients, mastering a new approach to old situations takes several attempts.

Moreover, many patients come to treatment only after long periods of chronic use, which may affect their attention, concentration, and memory and thus their ability to comprehend new material. Others seek treatment at a point of extreme crisis (e.g., learning they are positive for HIV, after losing a job), and may be so preoccupied by their current problems that they find it difficult to focus on the therapist's interventions and suggestions. Thus, in the early weeks of treatment, repetition is often necessary if a patient is to be able to understand or retain a concept or idea.

Thus, the basic concepts of this treatment are repeated throughout the treatment process. For example, the idea of a functional analysis of cocaine use is repeated throughout treatment. First, this occurs formally in the first session as part of the rationale for the treatment, where the therapist describes understanding cocaine use in terms of antecedents and consequences. Next, the patient is asked to practice conducting a functional analysis as part of the homework assignment for the first session. The concept of a functional analysis then recurs throughout treatment. This occurs each session, as the therapists starts out be asking about any episodes of cocaine use or craving, what preceded the episodes, and how the patient coped. The idea of cocaine use in the context of its antecedents and consequences is inherent in most of the major session topics as well. For example, craving and thoughts about cocaine are common antecedents of cocaine use and are the focus of two early sessions. These sessions encourage the patient to identify their own obvious and more subtle determinants of cocaine use, with a slightly different focus each time. Similarly, each session ends with a review of the possible pitfalls and high risk situations that may occur before the next session, again, stimulating the patient to become aware of and change his/her habits around cocaine use.

While repetition of key concepts is inherent throughout the manual, therapists should also recognize that repetition of whole sessions, or parts of sessions, may be necessary for patients who do not readily grasp these concepts due to cognitive impairment or other problems. Therapists should feel free to repeat session material, as many times and in as many different ways as needed with a particular patient.

Practice Needed for Mastery of Skills

We do not master complex new skills by merely reading about them or watching others do them. We learn by trying out new skills ourselves, making mistakes, identifying those mistakes, and trying again.

In CBT, therapists encourage patients to practice new skills and such practice is a central, essential, component of treatment. The degree to which the treatment is a skills *training* over merely a skills *exposure* approach has to do with the degree to which there is opportunity to practice and implement coping skills, making homework all the more important. It is critical that patients have opportunity to *try out* new skills within the supportive context of treatment. Through first-hand experience, patients can learn what new approaches work or do not work for them, where they have difficulty or problems, and so on. There are many opportunities for practice within CBT, both within sessions and outside of them. Within each session, there are opportunities for patients to rehearse and review ideas, raise concerns, and get feedback from the therapist. Also, there are suggested practice exercises given for each session. These are basically homework assignments that provide a structured means of helping the patient try out new and unfamiliar behaviors, or try more familiar behaviors in new contexts or situations.

Fostering Compliance

However, practice exercises are only useful if the patient sees the value of practice and actually tries the exercise, and compliance with extra-session assignments is a problem for many patients. There are several strategies that therapists find helpful in encouraging patients to do extra-session practice:

GIVE CLEAR RATIONALE. Therapists should not expect a patient to practice a skill or do a homework assignment without understanding why it might be helpful. Thus, as part of the first session, therapists should stress the importance of extra-session practice.

"It will be important for us to talk about and work on new coping skills in our sessions, but it is even more important to put these skills into use in your daily life. You're really the expert on what works and doesn't work for you; and the best way to find out what works for you is to try it out. It's very important that you give yourself a chance to try out new skills outside our sessions so we can identify and discuss any problems you might have putting them into practice. We've found, too, that people who try these things out tend to do better in treatment. The practice exercises I'll be giving you at the end of each session will help you try out these skills; we'll go over how well they worked for you, what you thought of the exercises, and what you learned about yourself and your coping style at beginning of each session."

GET A COMMITMENT. We are all much more likely to do things we have told other people we would do. Similarly, rather than assume that a patient will follow through on a task just because the therapist asked him/her to do it, CBT therapists should be direct in asking the patient whether they are willing to do practice skills outside of sessions and whether they think it will be helpful to do so. A clear "Yes" from the patient conveys that the patient understands the importance of the task and its usefulness. Moreover, it sets up a discussion of the discrepancy if the patient fails to follow through. On the other hand, hesitation or

refusal may be an important signal of important clinical issues that are important to explore with the patient. Patients may refuse to do homework because they do not see the value of the task, because they are ambivalent about treatment or renouncing cocaine use, because they do not understand the task, etc. Thus, therapists should devote considerable time to understanding the patient's difficulty in carrying out task assignments and respond as appropriate; by addressing ambivalence for patients who are unmotivated, by slowing down and simplifying presentation of the material for patients who have comprehension problems; by identifying and addressing the negative cognitions about task assignments (e.g., "This won't do me any good").

ANTICIPATE AND WORK THROUGH OBSTACLES TO TASK COMPLETION. It is essential that therapists leave enough time at the end of each session to develop or go over the upcoming week's practice exercise in detail. The patient should be given plenty of opportunity to ask questions and raise concerns about the task. Therapists should ask the patient to anticipate any difficulties s/he might have in carrying out the assignment and to apply a problem-solving strategy in helping the patient work through these obstacles. The patient should be an active participant in this process and have the opportunity to change or develop the task with the therapists, to plan for how the skill will be put into practice, and so on. Working through obstacles may include a different approach to the task (e.g., using a tape recorder for self-monitoring instead of writing), thinking through when the patient will do the task, whether s/he will ask someone else to help, and so on. Again, discussions with the patient around each practice exercise should have the goal of the patient's expressing commitment to do the exercise.

MONITOR CLOSELY. Following up on past assignments is critical to improving compliance with assignments and enhancing the effectiveness of those tasks. Checking on task completion is intended to underscore the importance of practicing coping skills outside of sessions and to provide an opportunity for discussion of the patient's experiences with the tasks so that any problems can be addressed in treatment. We have found that patients who do homework tend to have therapists who in turn value homework, spend a lot of time talking about homework, and expect that their patients will actually do the homework. The early part of each session must include *at least 5 minutes* on reviewing the patient's experience with the previous session's practice exercise in detail, not just asking the patient whether or not they did the homework. If the patient has the expectation will ask about the practice exercise, s/he will be more likely to do it than a patient whose therapist does not follow through. Similarly, if any other task is discussed during a session (e.g., a specific plan to be implemented that would avoid a potential upcoming high risk situation), be sure to follow up on it in the following session: "Were you able to talk to your brother about not coming over after he gets high?"

USE THE DATA. The work a patient does in carrying out a practice exercise and their thoughts about the task convey a wealth of important

information about the patient, his or her coping style and resources, strengths and weaknesses, and should be valued by the therapist and put to use during the sessions.

A simple self-monitoring assignment, for example, can quickly reveal the patient's understanding of the task or basic concepts of CBT, level of cognitive flexibility, insight into his/her own behavior, level of motivation, coping style, level of impulsivity, verbal skills, customary affective state and much more. Thus, rather than simply *checking homework*, the CBT therapist should explore with patient what s/he learned about him or herself in carrying out the task. This, along with the therapists' own observations will help guide the selection and pacing of future sessions.

EXPLORE RESISTANCE. Some patients literally do the practice exercise in the waiting room before a session, while others fail to try, or even think about, practice exercises in between session. Failure to implement coping skills outside of sessions may have a variety of meanings: the patient feels hopeless and does not think it is worth trying to change his/her behavior, the patient expects change to occur through willpower alone and without making specific changes in particular problem areas, the patient's life is so chaotic and crisis-ridden that s/he cannot organize enough to carry out the tasks, and so on. By exploring the specific nature difficulty the patient has with carrying out the assignment, the therapist can help the patient work these through.

PRAISE APPROXIMATIONS. Just as most patients do not immediately become fully abstinent on treatment entry, many are not fully compliant with practice exercises from the outset of treatment. Therapists should try to *shape* the patient's behavior, praising even small attempts at carrying out assignments, highlighting anything the patient reveals was helpful or interesting to him/her in carrying out the assignment, reiterate the importance of practice, and develop a plan for completion of the next session's assignment.

Patient is Active Participant

CBT is collaborative. The patient and therapist consider and decide together on what appropriate treatment goals are, the type and timing of skill training, whether or not a significant other is brought in to some of the sessions, the nature of outside practice tasks, and so on. Not only does this foster the development of a good working relationship and avoid an overly passive stance by the therapist, but also, it assures that treatment will be most useful and relevant to the patient.

Generalizable Skills

Since the treatment is brief, often given over twelve weeks, only a few specific skills can be introduced to most patients. Typically, these are skills designed to help the patient gain initial control over cocaine and other substance use, such as coping with craving and managing thoughts about use. However, the

therapist should make it clear that any of these skills can be applied to a variety of problems, not just cocaine use. In other words, CBT is an approach that seeks to teach skills and strategies that the patient can make use of long after they leave treatment. For example, the skills involved in coping with craving (recognizing and avoiding cues, temporizing behavior through urge control techniques, and so on) can be used to deal with a variety of strong emotional states that may also be related to cocaine use. Similarly, the session on problem-solving skills can be applied to nearly any problem the patient faces, whether substance-related or not.

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3. Defining CBT

Parameters of CBT

As practiced in our clinical trials, CBT is a brief (12-16 session) individual, outpatient, therapy that is usually delivered over 12 weeks, to individuals whose principal drug of abuse is cocaine. The patients we treat are often users or abusers of other substances as well (typically alcohol, marijuana, and less frequently, occasional benzodiazepene or opioid use). This approach has evolved in response to both clinical and research factors.

Individual Treatment

Unlike most treatment programs in the United States, we have selected an individual format for treatment delivery. Clinically, we believe that this fosters greater individualization and tailoring of treatment to meet needs of specific patients. Patients receive more attention, and patients are generally more involved in treatment when they have the opportunity to work with and build a relationship with a single therapist over time. While a number of researchers and clinicians have emphasized unique benefits of delivering treatment to substance users in the group format (e.g., universality, peer pressure), we believe the comparatively high rates of retention in programs and studies may reflect, in part, particular advantages of individual treatment. However, few studies have directly compared the effectiveness of treatment delivered in an individual versus group format and those which have evaluated this have generally not found differences in effectiveness (Grabowksi, in press). From a research perspective, analysis of individual patterns of change is greatly simplified when treated in an individual versus group format. Similarly, individual treatment affords greater flexibility in scheduling sessions and eliminates the problem of either having to deliver treatment in a *rolling admissions* format or ask patients to wait several weeks while sufficient numbers of patients are recruited for a group to form.

While we have not directly evaluated the effectiveness of CBT when delivered in a group format, it is relatively straightforward to adapt treatment described in this manual for groups. This generally requires lengthening the sessions to 1 1/2 hours to allow for all group members to have an opportunity to comment on their personal experiences with trying out skills, give examples, and participate in role playing. Treatment will also be more structured in a group format, due to the need to present the key ideas and skills in a more didactic, less individualized format.

Short-term Treatment (12 week)

As all of our patients enter treatment while still using cocaine, we have focused on comparatively brief, short-term treatment that is intended to bring about initial abstinence and stabilization. In many cases, this short-term approach is sufficient to bring about sustained improvement for as long as a year after

treatment ends. Moreover, preliminary data from our studies suggests that patients who are able to attain three or more weeks of continuous abstinence from cocaine during this 12-week treatment period are generally able to sustain good outcome during the twelve months after treatment ends.

For many patients, however, brief treatment is not sufficient to bring about stabilization or lasting improvement. In these cases, CBT is seen as preparation for longer-term treatment. In our clinical research studies, we directly recommend further treatment when (1) the patient requests further treatment, or (2) if the patient has not been able to achieve 3 or more weeks of continuous abstinence during the initial twelve week treatment.

We are currently evaluating whether adding additional *booster sessions* of CBT during the 6 months following the initial 12-week treatment phase improves outcome over the 12-week treatment alone. The maintenance version of CBT focuses on (1) identifying situations, affects, and cognitions which remain problematic for the patient in their efforts to maintain abstinence or which have emerged after cessation/reduction of cocaine use, (2) maintaining gains through solidifying the more effective coping skills and strategies the subject has implemented, and (3) encouraging patient involvement in activities and relationships which are incompatible with drug use. Rather than introducing new material or skills, the maintenance version of CBT reinforces broadening and mastery of skills to which the patient was exposed during the initial phase of treatment.

Outpatient Treatment

Treatment is delivered on an outpatient basis for several reasons. First, treatment is focused on understanding the determinants of each patient's substance use, and this is best done in the context of the patient's day-to-day life. By understanding who this patient is, where s/he lives, and how s/he spends their time, therapists can develop more elaborate functional analyses and get a good understanding of the patient's resources as well as the challenges faced by each particular patient. Second, skills training is most effective when patients have an opportunity to implement and practice new skills and approaches within the context of their daily routine, learn what does and does not work for them, and discuss new strategies with the therapist.

Who is Appropriate for CBT?

We have evaluated this approach with a broad range of cocaine abusers. While our inclusion/exclusion criteria are broad and we tend to admit most patients seeking treatment, our experience has led us to exclude some patients who are inappropriate for CBT delivered on an outpatient basis. This includes patients who have psychotic or bipolar disorders and who are not stabilized on medication, those who have no stable living arrangements, those who are not medically stable (as assessed by pretreatment physical examinination), and those who have other concurrent substance dependence disorders, with the exception of alcohol or marijuana dependence (although we assess for need for alcohol detoxification in the former). We do accept patients with some

concurrent substance abuse disorders.

We have evaluated, but have not found significant differences in outcome or retention for patients who seek treatment because of court or probation pressure, those who have DSM-IV diagnoses of antisocial personality disorder or other Axis II disorders, nor have we found significant differences in outcomes by patient race or gender. As noted earlier, some of our studies have found better outcomes for CBT compared with comparison treatments, for patients higher in severity of cocaine use and depression, as well as poorer outcomes for patients high in alexithymia. However, it should be noted that these findings have been based on small subsamples sizes in some cases and should be replicated in other studies.

Active Ingredients in CBT, Therapist Behaviors Prescribed and Proscribed

All behavioral or psychosocial treatments include both common factors as well as unique factors or active ingredients (Strupp & Hadley, 1979). *Common factors* refer to dimensions of treatment that are shared across most psychotherapies. These common factors include the provision of education, a convincing rationale for the treatment, enhancing expectations of improvement, provision of support and encouragement, and in particular the quality of the therapeutic relationship (Rozenzweig, 1936; Castonguay, 1993). A positive therapeutic relationship, or alliance, has repeatedly been associated with better outcome in a range of psychotherapies (Horvath & Luborsky, 1993), including substance use (Luborsky et al., 1985; Carroll, Nich & Rounsaville, 1997). A positive working relationship is an essential component of virtually all therapies, but, by itself, is not necessarily sufficient to produce change. *Unique factors* refer to a treatment's *active ingredients*, or those techniques and interventions which distinguish or characterize particular psychotherapies. While common factors are shared, unique factors are those that are not shared across different therapies. Examples of unique factors might include transference interpretations in psychodynamic psychotherapies or invoking the Twelve Steps in disease model therapies.

CBT, like most therapies, consists of a complex combination of common and unique factors. For example, in CBT mere delivery of skills trainings without grounding in a positive therapeutic relationship leads to a dry, overly didactic *psychoeducational* approach that alienates or bores most patients and ultimately has the opposite effect of that intended. It is important to recognize that CBT is thought to *work*, or exert its effects, through this intricate interplay of common and unique factors and a major task of the therapist is to achieve appropriate levels of balance between attending to the relationship and delivering skills training. For example, without a solid therapeutic alliance, it is unlikely that a patient will either stay in treatment, be sufficiently engaged to learn new skills, or to share successes and failures in trying new approaches to old problems. Conversely, empathic delivery of skills training as tools to help the patient manage his/her life more effectively, with the therapist giving the message of "I see you really struggling with your craving for cocaine, I think we can come up with some effective ways to help you understand what's happening better and help you deal with it", may form the basis of a strong working alliance.

The importance of this balance of common and unique factors in CBT was recently supported by data from our clinical trials. We found that not only was the therapeutic alliance rated as *more positive* for CBT with respect to Clinical Management (a nonspecific supportive condition that offered empathy and clinical monitoring but none of the active ingredients of CBT), but that sessions in which more of the active ingredients of CBT were delivered were also rated as having a more positive therapeutic alliance (Carroll, Nich & Rounsaville, 1997).

To specify CBT in terms of its common and unique factors and to clarify the range of therapist interventions that are consistent and inconsistent with this approach, CBT interventions will be described in terms of the system recommended by Waltz and colleagues, 1993): First, CBT's essential and unique interventions, that is, active ingredients that are specific or unique to CBT. Second, CBT's recommended interventions, those that are thought to be *active* and important, but which are not necessarily unique to CBT. Third, interventions, behaviors, or processes that are acceptable within the therapy but are not essential or unique. Finally , interventions, behaviors, or processes that are proscribed, or not consistent with this approach.

Essential and Unique Interventions

In CBT, the key active ingredients which distinguish it from other therapies and the elements that *must* be delivered in order for the patient to be considered as being *adequately exposed* to CBT include:

- Conducting functional analyses of substance use
- Providing individualized skills training in: recognizing and coping with craving, managing thoughts about substance use, problem solving skills, planning for emergencies, recognizing seemingly irrelevant decisions, and refusal skills
- Examination of the patient's cognitive processes related to substance use
- Identification and debriefing of past and future high risk situations
- Encouragement and review of extra-session implementation of skills
- Practice of skills within sessions

Recommended but Not Unique Interventions

Interventions or strategies which should be delivered, as appropriate, during the course of each patient's treatment, but which are not necessarily unique to CBT include:

- Discussing, reviewing, reformulating the patient's goals for treatment
- Monitoring cocaine use and craving
- Monitoring other substance use
- Monitoring general functioning
- Exploring positive and negative consequences of cocaine use
- Exploring the relationship between affect and substance use
- Providing feedback on urinalysis results
- Setting agendae for the session
- Making process comments as indicated
- Discussing advantages of an abstinence goal

Exploration of the patient's ambivalence about abstinence
Meeting resistance with exploration and a problem solving approach
Supporting patient efforts
Assessing level of family support
Explaining the distinction between a slip and a relapse
Including family members or significant others in up to 2 sessions

Acceptable Interventions

Interventions which are not required or strongly recommended as part of CBT but which are not incompatible with this approach include:

Exploring self-help involvement as a coping skill
Identifying means of self-reinforcement for abstinence
Exploring discrepancies between patient's stated goals and actions
Eliciting concerns about substance use and consequences

Proscribed Interventions

Interventions which are proscribed because they are distinctive of dissimilar approaches to treatment and inconsistent with a cognitive-behavioral approach include:

Extensive self-disclosure by the therapist
Use of a confrontational style or a confrontation-of-denial approach
Requiring the patient attend self-help groups
Extended discussion twelve-step recovery, higher power, etc.
Use of disease model language or slogans
Extensive exploration of interpersonal aspects of substance use.
Extensive discussion or interpretation of underlying conflicts or motives
Provision of direct reinforcement for abstinence (e.g., vouchers, tokens)
Interventions associated with Gestalt therapy, structural interventions, etc.

Compatibility with Adjunctive Treatments

This manual described Cognitive-behavioral Treatment for cocaine abuse as a short-term, individual, *stand-alone* treatment. As described in Chapter 1, we have evaluated CBT primarily as a stand-alone treatment, often in combination with pharmacotherapy. However, CBT is highly compatible with a range of other approaches and treatments to address a range of comorbid problems and severity of the disorder. These include pharmacotherapy for cocaine use and/or concurrent psychiatric disorders, family and couples therapy, vocational counseling, parenting skills, and so on. When CBT is provided as part of a larger treatment package, it is essential for the CBT therapist to maintain close and regular contact with other treatment providers. Moreover, a number of ongoing research projects are evaluating the combination of CBT for cocaine abuse with compatible cognitive-behaviorally-oriented treatments for a range of comorbid disorders, including schizophrenia and psychotic disorders, bipolar disorders, and PTSD.

Regarding the role of Alcoholics Anonymous (AA), Cocaine Anonymous (CA), and other self-help groups, we take different approaches, depending upon

whether a patient is enrolled in one of our research studies or in one of our clinics. In our research studies, we have often compared CBT directly to a Twelve-Step oriented treatment, where a major goal of that treatment involves encouraging the patient to develop a lasting relationship with the Fellowship of AA or CA. In order to compare the effectiveness of these approaches directly, we have tried to minimize overlap between the treatments, particularly with regard to AA or CA. Thus, CBT therapists are discouraged from using language or concepts compatible with disease-model approaches (e.g., HALT, AA slogans, disease-model language), in an attempt to deliver a *pure* CBT approach. This also extends to AA/CA meeting attendance, where CBT therapists take a neutral approach regarding self-help meetings. That is, meeting attendance is neither strongly encouraged nor discouraged. If a patient unilaterally states s/he would like to attend or is already involved in self-help, the therapist encourages continued involvement, but also reframes self-help involvement as a coping skill (e.g., s/he can attend a meeting when experiencing craving or a high risk situation, the self-help network can be an important strategy in building and maintaining a social support system, calling on the fellowship can be an important part of building a personal *emergency* coping plan). Given that many AA/CA groups and disease model approaches have recently adopted a number of cognitive-behavioral principles and the many similarities between disease model and cognitive-behavioral models (McCrady, 1994; Morgenstern & McCrady, 1992), few patients report insurmountable discrepancies between the two approaches. In clinical use, therapists are free to actively encourage patients to attend AA/CA meetings; however, therapists never require a patient to attend AA/CA if they do not wish to do so.

CBT in Contrast to Other Treatments

It is often easier to understand what a treatment is in terms of what it is not. This chapter discusses CBT for cocaine abuse in terms of its similarities and differences to other psychosocial treatments for substance abuse.

Approaches Most Similar to CBT

CBT is *most* similar to other cognitive and behavioral therapies, all of which understand substance use in terms of its antecedents and consequences. These include Beck's Cognitive Therapy (Beck et al., 1991) and the Community Reinforcement Approach (CRA) (Azrin et al., 1976; Meyers & Smith, 1995), and particularly Marlatt's Relapse Prevention (Marlatt & Gordon, 1985), from which it was adapted.

> Cognitive therapy "**...is a system of psychotherapy that attempts to reduce excessive emotional reactions and self-defeating behavior by modifying the faulty or erroneous thinking and maladaptive beliefs that underlie these reactions**" (Beck et al., 1991, p 10). CBT is particularly similar to cognitive therapy in it emphasis on functional analysis of substance use and identifying cognitions associated with substance use. It differs from cognitive therapy primarily in terms of *emphasis* on identifying, understanding, and changing underlying beliefs about the self and the self in relationship to substance abuse as a primary

focus of treatment. Rather, in CBT early sessions focus on learning and practicing a variety of coping skills, only some of which are cognitive. That is, in CBT, initial strategies stress behavioral aspects of coping (e.g., avoiding or leaving the situation, distraction, and so on) rather than *thinking* one's way out of a situation. In cognitive therapy, the therapist's approach to focusing on cognitions is Socratic and based on leading the patient through a series of questions, while in CBT the approach is somewhat more didactic. In cognitive therapy, the treatment is thought to reduce substance use by changing the way the patient thinks, in CBT, the treatment is thought to work by changing what the patient does and thinks.

The Community Reinforcement Approach (CRA) "**...is a broad spectrum behavioral treatment approach for substance abuse problems....that utilizes social, recreational, familial and vocational reinforcers to aid clients in the recovery process**" (Meyers & Smith, 1995, p. 1). This is an approach that uses a variety of reinforcers, often available in the community, to help substance users move out of a drug-using into a drug-free lifestyle. Typical components of CRA treatment include (1) functional analysis of substance use, (2) social and recreational counseling, (3) employment counseling, (4) drug refusal training, (5) relaxation training, (6) behavioral skills training, and (7) reciprocal relationship counseling (Meyers & Smith, 1995). In the very successful approach developed by Steve Higgins and colleagues for cocaine-dependent individuals (Higgins et al., 1991, 1994), a contingency management component is added which provides vouchers, redeemable for items consistent with a drug-free lifestyle, that are contingent upon the patient's provision of drug-free urine toxicology specimens. Thus, CRA and CBT share a number of features, most importantly a functional analysis of substance use and behavioral skills training. It differs from CRA in not typically including the direct provision of either contingency management (vouchers) for abstinence or intervening with patients outside of treatment sessions or the treatment clinic, as do community-based interventions (job or social clubs).

CBT has some similarities to other approaches, including Motivational Enhancement Therapy (MET) (Miller & Rollnick, 1991). MET "**...is based on principles of motivational psychology and is designed to produce rapid, internally motivated change. This treatment strategy does not attempt to guide and train the client, step by step, through recovery, but instead employs motivational strategies to mobilize the client's own change resources**" (Miller et al., 1992, p. 1). CBT and MET share some approaches, particularly an exploration, early in the treatment process, of what the patient stands to gain or lose through continued substance use, as a strategy to build the patient's own motivation to change their substance use. CBT and MET differ, however, primarily in emphasis on skill training. While in MET responsibility for *how* the patient is to go about changing his/her behavior is left to them and assumes that the patient can use available resources to change behavior and does not require such training; CBT maintains that learning and practice of specific

substance-related coping skills fosters abstinence. Thus, because they focus on different aspects of the change process (MET on *why* the patient may go about changing his/her substance use; CBT on *how* the patient might do so), these two approaches may be seen as complementary to one another. For example, for a patient with low motivation and few resources, an initial focus on motivational strategies before turning to specific coping skills (MET before CBT) may be the most productive approach. Similarities and differences between MET and CBT are presented in Table 3.1

Approaches Most Dissimilar to CBT

While it is important to recognize that all psychosocial treatments for drug abuse share a number of features and may overlap or closely resemble one another in several ways, there are some approaches which are more dissimilar to CBT.

CBT is dissimilar to Twelve-Step, or disease model approaches, in a number of ways. Twelve Step Facilitation (TSF) (Nowinski, Baker, and Carroll., 1992) "...is grounded in the concept of alcoholism as a spiritual and medical disease. The content of this intervention is consistent with the 12 Steps of Alcoholics Anonymous (AA), with primary emphasis given to Steps 1 through 5. In addition to abstinence from all psychoactive substances, a major goal of the treatment is to foster the participant's commitment to and participation in AA or Cocaine Anonymous (CA). Participants are actively encouraged to attend self-help meetings and to maintain journals of their AA/CA attendance and participation" (Project MATCH Research Group, 1993). While CBT and TSF share some concepts, for example the similarity between the disease model's *people, places, and things* and CBT's *high risk situations*, there are a number of important differences. While disease-model approaches are grounded in a conception of addiction as a disease that can be controlled but never cured, CBT sees substance abuse as a learned behavior that can be modified. While the emphasis in disease model approaches is on emphasis of the patient's loss of control over substance abuse and other aspects of his/her life, the emphasis in CBT is on self-control strategies; that is, what the patient can do to recognize the processes and habits that underly and maintain substance use and what can be done to change it. Similarly, the major change agent in disease model approaches is involvement with the fellowship of AA/CA and *working* the Twelve Steps, that is, the way to cope with nearly all drug-related problems is by going to meetings or deepening involvement with fellowship activities. In CBT, coping strategies are much more individualized and based on the specific types of problems encountered by the patient and his/her usual coping style. Contrasts between TSF and CBT are also found in Table 3.1.

In fact, while attending AA or CA meetings is not required or strongly encouraged in CBT, some patients find attending meetings very helpful in their efforts to become or remain abstinent. CBT therapists take a neutral stance to attending AA, encouraging patients to view going to meetings

as *a*, not *the*, coping strategy. In other words, the CBT therapist may explore with the patient the ways in which going to a meeting when faced with strong urges to use may be a very useful and important strategy to cope with craving, but will also encourage the patient to think about and have ready a range of other strategies as well.

CBT is also different from interpersonal and short-term dynamic approaches such as Interpersonal Psychotherapy (IPT) (Rounsaville & Carroll, 1993) or Supportive-Expressive therapy (SE) (Luborsky, 1984). **IPT is based on the concept that many psychiatric disorders, including cocaine dependence, are intimately related to disorders in interpersonal functioning which may be associated with the genesis or perpetuation of the disorder. IPT adapted for cocaine dependence was four definitive characteristics: (1) adherence to a medical model of psychiatric disorders, (2) focus on patients' difficulties in current interpersonal functioning, (3) brevity and consistency of focus, and (4) use of an exploratory stance by the therapist that is similar to that of supportive and expressive therapies.** IPT and CBT differ from CBT in several ways: CBT is a structured approach, whereas IPT is more exploratory. Extensive efforts are made in CBT to teach and encourage the patient to use skills to control their substance use, while the more exploratory approaches view substance use as a symptom of other difficulties and conflicts, and thus may deal less directly with the substance use. Contrasts between TSF and CBT are also found in Table 3.1.

Table 3.1

Contrasts Between CBT and Other Treatments

	Twelve Step Facilitation (TSF)	Cognitive-Behavioral (CBT)
Goals of Treatment	Encourage patient to accept the diagnosis of addiction and understand addiction as a progressive, fatal disease. Facilitate patient's integration into AA/CA/NA.	Help patient master coping behavior as effective alternative to drug use. Increase patient's self-efficacy.
Approach	Medical/disease oriented	Behavioral
Agent of Change	Treatment Fellowship/Higher Power	Treatment Mastery of skills
Labelling	Labelling patient as *addict* is encouraged, as this label provides the framework for the treatment. Acceptance of the diagnosis is necessary, it determines a set of symptoms (e.g., lack of control, denial) and the steps required for recovery.	Labelling discouraged; drug abuse/dependence is conceived as overlearned behavior that can be broken down into a finite set of discrete problem situations and behaviors.
Control	Emphasis on loss of control. Patient cannot control drug use; as s/he has the disease, addiction, which s/he is powerless to control. Patient can control whether s/he has the next run, whether or not s/he uses CA/AA, whether or not patient harbors the idea that s/he can control drug use.	Emphasis on self-control. Patient makes decisions regarding drug use over which s/he has control. Patient can learn to understand and better control the decision-making process. Patient can exert self-control by choosing to engage in alternative behaviors.
Responsibility	Patient responsible for own sobriety, by *working* the 12 Step program.	Patient responsible for own behavior. Emphasis on enhancing self-efficacy through skills training.
Conception of Craving	Because of disease processes, patient's body will crave cocaine periodically. First use will trigger craving.	Craving as conditioned response. Craving can be coped with and reduced through stimulus control, urge control, etc.

Motivational Enhancement (MET)	Interpersonal Therapy (IPT)
Maximize patient's motivation and commitment to change his/her drug use.	Help patient develop more productive strategies for dealing with social and interpersonal problems associated with drug use.
Motivational Patient Readiness for change	Brief dynamic Treatment Acquisition of alternate strategies for meeting interpersonal needs
Labelling is strongly discouraged; alternative conceptions of drug use are accepted/encouraged.	Labelling strongly discouraged; drug use seen as highly individualized and related to interpersonal context.
Emphasis on choice. Patient has full control over decision to alter drug use.	Emphasis on self-control and the function that drug use serves for the patient. Symptom of drug use seen as a method of controlling environment and others to get needs met.
Patient responsible for own choices. Emphasis on autonomy, self-efficacy.	Patient responsible for own behavior. Exploration of own role in interpersonal relationships.
Patient free to develop and capable of developing strategies for dealing with craving on his/her own.	Signal of unresolved interpersonal problem. Patient should begin to translate what triggered craving into underlying interpersonal problem.

Table 3.1 (cont.)

Contrasts Between CBT and Other Treatments

	Twelve Step Facilitation (TSF)	Cognitive-Behavioral (CBT)
Strategies Addressing Ambivalence and Motivation	Remember last run. Addiction is a disease that motivates denial, educate patient re *sinister* aspects of disease. Current problems attributed to disease.	Positive/negative consequences of decisions to use or stay abstinent. Instill belief that effective coping will provide alternatives to drug use.
Patient's Response to Substance Use	External, uniform approach. Use CA/AA social network (call sponsor, go to a meeting). Remember slogans (eschews alternative strategies, because of denial). "Do not think you can control the consequences of use."	Individualized approach. Develop and use individualized set of coping strategies (challenge cognitions, problem-solve, etc.). Examine antecedents, behaviors, and consequences. "You can learn skills to avoid lapses and prevent lapses from becoming relapse."
Coping Behaviors	CA/AA fellowship/network constitute a ready-made set of strategies and the one preferred solution.	Individualized set of strategies, generalizeable problem-solving approach. Specific training in drug refusal skills, urge control, altering cognitions, emergency planning, etc.
Cognitions	Generally interpreted as evidence of denial, e.g., "stinking thinking".	Identified, examined, and challenged; encourage alternative perceptions/cognitions.
Handling Resistance	Confrontation of denial, exhortation of acceptance of addiction.	Application of problem-solving. Reinforcement of even minimal positive steps.
Role of Spouse/S.O. in Treatment	Reduce enabling, facilitate detaching, seek support through AlAnon.	Reinforce positive behavior change.
Phone Calls/crises	Refer patient to CA sponsor. "Use the fellowship".	Encourage patient to implement coping and problem-solving strategies.
Level of Structure	Highly directive and structured	Moderately directive and structured

Motivational Enhancement (MET)	Interpersonal Therapy (IPT)
Acknowledge validity of patient feelings, elicit self-motivational statements. Empathic listening, primacy of patient's choice. FRAME.	Challenge positive view of drug effects and emphasize deleterious effects by enumerating cost repeatedly. Emphasize authentic gratification patient will experience from improved interpersonal functioning.
Internal, individualized approach. Reviews progress, reviews/evaluates initial plan, renews motivation and commitment.	Explore interpersonal consequences of drug use and what needs were being met by using. Call attention to discrepancy between patient's goals and drug use.
"It's up to you whether you use or not."	"You feel more sociable when you're high, yet your cocaine use has alienated your family. What about that?"
Patient free to develop own coping strategies. Development of strategies encouraged, but not provided by therapist.	Patient free to develop own coping strategies. Development of strategies is encouraged, but not provided by therapist. Encouragements to use social supports instead of drugs.
Accepted as valid, met with exploration and reflection.	Exploration of effects of distorted thinking on interpersonal relationships is critical.
Reflection, empathy, reframing. Patient actively avoids evoking resistance.	Explored and interpreted in interpersonal context. Limited exploration of transference.
Facilitate patient's motivation to change drug use behavior.	Explore ways of providing support to patient. Exploration of relationship vis-a-vis drug use.
Meets patient's concerns with reflection.	Reinforce use of interpersonal contact instead of drugs in times of crisis. Encourage use of social supports.
Patient structured	Moderately directive and loosely structured

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4. The Structure and Format of Sessions

In contrast to other approaches to substance dependence, CBT is a highly structured treatment. In particular, the focus on skills training means the treatment is inherently more didactic than many other treatments. Thus, CBT therapists assume a more directive and active stance than therapists conducting some other forms of substance abuse treatment. There is a great deal of *work* to be done during each session, including review of practice exercises, debriefing problems that may have occurred since the last session, skills training, feedback on skills training, in-session practice, and planning for the next week. Again, however, this more active stance must be balanced with adequate time for understanding, joining the patient, and engaging with the patient.

20/20/20 RULE

- First Third of Session
  - Assess substance use, craving and high risk situations since last session.
  - Listen for/elicit patient's current concerns.
  - Review and discuss practice exercise.
- Second Third of Session
  - Introduce and discuss session topic.
  - Relate session topic to current concerns.
- Final Third of Session
  - Assign practice exercise for next week.
  - Explore patient's understanding of and reactions to topic.
  - Review plans for week and anticipate potential high risk situations.

Thus, to achieve a good integration of manual-driven and patient-driven material in each session, we have developed the *20/20/20 rule* for the flow of a typical 60-minute CBT session. In a 20/20/20 session, the first 20 minutes are characterized by the therapist's getting a clear understanding of the patient's current concerns, level of general functioning, and substance use and craving during the past week, as well as his/her experiences with the practice exercise. This first third of the session tends to be characterized by the patient talking more than the therapist, although the therapist guides this part of the session with questions and reflection as s/he gets a sense of the patient's current status. The second twenty minutes is devoted to introduction and discussion of the particular skill to be discussed that session. The therapist typically talks more than the patient during this part of the session, although it is critical that the therapist personalizes the didactic material and checks back with the patient frequently for examples and understanding. The final twenty minutes then reverts back to being more patient-dominated, as the patient and therapist agree on a practice exercise for the next week, and anticipate and plan for any

First Third of Session

Assess Substance Use, Craving and High Risk Situations Since Last Session

difficulties the patient might encounter before the next session.
Here the therapist greets the patient, and typically starts the session by asking the patient how s/he is doing. Most patients respond to this by spontaneously reporting whether or not they used cocaine or had cravings during the last week. If the patient does not report substance use, the therapist should ask about this directly. Particularly in the beginning of treatment, the therapist should obtain a detailed, day-by-day description of how much cocaine was used. For each episode of use, the therapist should spend several minutes doing a functional analysis (what happened before the episode, when was the patient first aware of the desire or urge to use, how s/he was feeling, how and where the patient acquired the cocaine, what was the high like, what happened afterwards). If the patient reported no cocaine use, the therapist should probe for any high risk situations or cravings the patient may have experienced and *debrief* these as well. The therapist's goal here is to get a detailed sense of the patient's current level of functioning, motivation, and cocaine use.

URINE TOXICOLOGY SCREENS

Since the therapist will also be obtaining urine specimens at every appointment, the early part of the session is a good opportunity to review results of the most recent urine toxicology reports with the patient. Ideally, the clinic has access to a *dipstick* method where the patient's urine can be tested on the spot and drug use within the past 3 days can be detected.

While discussing urine test results is straightforward where the patient reports being drug-free and the laboratory results confirm this, it is somewhat more complicated in cases where the patient has denied cocaine use but the urine screen indicates recent cocaine use. While patients often present excuses or creative explanations of why the toxicology screen was in error, it is best to point out that laboratory errors are quite unusual, point out that the patient has little to gain from not being honest about his/her substance use, and in fact has much to lose, as treatment will be less helpful if the patient is not open about the kinds of problems s/he is having. *Confronting* a patient about discrepancies in self- versus laboratory reports of substance use is very important; done well, this an advance the therapeutic relationship and the process of treatment significantly. However, pointing out these discrepancies should *not* be done in a confrontational style. Rather, the therapist might point out discrepancies between the patient's stated treatment goals and the urine results ("you've said things are all going great, but the urine results make me wonder if its all been as easy as you say. What do you make of this?"). The therapist might also point out some reasons why patients are often reluctant to admit to ongoing drug use (fear of being terminated from treatment, wanting to please the therapist, testing the therapist, minimizing ongoing levels of drug use), explore these with the patient, and process these as appropriate:

T: "It sounds like you're afraid that treatment is not working for you as quickly as you, and especially your wife, would like, and admitting you used last week might mean you wouldn't continue

in treatment. I want to understand that as long as you keep coming, working hard, and trying to stop using, I'll keep working with you. The only way that would change is if your cocaine use increased to a level where it was clear that outpatient treatment just wasn't enough to help you stop. In that case, we'd talk about increasing the frequency of sessions, or other options, like your going into an inpatient unit, How does that sound?"

OR

T: "I know the cocaine level from last week's lab test wasn't high, but it does indicate some recent cocaine use. Is it possible you used even a small amount last week?"

P: "Well, I did use a dime, but I didin't think that counted."

T: "One line in the last week is a lot less than you were using just a few weeks ago and that's really great. But before we get into how you were able to cut down your use that much, I was wondering while you feel that one line *doesn't count*, since there's probably a lot we can learn about even that small amount of use."

APPLYING A PROBLEM SOLVING STRATEGY TO COMMON PROBLEMS

It is not unusual for patients, particularly those who have not been in treatment before, to come late to appointments or miss appointments without calling. Here, the general therapist strategy is to apply a problem-solving strategy. This entails some inquiry about why the patient was late, brainstorming solutions to lateness, and working through how plans to attend sessions promptly might be implemented.

Listen for/elicit Patient's Current Concerns

In reporting on substance use and the major events since the last session, the patient will invariably reveal a great deal about his/her general level of functioning and the types of issues and problems of most concern to him or her right now. The therapist should listen carefully and assess the patient regarding a number of domains: Has the patient made some progress in reducing their drug use? What is his/her current level of motivation? Does s/he have a reasonable level of support in efforts to remain abstinent? What's bothering this person most right now? Here, the therapist should listen intently, clarify when necessary, and where appropriate, relate current concerns to substance use (e.g., "...it seems like you're really worried about the guys at work getting you in trouble with your boss. Are these the same guys you used with?", or "It sounds like you were really lonely and bored this weekend, and maybe you've been feeling this way for a long time. Is that something you'd like to work on in here?").

During this part of the session, while getting a clear sense of the patient's current concerns, the therapist should be planning for the rest of the session, particularly in terms of how the planned session topic relates specifically to a

problem or issue the patient has experienced recently ("Talking about how bored you felt over the weekend makes me wonder if you weren't having a lot of craving for cocaine as well. If you think that's true, I'd like to spend time in this session talking about understanding craving and learning to deal with it"). When done well, this approach builds strong working relationships and heightens the relevance of CBT tremendously, as the patient gets the sense that the therapist is responding to his/her struggles with useful, timely tools and strategies.

Review and Discuss Practice Exercise

The early part of each session should also include detailed review of the patient's experience with and reactions to the practice exercise. The primary focus should be on what the patient *learned* about him/herself in carrying out the exercise. Was it easier or harder than expected? What coping strategies worked best? What didn't work as well? Did the patient come up with any new strategies? Again, if the therapist spends considerable time engaging with the patient in a detailed review of his/her experience with extra-session implementation of tasks, not only will the therapist convey to the patient as sense of the importance of practice, but the therapist and patient together will learn a tremendous amount about the patient.

Thus, the CBT therapist should *not*: (1) Merely ask the patient whether or not s/he completed the task or accept a one work (yes/no) response without further probing, (2) *Collect* the patient's practice exercise as if it work a *homework assignment*. Patients should be encouraged to keep a notebook or journal with their practice exercises, as they may find them useful to refer to long after they leave treatment. (3) Use an aggressive or confrontational style in cases where a patient does not attempt to carry out skills implementation or does so in a perfunctory way. Instead, the strategies discussed in Chapter 2, may be helpful in moving the patient towards implementing skills outside of sessions (Giving a clear rationale, getting a commitment from the patient, anticipating and working through obstacles, monitoring task completion closely, making good use of the data, exploring resistance, and praising approximations).

Second Third of Session

Introduce and Discuss Session Topic

After getting a clear sense of the patient's general functioning, current concerns, and progress with task implementation, the therapist should then move toward a transition to the session topic for that week. This may either be introducing a new topic, or finishing up or reviewing an old one. In any case, an agenda for the remainder of the sessions should be set or reviewed at this time ("Since you had that problem with Jerry last week, I think it might be a good idea to talk more about how you can avoid or refuse offers of cocaine, and to practice a few more times so you feel more confident the next time that comes up. Then we can spend some time figuring out how you can have another clean week. How does that sound?").

Relate Session Topic to Current Concerns

Explore Patient's Understanding of and Reactions to Topic

Final Third of Session

Again, therapists should explicitly point out the relevance of the session topic to the patient's current cocaine-related concerns, and introduce the topic using concrete examples from the patient's recent experience ("I think this is a good time to talk about what to do when you find yourself in a really tough high risk situation, like what happened at the park on Tuesday. You coped with it really well, by getting out of there quickly, but maybe there are some other things we can come up with if you find yourself in that kind of situation again").

Assign Practice Exercise for Next Week

Therapists should never assume that a patient fully understands the session material or that it feels timely and useful to them. While going through the material, the therapist should check for patient understanding by:

- Asking for concrete examples from the patient ("Can you think of a time last week when this happened to you?").
- Eliciting the patient's views on how s/he might use particular skills ("Now that we've talked about craving, and talked about urge surfing, distraction, and talking it out, what do you think would work best for you? Which of these have you used in the past? Is there any other way you've tried to cope with craving?").
- Asking for direct feedback from the patient ("Does this seem like it's an important issue for us to be working on right now, or do you have something else in mind?").
- Asking the patient to describe the topic or skill in his/her own words ("We've talked a lot about building an emergency plan. Just to make sure you're confident about what you want to do, can you tell me what you're planning the next time you get into an emergency situation?").
- Role playing or practicing the skill within the session ("It sounds like you're ready to practice this. Why don't we try that situation you were telling me about when your father got angry when you asked for a ride over here?").
- Paying attention to the patient's verbal and nonverbal cues ("I noticed that you keep looking out the window and I was wondering what you're thinking about what we're talking about today").

Review Plans for the Week and Anticipate Potential High Risk Situations

In many cases, a patient will feel that a particular topic is not really relevant to them. For example, a patient may completely deny experiencing any craving for cocaine. While therapists should use clinical judgment in determining the salience of particular material for particular patients, a therapist might work through a particular topic the patient does not feel is relevant at that moment by pointing out that some problems may come up in the future, and having a particular skill in the patient's repertoire may be quite useful ("I know you're not feeling bothered by craving now, and don't think you'll experience any in the near future, but it may come up in a few weeks or even after you leave treatment. In any case, it might be helpful to spend a little bit more time talking about it, so if it *does* come up, you'll be prepared. What do you think?").

The last third of the session is, like the first third, likely to be characterized by the patient talking more, with the therapist guiding the discussion through asking questions and obtaining clarification.

As part of the wind-down of the session, the therapist and patient should discuss the practice exercise for the next week. In working through a practice exercise, it is critical that the patient understand clearly what is required. Early in treatment for most patients, and throughout treatment for others, the therapist may find it useful to do an example of the assignment during the session. Again, the therapist should also ask for a commitment from the patient to try out the skill and to work through obstacles to implementing the skill by planning when and where the patient will carry out the task. There is a suggested practice exercise that accompanies each session; an advantage of using these sheets is that they also summarize key points about each topic and thus can be useful reminders to the patient of the material discussed each week.

Again, however, the extra-session practice of skills will be most useful to the patient if it is individualized. Thus, rather than being bound by the suggested exercises, the therapist and patient are encouraged to use these a starting point for discussing the best way for a patient to implement the skill and to come up with variations or new assignments. Similarly, not all *assignments* must be written; a number of patients may have limited literacy and they may tape their thoughts about the practice exercise.

The final part of each session should include a detailed discussion of the patient's plans for the upcoming week and anticipate high risk situations, ("Before we stop, why don't we spend some time thinking about what the next few days are going to be like for you. What are your plans for after you leave here today? What's the hardest situation you think you'll have to deal with before we meet on Friday?"). Thus, the therapist tries to model the idea that the patient can literally plan him/herself out of using cocaine. For each anticipated high risk situation, the therapist and patient should identify appropriate and viable coping skills. Early in treatment, this may be as concrete as asking a trustworthy friend or significant other to handle the patient's money.

Again, this may be difficult in the beginning of treatment, particularly for patients who are not used to planning or thinking through their activities, or whose lives are highly chaotic. This kind of planning and anticipation models an important skill that is the focus of the session on "Seemingly Irrelevant Decisions"; that is, learning to temporize behavior by looking ahead. For patients whose lives are chaotic, this also may help reduce the patient's sense of lack of control. Similarly, patients who have been deeply involved with substance dependence for a long time will discover through this process that they have few activities to fill their time or do as alternatives to drug use, by being unemployed or having few non-substance using social supports. This

5. Skills Training Guidelines

Overview

becomes an opportunity to discuss strategies to rebuild a social network or begin to think about going back to work.

Topic 1: Introduction to Treatment and CBT

Goals

There are 8 skill topics to be covered in CBT for cocaine dependence, in addition to a session on termination and elective sessions on HIV risk reduction and significant other involvement. While the sequence of these topics as sessions should be determined by the clinical judgment of the therapist and the needs of the patient, they are presented here in the sequence most often used with cocaine abusers in our clinical trials. This sequence attempts to introduce first the most critical behavioral skills for cocaine abusers just entering treatment, with more general skills introduced later in treatment. This sequence of sessions also draws from the structure of the cognitive-behavioral treatment used in Project MATCH (Kadden, Carroll, Donovan et al., 1992).

Key Interventions

CBT is usually delivered in 12-16 sessions over 12 weeks; thus, there are fewer skills training topics than there are sessions. This affords some flexibility to the therapist in allowing for greater practice and mastery of a small but critical set of skills, as well as repetition of session material as needed. This is intended to prevent the patient being overwhelmed with material. For example, in each section, several skill guidelines are given; indeed, many more than can be reasonably introduced in any one session. When delivered as a single session, the therapist should carefully select skills to match the patient and not attempt to cover all of them. Thus, the therapist might pick one or two coping skills the patient has used in the past (although the patient may not recognize them as such) and introduce one or two more that are consistent with the patient's coping style. When delivered as more than one session, the therapist should split up the guidelines, discussing and practicing the most basic and familiar ones in the first session and the more challenging ones in the second. Moreover, the two-session format allows for the patient to be introduced to a skill in the first session, practice it in the interval before the next session, and discuss and work through any difficulties during the second session. Practice exercises should be given for both sessions; with the exercise for the second session a variant of the first (e.g., trying out a skill not used the week before, increasing the difficulty or complexity of the task).

Some patients, particularly less severe users, may move through the skills very quickly. When this occurs, we often draw from some of the excellent *elective* session material from the Monti et al., (1989) book. Since this material tends to focus on broader, interpersonal skills, such as coping with criticism or anger, it is comparatively straightforward to adapt for use with cocaine abusers. The sessions on *managing negative moods and depression* are used particularly frequently.

The first session is the most important and often the most difficult, as it is here that the therapist must address several areas:

Begin to establish a relationship with the patient.
Assess the nature of the patient's substance use and other problems that may be important factors in treatment.
Provide a rationale for the treatment.
Establish the structure for the remaining sessions.
Initiate skills training.

Because of the complexity of the tasks involved in the first session, therapists should allow 1 1/2 hours, rather than the typical one hour session.

1. TAKING A HISTORY AND ESTABLISHING A RELATIONSHIP

After greeting the patient, the therapist should spend a considerable amount of time during the first session getting to know the patient, obtaining a history of the patient and his/her substance use, getting a sense of the patient's level of motivation, and assessing what led to the patient seeking treatment. This occurs through a series of open-ended questions, where the therapist should cover at least the following areas:

Reasons for seeking treatment and treatment history:
- What brought you here today?
- Have you ever been in treatment for cocaine before?
- When was that (how long did you stay/go there, what was it like, what did you like or not like about the program, why did you leave?)
- What about treatment for other substances, like alcohol, heroin, or benzodiazepines?

History and current pattern of cocaine use:
- What's your cocaine use right now like?
- How do you use (smoking, sniffing, shooting)?
- How often/much do you use?
- What's the longest period of abstinence you've ever had? When did it stop/start?
- What's the longest period of abstinence you've had in the last 3 months?
- How did that start and end?
- What have you tried to do to cut down on your cocaine use?
- How do you get cocaine?
- How much alcohol do you drink? How does drinking affect your cocaine use?
- How long have you been able to not drink?
- What kinds of other drugs are you using?
- How do you feel after using cocaine?
- How did your cocaine use get started?

Other problems and resources:

Where do you live? Does anyone you live with use cocaine? Who among the people you spend the most time with use drugs? Who doesn't use?

Are you working now? How has your cocaine use affected your employment?

Does your family know about your cocaine use?

When was your last physical? Do you have any medical problems or worries?

Do you have any legal problems? Is probation or parole involved with your decision to seek treatment?

How do you feel most of the time? Have you been depressed or down? Have you ever thought about hurting yourself? Have you ever done so? Does that happen just when you use cocaine? Have you ever become paranoid or thought someone was after you while using? What was that like?

Because our patients have typically been through an extensive assessment battery before meeting the therapists, the therapists attempt to be sensitive to this ("I know you've already spent several hours answering questions, but now as we're beginning treatment, I hope you can deal with a few more questions that should help you and me plan where we go from here").

2. ENHANCING MOTIVATION

As part of the dialogue involved in the questions above and the patient's responses to them, the therapist should be listening closely for, and where possible eliciting, statements or comments from the patient concerning their reasons for seeking treatment or reducing cocaine use. Here, some of the general strategies recommended by Miller and colleagues (1992) for enhancing motivation and avoiding resistance are extremely useful, including:

ELICITING SELF-MOTIVATIONAL STATEMENTS. "It sounds like from what you've told me that your parents and your PO are worried about your cocaine use, but I was wondering how you felt about it"; "Tell me how using cocaine has affected you"; "What bothers you most about your cocaine use?".

LISTEN WITH EMPATHY. "It sounds like your worried about taking all this on at once"; "You feel like you want to stop, but you're worried because you've tried treatment before and you've gone back to cocaine use each time", "On one hand, you feel not seeing Jerry as much would be an important step forward for you because you've always used with him, on the other hand you worry about cutting yourself off from a friend who you've been close with for a long time". Therapists should avoid interrupting the patient, arguing with or challenging the patient, or changing the subject.

ROLL WITH RESISTANCE. "You're not sure you're ready to spend a lot

time changing your lifestyle right now"; "I think you're jumping ahead a bit; we can take some time to talk about what's the best goal for you and how to approach it".

POINT OUT DISCREPANCIES. "You're not sure cocaine is that big a problem, but at the same time a lot of people who care about you think it is and getting picked up for possession is causing some problems for you."

CLARIFY FREE CHOICE. "There's nothing I or anyone else can do *make* you stop cocaine; what you do is really up to you"; "You can decide to take this on now or wait until another time".

REVIEW CONSEQUENCES OF ACTION AND INACTION. "What do you see happening if you don't stop using cocaine?" "It sounds like you've got some concerns about slowing things down with Jerry; what do you think will happen if you don't?"

3. NEGOTIATION OF TREATMENT GOALS

CBT for cocaine dependence is an abstinence-oriented treatment. There are many reasons for this. Cocaine use, even in small amounts, is associated with a variety of serious medical and psychiatric risks. Furthermore, unlike alcohol where some cognitive-behaviorally oriented treatments advocate a moderate drinking goal, cocaine is an illicit drug with considerable legal risks as well. Clinically, better outcomes are usually seen for patients who are abstinent.

At the same time, relatively few patients come to treatment completely committed to an abstinence goal. Many seek treatment due to some external persuasion or coercion; others have a goal of cutting down cocaine use to a point where negative consequences of cocaine use are eliminated, but cocaine use might go on. For patients who are highly ambivalent about abstinence, clinicians must recognize that commitment to abstinence is a process that often takes several weeks to work through in treatment. Moreover, in most patients, abstinence takes several weeks to achieve and does not occur all at once.

Thus, in these cases, therapists explicitly state that the goal of treatment is abstinence. Thus, while therapists *should make it clear that they think abstinence is the best option*, the message that therapists convey to participants who are not fully committed to abstinence might go as follows:

T: "I know you're not sure about stopping cocaine use completely, and we'll spend some time over the next few sessions talking about what you want to decide. However, there are some good reasons to consider abstinence from cocaine, as well as other drugs and alcohol. For example, by trying to stop completely while you're here, you'll learn a tremendous amount about yourself and some of the factors that might be pushing you to continue using. You might also find it easier to understand the circumstances that make it more likely for you to use and some things you can do to stop using. You'll also avoid substituting other substances

for cocaine. After a period of abstinence, you can get a clear idea of how you'll feel without cocaine in the picture, and can get a sense of whether that's what you really want to do. You can always change your mind later. What do you think?"

While this is a short-term treatment, focused on cessation of cocaine use, patients invariably have a number coexisting problems and concerns, some of which are related to cocaine dependence, some not. Therapists should also ask about whether the patient has other goals, as well as how stopping substance use might help the patient reach those goals (e.g., regaining custody of their children, going back to work). In general, while the primary focus of treatment should be stopping cocaine use, it is important to recognize and help the patient sort through other problems and symptoms. In the case of problems that may be closely related to cocaine dependence (e.g., depressive symptoms, marital conflict, legal problems), it is critical the therapist acknowledge these, work with the patient to prioritize the goals in relationship to cocaine use, negotiate reasonable treatment goals and how the treatment will address them, and monitor these other target symptoms and problems as treatment proceeds:

T: "I know you've been feeling down and want to try Prozac again, but you've been using for a long time, and it's going to be hard to sort out how much of how you're feeling is due to that cocaine use, and how much might be a depressive problem that's separate from your cocaine use. The best way to tell is after a period of abstinence. Generally, we find that depressed feelings that last more than a month after the last use indicate the need to address these separately, possibly with medication. What do you think about getting a month of abstinence in, and then considering a referral to one of the psychiatrists here for a medication evaluation? In the meantime, it also sounds like we should spend some time talking about feeling down, and how that might be related to your cocaine use."

T: "It sounds like there have been some problems with Billy for a long time, and he's asked you to leave, but at the same time you think things might get better if you stop using cocaine. One thing we can do in our work is to invite Billy to attend a session or two, so he can ask questions and learn more about this treatment programs, and the two of you can talk about where to go from here. After we complete this first twelve weeks, we might also think about a referral to family services. How does that sound?"

4. PRESENTING THE CBT MODEL

At this point, the therapist should provide an explanation and rationale for the treatment. This should cover the following points (covered in Chapter 2):

COCAINE USE CAN BE SEEN AS LEARNED BEHAVIOR. "One way of looking at cocaine use is that it's something people learn to do over time. They learn from watching other people use it; they learn ways to get and

use it; they learn that cocaine has certain effects that may make them feel more energetic or attractive or social. As you've been talking, it seems like you've been doing a lot of learning over the years, too...."

OVER TIME, COCAINE USE AFFECTS HOW PEOPLE THINK, HOW THEY FEEL, AND WHAT THEY DO. "This learning process affects a lot about a person over time. People start developing certain beliefs about cocaine, like its hard for them to function without it. You've probably developed your own set of beliefs about cocaine use, and by looking at these beliefs, we'll be able understanding them better and it'll help you learn ways to stop. Cocaine also affects how people feel; some people find it makes them feel better for a short period of times, other talk about using cocaine to try to stop feeling so bad. Over time, those feelings get paired up with cocaine, and it's important to try to look at and understand these as well. Finally, cocaine affects what people do; you've already talked about how cocaine is such a habit for you, that it's something you do without even thinking."

BY UNDERSTRANDING THIS PROCESS, INDIVIDUALS FIND IT EASIER TO LEARN TO STOP USING COCAINE AND OTHER DRUGS. "You've said there's a lot about cocaine that's pretty automatic for you; like how you didn't even remember going to New York last week. What we'll do is spend a lot of time slowing that process down; we'll look at what happens long before you use, what you're thinking and feeling and where you are using, we'll look at what use is like for you, and we'll look at what happens after you use. By understanding what seems so automatic now, it'll be a lot easier to control".

NEW, MORE EFFECTIVE SKILLS CAN REPLACE OLD HABITS THAT LEAD TO COCAINE USE. "It's not just understanding these automatic processes, it's also doing something different that helps people stop using. You've talked about how just stopping the cocaine and not changing anything else doesn't really work for you. Really stopping cocaine means learning to do things differently, and that's where coping skills comes in. Instead of responding to old cues and problems with cocaine, we'll be talking about, and practicing, new, more effective ways of coping. This isn't always easy, because you've learned your old cocaine coping style over a long time. What we'll do is help you unlearn some old, less effective strategies, and learn some new ones. It'll take some time and a lot of practice to learn some new skills, but I bet if we look at the time you were abstinent for 4 months last year, we'll find you used some pretty effective coping mechanisms".

Practice Exercise

PRACTICE IS ESSENTIAL. "This takes practice. Really trying out new ways of responding to old situations. One thing that might help to remember is that it took a lot of time for you to learn how to be such an effective cocaine user; how to get the money, buy cocaine, use it, and not get caught. That's a highly developed skill for you. Since you've been doing it for so long, a lot of other kinds of skills that you might have aren't in practice, and won't be natural for you at first. That's where

TRIGGER (What sets me up to use?)	THOUGHTS AND FEELINGS (What was I thinking? What was I feeling?)	BEHAVIOR (What did I do then?)	POSITIVE CONSEQUENCES (What positive thing happened?)	NEGATIVE CONSEQUENCES (What negative thing happened?)

Figure 5.1 (See Appendix 5.1).

practice of new skills comes in. We'll practice during sessions, but each week, we'll also talk about how you can practice new skills outside of sessions. This kind of practice is really important, and won't seem natural or easy at first. By sticking it out and practicing outside of our meetings, though, you'll learn a lot about yourself and what works and doesn't work for you. You can always bring problems in and talk about new ways of coping. Can you see yourself doing some practice outside of sessions?"

ESTABLISHING TREATMENT GROUND RULES. In addition to treatment goals and tasks, it is important to set up clear expectations for the patient in terms of the treatment, your obligations, and his/her responsibilities. Thus, the following areas should be reviewed and discussed:

Scheduling of sessions and length of treatment.

Importance of regular attendance.

The patient should call in advance if the session will be missed or s/he will be late.

A urine specimen will be collected each time.

The patient will not come to the sessions after using cocaine, alcohol, or other drugs.

INTRODUCING FUNCTIONAL ANALYSES. The therapist should work through a recent episode of cocaine use with the patient, conducting a full functional analysis.

To get an idea of how all this works, let's go through an example. Tell me all you can about the last time you used cocaine...Where were you and what were you doing...What happened before?...How were you feeling?...When was the first time you were aware of wanting to use?...What was the high like at the beginning?...What was it like later?...Can you think of anything positive that happened as a result of using?...What about negative consequences?

Topic 2: Coping with Craving

Rationale and Goals

The practice exercise involves the patient doing a functional analysis of at least three recent episodes of cocaine use. Thus, it follows closely the format of the one conducted by the therapist within the session, and the therapist may want to use the sheet as a within-session example (Fig. 5.1 follows).

Key Interventions

Because craving is such a difficult problem for so many cocaine abusers, this topic is introduced very early in treatment. Episodes of intense subjective craving for cocaine are often reported weeks and even months beyond the inception of abstinence. This experience can be both mystifying and disturbing to the abuser, and can often culminate in cocaine use if not understood and managed effectively.

Given both the frequency and the variety of circumstances in which cocaine is self-administered, for each cocaine user there is a multitude of stimuli previously paired with cocaine use which may act as conditioned cues for cocaine craving. Commonly experienced cues include exposure to cocaine itself (or anything that looks, tastes, or smells like it), individuals and settings previously associated with cocaine use, cocaine paraphernalia, and, for patients who drink, alcohol. Conditioned cues for cocaine craving are highly also idiosyncratic, thus identification of cues should take place in a ongoing way throughout treatment.

The goals of this session include:

Understanding the patient's experience of craving.
Conveying the nature of craving as a normal, time-limited experience.
Identifying craving cues and triggers.
Imparting and practicing craving and urge control techniques.

Note: Much of this material was adapted from Kadden, Carroll, et al., (1992).

1. UNDERSTANDING CRAVING

Craving is most often experienced early in abstinence, but it is not unusual to experience craving weeks and months after becoming abstinent. It is important to recognize that experiencing some craving is normal and quite common. Experiencing craving does not mean anything is wrong or that the patient *really wants* to use.

Craving often occurs in situations where cocaine was used or associated; these can eventually *trigger* craving. Common triggers include being around people with whom one used cocaine, having money or getting paid, drinking alcohol, social situations, certain affect states, and so on. To explain the ideas of conditioned cues, the therapist might paraphrase Pavlov's classical conditioning paradigm, equating the food to cocaine, the animal's salivation to the experience of cocaine craving, and the bell as the conditioned cue for cocaine. Using this concrete example, the patient can usually identify a number of personal *bells* associated with cocaine craving. The example of Pavlov's experiments is often enough to demystify the experience of craving and help the patient identify and tolerate conditioned craving when it occurs.

It is also important to convey the *time-limited* nature of cocaine craving; that is, conditioned craving usually peaks and dissipates in less than an hour, *if not*

followed by cocaine use. The therapist should also explain the process of *extinction* of conditioned responses, again using concrete examples such as waves, hills, or even Pavlov's experiments.

2. DESCRIBING CRAVING

Next, it is essential to get a sense of the patient's experience of craving. This includes:

> What is craving like for you? Cravings or urges are experienced in a variety of ways by different patients. For some, the experience is primarily somatic ("I just get a feeling in my stomach", "My heart races", "I start smelling it"). For others, craving is experienced more cognitively ("I need it now", "I can't get it out of my head", "It calls me"), or affective ("I get nervous", "I'm bored"). It's important for the therapist to get a clear idea of how craving is experienced by the patient.
>
> How bothered are you by craving? There is tremendous variability in the level and intensity of craving reported by patients in treatment. For some, achieving and maintaining control over craving will be a principal treatment goal and take several weeks to achieve. Other patients adamantly deny they experience any craving. Gentle exploration with patients who deny any craving (especially those who continue to use cocaine) often reveals that they misinterpret a variety of experiences or simply ignore craving when it occurs until they suddenly *find* themselves using. Other abstinent patients who deny they experience any craving, often, when asked, admit to intense fears about relapsing.
>
> How long does craving last for you? For the therapist to make the point about the time-limited nature of craving, it is often important to point out that the patient has rarely let him/herself experience an episode of craving without giving in to the urges.
>
> How do you try to cope with it? Getting a sense of the coping strategies used by the patient will help the therapist identify the patient's characteristic coping style and help the therapist select appropriate coping strategies.

3. IDENTIFYING TRIGGERS

The therapist should then work with the patient to develop a comprehensive list of his/her own craving cues or *triggers*. Some patients become overwhelmed when asked to identify cues (one patient reported that even *breathing* was associated with cocaine use for him). Again, it may be most helpful to concentrate on identifying craving and cues that have been most problematic in recent weeks. This list should be started during the session, and the practice exercise for this session includes self-monitoring of craving, so patients can begin to identify new, more subtle cues as they arise.

4. AVOIDING CUES

Keeping in mind that the general strategy of *Recognize, Avoid, and Cope* is particularly applicable to coping with craving, after identifying the patient's most problematic cues, the therapist explores the degree to which some of these cues can be avoided. This may include breaking ties or reducing contact with individuals who use or supply cocaine, getting rid of paraphernalia, staying out of bars or other places where cocaine was used, and so on.

"You've said that having money in your pocket is toughest trigger for you right now. Let's spend some time thinking through ways that you might not have to be exposed to money as much. What do you think would work? Is there an amount of money you can carry with you that feels *safe*? You talked about giving your check to your mother earlier, do you think this would work? You've said that she's very angry about your cocaine use in the past; do you think she'd agree to do this? How would you negotiate her keeping your money for you? How could you arrange with her to get money you needed for living expenses? How long would this arrangement go on?"

Among cocaine users, who frequently use cocaine with alcohol, so much so that alcohol becomes a very powerful cocaine cue, therapists should spend considerable time exploring the relationship between alcohol and cocaine use for each patient. Specific strategies to reduce, or preferably, stop alcohol use should be explored.

5. COPING WITH CRAVING

There are a variety of strategies for coping with craving. The therapist may wish to point out that these strategies may not stop craving completely. However, with practice, they will reduce the frequency and intensity of craving, and make craving a less disturbing and frustrating experience when it occurs.

DISTRACTION. In many cases, an effective strategy for coping with conditioned craving for cocaine is distraction, especially doing something physical. It is therefore useful to prepare a list of reliable distracting activities with the patient in anticipation of craving in the future (taking a walk, playing basketball, doing relaxation exercises). Preparation of such a list may reduce the likelihood the patient might use substances, particularly alcohol and marijuana, in ill-fated attempts to deal with craving. Leaving the situation and going somewhere safe is one of the most effective ways of dealing with craving when it occurs.

TALKING ABOUT CRAVING. When patients have supportive, abstinent friends and family members, talking about craving when it occurs is a very effective strategy for many individuals and can help reduce the feelings of anxiety and vulnerability that often accompany craving, as well as identify specific cues. Therapists should recognize that close family members may become distressed when hearing the patient is craving, as they, too, may think that craving inevitably leads to use. It

may be helpful to spend some time with the patient identifying who the patient would feel comfortable talking with about craving when it occurs, how that person would be likely to react, and whether it might make sense for the patient to ask that person in advance if they would be willing to support the patient in this way.

"It sounds like you think talking to your wife might help, but you've also said that she's very nervous about what would happen if you relapsed. Do you think she'd be able to listen if you talked with her the next time you felt like using? Maybe you could talk to her about this *before* the next time you felt craving, so the two of you could figure out how you'll handle it when it comes up".

Note: Socially isolated patients, or those who have few non-using friends, will find it difficult to nominate a supportive other who can help assistance with craving, thoughts about cocaine, and other problems. This should alert the therapist to the need to consider addressing social isolation during the treatment. For example, the therapist and patient can brainstorm ways of meeting new, non-using others, reconnecting with friends and family members, and so on. To help the patient *own* these strategies and be more likely to initiate more positive social contact, the therapist might suggest that the patient apply the problem solving strategies discussed under Topic 7.

GOING WITH CRAVING. This technique is also called *urge surfing*, and is described by Ito et al., (1984). The idea is to let cravings occur, peak, and pass; in other words, to experience them without either fighting them or giving into them. Giving patients the imagery of a wave or walking over a hill may help convey this idea, as does the idea of judo, that is, gaining control by avoiding resistance.

Ito and colleagues (1984) identify the steps in urge surfing, which should be practiced within sessions or at home before craving occurs. Also, patients should be told that the purpose of urge surfing is not to make the cravings disappear, but to experience them in a different way that makes them feel less anxiety provoking and dangerous, and thus easier to *ride out*:

Pay attention to the craving. This usually involves first, finding someplace safe to let oneself experience craving (a comfortable and quiet place at home). Next, relaxing and focusing on the experience of craving itself;

Focus in on the area where the craving occurs. This involves paying attention to all the somatic and affective signals and trying to put them into words. What's the feeling like? Where is it? How strong is it? Does it move or change? Where else does it occur? After concentrating on the craving in this way, many patients find that the craving goes away entirely. In fact, the patient may find it useful to rate the intensity of craving before trying urge surfing, and

Practice Exercise

then rating it again after the exercise, to demonstrate how effective it can be.

RECALL THE NEGATIVE CONSEQUENCES OF COCAINE USE. When experiencing a craving, may people have a tendency to remember only the positive effects of cocaine, and often forget the negative consequences. Thus, when experiencing craving, its often effective to remind themselves

Coping with Cravings and Urges

Urges are common and normal. They are not a sign of failure. Instead, try to learn from them about what your craving *triggers* are.

Urges are like ocean waves. Thry get stronger only to a point, then they start to go away.

If you don't use, your urges will weaken and eventually go away. Urges only get stronger if you give in to them.

You can try to avoid urges by avoiding or eliminating the cues that trigger them.

You can *cope* with urges by:
...distracting yourself for a few minutes.
...talking about the urge with someone supportive.
...*urge surfing*, or riding out the urge.
...recalling the negative conseqeunces of using.
...talking yourself through the urge.

Each day this week, fill out the daily record of cocaine craving, and what you did to cope with the craving.

Example:

DATE	SITUATION (Include your thoughts and feelings)	INTENSITY OF CRAVING (1-100)	LENGTH OF CRAVING	COPING BEHAVIORS USED
Friday 3PM	*Fight with boss Frustrated, angry*	*75*	*20 minutes*	*Called home, talked to Mary*
Friday 7PM	*Watching TV, bored Trouble staying awake*	*60*	*25 minutes*	*Rode it out and went to bed early*
Saturday 9PM	*Wanted to go out and get a drink*	*80*	*45 minutes*	*Played basketball instead*

Figure 5.2a (See Appendix 5.2a).

DATE	SITUATION (Include your thoughts and feelings)	INTENSITY OF CRAVING (1-100)	LENGTH OF CRAVING	COPING BEHAVIORS USED

Figure 5.2b (See Appendix 5.2b).

Topic 3: Shoring Up Motivation and Commitment to Stop

Rationale and Goals

of the benefits of abstinence and the negative consequences of continuing to use. This way, the patient can remind him/herself that they really *will not* feel better if they use.

To this end, it may be useful to ask the patient to list the reasons they want to be abstinent and the negative consequences of use on a 3x5 card, and to keep it in their wallet or another obvious place. A glimpse of the card when confronted by intense craving for cocaine or a high risk situation can remind patients of the negative consequences of cocaine use at a time when they are likely to recall only the euphoria associated with the cocaine high (see Topic 3).

USING SELF-TALK. For many patients, a variety of automatic thoughts may accompany craving, but these are so deeply established that the patient is not aware of them. Automatic thoughts associated with craving often have a sense of urgency and exaggerated dire consequences ("I have to use now"; "I'll die if I don't use" "I can't do anything else until I use").

In coping with craving, it is important both to recognize them and to counter them effectively. To help the patient recognize his/her automatic thoughts, therapists can point out cognitive distortions that occur during sessions ("A few times today you've said you feel like you *have to* use...are you aware of those thoughts when you have them?"). Another strategy is to help the patient *slow down the tape* to recognize cognitions:

> "When you decided to go out last night, you said that you really weren't aware of thinking about using cocaine. But, I bet if we go back and try to remember what the night was like, sort of play it back like a movie in slow motion, we could find a couple of examples of things you said to yourself, maybe without even realizing it, that led to cocaine use. Can you sort of play last night back for us, now?"

Once automatic thoughts are identified, it becomes much easier to counter or confront them, using positive, rather than negative self-talk. This includes cognitions such as *challenging the thought* ("I won't really die if I don't have cocaine), and *normalizing craving* ("Craving is uncomfortable, but a lot of people have it and it's something I can deal with without using").

Key Interventions

Depending on how serious a problem craving is for a patient, this session can be delivered as one or two sessions. When delivered as two sessions, the first session is focuses on recognizing craving and identifying triggers, and the extra-session task includes making a more elaborate list of craving triggers through self-monitoring. The second session then focuses on learning and practicing coping strategies, and the extra-session tasks involves continuing to self-monitor, but also monitoring the coping behaviors the patient uses when craving occurs (Figs. 5.2a, 5.2b follow).

By now, the therapist and patient will have done several functional analyses of cocaine use and high risk situations, and the patient has a clearer idea of the general approach to treatment. Most patients have also reduced their cocaine use significantly (or even stopped) at this point, and can work towards a more realistic view of treatment goals than may have been possible in the first session. It is also at this point that patients are more aware of the role cocaine has played in their lives, they may be aware of recurrent thoughts about cocaine, and they may also be more ready to sort through some of their ambivalence.

Another task that often follows from frank discussion of the patient's ambivalence about seeking treatment or giving up cocaine is clarification of the patient's stated and unstated treatment goals. While some patients intend to fully cease cocaine and other substance use, other patients' goals may include (1) reduction of cocaine use to *controlled* levels; (2) cessation of cocaine use but continued high levels of alcohol or other substances; or (3) to remain in treatment until the external pressures which precipitated treatment seeking (e.g., a spouse's ultimatum, pressure from an upcoming court case) are abated. While such goals are, in our experience, quite unrealistic, it may be wise for the therapist, particularly in the early weeks of treatment, to join with the patient and not directly challenge such goals until a therapeutic alliance is established which allows for a more informed reassessment. Allowing the patient to recognize for himself the impossibility of controlled cocaine use may be much more persuasive than a therapist's repeated warnings that goals other than abstinence are ill-advised. For example, a young woman maintained she could not possibly cease both cocaine and marijuana simultaneously (as she attempted to use marijuana to cope with cocaine craving) until she discovered that her excursions to buy marijuana led to a variety of powerful cocaine cues and usually to extended cocaine binges.

The goals of this session are:

Revisiting and clarifying treatment goals.
Acknowledging and addressing ambivalence about abstinence.
Identification and coping with thoughts about cocaine.

1. CLARIFY GOALS

This is a good time to explore with the patient his/her commitment to abstinence and other goals for treatment. By now, even patients who came to treatment because of external pressures (e.g., jobs, probation/parole officers) usually have begun to sort out the consequences of continued cocaine use in relationship to other goals. Thus, the therapist should *check in* regarding the patient's current view of treatment and readiness to change.

T: "I noticed that, even though you haven't stopped completely, you've mentioned several times all the problems cocaine has caused you, like the job and the trouble with your probation officer, and some of the opportunities it has cost you, like spending more time with your kids as

they were growing up. How does it seem to you?.....At the same time, I also hear that there are some things about using cocaine that you really miss right now. I thought we could spend some time this session talking more about your goals and how we might be able to help you get there. Do you feel ready for that?.....What are you thinking about your cocaine use at this point?....Are there other problems you'd like to tackle while we work together?"

From this discussion, the therapist should be able to get a clear idea of:

The patient's current readiness for change.
His/her current stance toward abstinence.
A sense of other target goals and problems.

This should be an open-ended discussion, with the therapist refraining from taking too active a role or *providing* goals for the patient. The techniques described by Miller et al., (1992) for strengthening commitment to change should be used here, including:

- Communicating free choice ("It's up to you what you want to do about this").
- Emphasizing the benefits of abstinence as a goal.
- Providing information and advice around the kinds of problems and issues that should be addressed if the patient is to remain abstinent.

The patient might also be encouraged to talk about his/her treatment goals any number of ways ("Have you thought about where do you want to be 12 weeks from now? What about 12 months from now?").

This discussion usually elicits articulation by the patient of other target symptoms and problems, some of which may be closely related to cocaine use (including medical, legal, family/social, psychiatric, employment/support, and other types of substance use or dependence), while others may be less closely related and thus less important to address during treatment. As this is a brief treatment focused on helping the patient achieve initial abstinence, the therapist must balance the need to address problems which might pose barriers to abstinence with the need to keep treatment focused on achieving abstinence.

The therapist should work with the patient to prioritize other target problems as follows:

Is the psychosocial problem likely to pose a barrier to the patient's achieving abstinence? The therapist should work with the patient to identify severe psychosocial problems that, if unaddressed, would be likely to interfere with the patient's efforts to become abstinent or make the patient's life so chaotic that s/he would be unable to be fully involved in treatment. Examples include homelessness, severe psychiatric problems or symptoms including suicidal ideation or intent, or acute medical conditions. The therapist should address such problems immediately and as appropriate (significant suicidality or homicidality requires immediate referral to an emergency room), and should also consider devoting time during each session to case management (see Topic 8).

Is the problem best assessed and addressed after some control over cocaine is achieved? Again, many patients may present for treatment with more concerns about some of the consequences of chronic cocaine dependence than the cocaine dependence itself. There are a variety of problems that may be caused or exacerbated by cocaine dependence, which, while of concern to the patient, may best be assessed and addressed after the patient has become abstinent. For example, many patients' depression resolves with several weeks of abstinence, a marital rift that seems irresolvable may improve when the spouse sees the patient making an earnest effort to commit to treatment and remain abstinent, and so on.

Thus, the therapist should not ignore such concerns, but instead propose a plan for closely monitoring and addressing the problem if it does not improve with abstinence:

> "You've told me you've been feeling really down, and it feels like all the bills are coming due at once. That's not unusual for someone in the first few days of abstinence. Since some depression is very common for people who are in the early phases of abstinence, I'd like to check in with you very often about how you're feeling. If you stay abstinent and aren't feeling better in a few weeks, we might want to think about doing a more formal assessment of depression, possibly by having you see one of the psychiatrists here. How does that sound to you?"

Can addressing the problem wait? If the problem is not likely to pose a barrier to treatment, nor is it directly related to cocaine use, the therapist might suggest waiting to address it in detail during treatment until after the first 12 weeks, in order to keep treatment focussed on achieving abstinence. The therapist might also point out that problem-solving skills will be a topic of future sessions, and the general problem-solving strategy that will be reviewed can be applied to a range of problems other than cocaine dependence.

Address ambivalence. Ambivalence is best addressed early to foster a therapeutic alliance which allows for open exploration of conflicts concerning cessation of cocaine use. To launch a discussion of the patient's struggle around abstinence, encourage the patient to articulate and *own* the reasons s/he may have used cocaine, help the patient own the decision to stop use through exploring what the patient stands to gain by stopping use, and underscore the idea that cocaine use cannot be divorced from its consequences, we frequently make use of a simplified version of the decision matrix described by Marlatt and Gordon (1985). In this exercise, the therapist divides a piece of paper or an index card into two halves and records the patient's description of all possible benefits of continued cocaine use, however subjective, on one side of the card. Some patients have initial difficulty in acknowledging positive consequences of continued cocaine use, but most are able to list several justifications like, "There's nothing else as exciting in my life", "I feel less anxious with people", "I get most of my money from selling cocaine", "Sex and coke go together" and so on.

Next, with open-ended questions, the therapist encourages the patient to explore each of these stated benefits ("Having money in your pocket sounds important; what else does selling do for you?"). Most often, the patient indicates many of these are ultimately negative. For example, if the cocaine high was listed as an advantage of cocaine use, the nature of the patient's experience of the cocaine high is explored and thus the patient is reminded of the crash and dysphoria which invariably follow and endure much longer than cocaine euphoria. A patient who sells cocaine reminds him/herself that all of the profits are used to support cocaine use.

The therapist then asks the patient to list all possible reasons to stop cocaine use and writes these on the other half of the card. These are typically numerous and reflect negative consequences such as "I want to keep my job", "Fewer fights with my parents", or "More money for things I want". The patient is instructed to keep the card in his/her wallet, preferably near their money: A glimpse of the card when confronted by intense craving for cocaine or a high risk situation can remind patients of the negative consequences of cocaine use at a time when they are likely to recall only the euphoria associated with the high.

The power of this concrete reminder was illustrated by a cocaine abuser who removed the card from his wallet before he went out on an evening when he intended to use cocaine, as he felt the card had literally "stopped me from using" on several previous occasions.

2. IDENTIFYING AND COPING WITH THOUGHTS ABOUT COCAINE

Some material in this section was adapted from Monti et al., (1989).

Ambivalence often shows in terms of thoughts about cocaine and using that are difficult to manage. Cocaine was an important, even dominant factor in the patient's life, and thoughts, both positive and negative, about thoughts about cocaine are normal and likely to linger for some time. Again, the strategy here is to *Recognize, Avoid, and Cope*:

Recognizing thoughts associated with cocaine which can lead to resumption of cocaine use: While these vary widely across individuals and their cognitive styles, and the therapist should work to identify the patients own cognitive distortions and rationalizations ("I've noticed that you talk about your cocaine self and your straight self; can you tell me more about your cocaine self...?").

It is important that the therapist also define automatic thoughts (e.g., "either a thought or visual image that you may not be very aware of unless you focus your attention on it"), and cognitions (e.g., "things you say to yourself") clearly.

Common thoughts associated with cocaine include:

Testing control: "I can go to parties..(see friends who are users, drink or smoke marijuana)...without using".

Life will never be the same "I love being high".

Failure "Previous treatments haven't worked; there's no hope for me".

Diminished pleasure "The world is boring without cocaine".

Entitlement "I deserve a reward".

Feeling uncomfortable "I don't know how to be with people if I'm not high".

What the hell "I screwed up again, I might as well get high".

Escape "My life is so bad, I just need a break for a few hours".

Avoiding thoughts about is not always possible, but individuals who tend to be focused on positive goals seem to be less troubled by them. Thus, asking the patient to articulate and record their short- and long-term goals often helps the person see beyond the immediate temptations more readily than individuals who lack a clear focus on the future.

An in-session exercise is having the patient record his/her immediate (next week) short-term (next twelve weeks) and long-term (the next year) goals. These should be concrete as possible (e.g., instead of "have a lot of money", "have a job paying $12 an hour by October").

Practice Exercise

There are a number of strategies for *Coping* with thoughts about cocaine (adapted from Monti et al., 1989):

Thinking through the high: While the patient is beset with craving or positive thoughts about cocaine, it is often difficult to remember the *downside* of a cocaine binge. Thus, the therapist can ask the patient to relate an instance and come up with an image of the end of a particularly unpleasant cocaine binge. For example, one patient's image of waking up naked, robbed, and beaten, in someone else's car in a town he didn't know was powerful enough to counter a range of nostalgic thoughts about cocaine.

Goals Worksheet

The changes I want to make during the *next 10 weeks* are:

The most important reasons why I want to make those changes are:

The steps I plan to make in changing are:

The ways other people can help me are:

Some things that might interfere with my plan are:

Figure 5.3a (See Appendix 5.3a).

Goals Worksheet

The changes I want to make during the *next 12 months* are:

The most important reasons why I want to make those changes are:

The steps I plan to make in changing are:

The ways other people can help me are:

Some things that might interfere with my plan are:

Figure 5.3b (See Appendix 5.3b).

Coping with Thoughts about Cocaine

There are several ways of coping with thoughts about cocaine:
Thinking through and remembering the end of the last high.
Challenging your thoughts.
Recalling the negative consequences of cocaine use.
Distracting yourself.
Talking through the thought.

Before the next session, keep track of your automatic thoughts about cocaine when they occur, and then record a positive thought and coping skill.

THOUGHT ABOUT COCAINE	POSITIVE THOUGHT, COPING SKILL USED

Figure 5.3c (See Appendix 5.3c).

Challenge the thoughts: For each negative, cocaine-related thought, patients can be encouraged to generate and practice positive beliefs to counter them: "I've dealt with craving in the past, and I can do it again", "Keeping my family together is more important than getting high", "I used to have relationships where cocaine wasn't a part of the picture". Again, these should be individualized and tailored to each patients cognitive style. Humor and reframing are particularly

Topic 4: Refusal Skills/ Assertiveness

Rationale and Goals

effective ways of countering thoughts about cocaine for some patients.

Review negative consequences: Reviewing a 3x5 card or piece of paper which lists the patient's own view of the negative consequences of cocaine use is a very powerful strategy to counter craving or thoughts about cocaine. Making one's own 3x5 card is one of the practice exercises for this topic.

Distraction: Just as cravings peak and go away if resisted, so do thoughts about cocaine. Thoughts about cocaine will become less strong, less frequent, and less upsetting if one does not *give in* to them. Just as distraction is an effective means of coping with craving, having a list of pleasant (something the patient finds enjoyable or stimulating), available (a range of activities that could be engaged in day OR nighttime, in good or poor weather), and realistic (not expensive or always dependent on the availability of others) distracting activities is an effective way of coping with thoughts for patients who have trouble relying on some of the cognitive strategies listed above.

Talking: Again, just as talking to a supportive friend or significant other can be an effective means of pinpointing, understanding, and working through an episode of craving or urges, talking through *cocaine thoughts* is often an effective way of dispelling them. Thoughts that seem compelling and dire ("I can't live without cocaine.") often lose their potency when expressed to others. Again, the therapist should work with the patient to identify appropriate others with whom s/he can discuss and work through thoughts about cocaine when they occur.

When done as two sessions, the first sessions exercise includes having the patient do the three by five card of positive and negative consequences of using, and completing the goals worksheets. The second session's exercise includes monitoring of thoughts, plus recording of coping skills (similar to the craving session) (Figs. 5.3a, 5.3b, 5.3c follow).

Key Interventions

A major issue for many cocaine abusers is reducing availability of cocaine and effectively refusing offers of cocaine. This is often difficult as it requires an active stance on the part of the patient regarding cessation of cocaine use; those who remain ambivalent about reducing their cocaine use often have particular difficulty when offered cocaine directly. Moreover, by the time they seek treatment, many cocaine users' social networks have narrowed to the point that they associate with few people who do not use cocaine and thus are likely to be beleaguered by individuals who do use, so cutting off contact also may mean further social isolation. Also, to support their cocaine use, many individuals become involved in distribution, and extricating themselves from the distribution network is difficult. Finally, many cocaine abusers lack basic assertiveness skills that enable them to effectively refuse offers of cocaine or negotiate with cocaine-using associates to prevent future offers of cocaine. Thus, this session includes sections on reducing availability, refusal skills, and, if indicated, a review of general assertiveness skills.

Patients are urged to take all possible measures to make cocaine as unavailable—both psychologically and physically—as possible during the initial stages of treatment. When control is fragile, the distinction between cocaine being available in one hour versus one minute can be critical, as any delay in acquisition of cocaine increases the abuser's opportunity to initiate effective coping strategies. Moreover, evidence from smoking research suggests that continued exposure to conditioned cues (such as the regular presence of substance-using others) may be associated with fewer attempts to cope with high risk situations (Bliss et al., 1989).

The therapist should carefully direct questions to ferret out covert indicators of ambivalence and resistance to change or social forces working against change. Failure of an abuser to take initial steps toward stimulus control may reveal a number of clinically significant issues, including: (1) Ambivalence towards stopping cocaine use, as in the case of the individual who resists telling family and friends of his decision to stop use or breaking ties with dealers; (2) Failure to appreciate the reality of the relationship between cocaine availability and use, as with the abuser who sells cocaine but maintains that he will be able to cease cocaine use while continuing to deal; (3) Marked limitations in personal or psychosocial resources, as in the case of the unemployed single parent living in a neighborhood where cocaine is relentlessly available; (4) Important indications of how actively the patient will take part in treatment. If a patient has made no independent steps toward limiting cocaine availability, the therapist might consider whether that patient expects that mere exposure to treatment will *magically* produce abstinence with little or no participation or struggle on the part of the patient.

The goals for this session are:

- Assessing cocaine availability and the steps needed to reduce it.
- Exploring strategies for breaking contacts with individuals who supply cocaine.
- Learning and practicing cocaine refusal skills.
- Reviewing the difference between passive, aggressive, and assertive responding.

1. ASSESSING COCAINE AVAILABILITY AND THE STEPS NEEDED TO REDUCE IT

Reduced availability of cocaine and associated cues requires that the therapist and patient assess the current availability of cocaine and then encourage the patient to formulate strategies to limit that availability. Familiarity with cocaine practices is essential so that the therapist can anticipate stimuli that must be addressed. The therapist should assess whether other individuals in the patient's home or workplace use cocaine, whether the patient is involved with selling cocaine, and the nature of the patient's cocaine sources. Assessment of the steps the patient has already taken toward reducing cocaine availability may be an invaluable index of the patient's internal and external resources. For example, has the patient informed cocaine-using associates of his/her intention to stop using? Has a patient who sells cocaine attempted to extricate him/herself from the distribution network? In our experience, it is impossible for an individual to continue to sell cocaine and not use it.

Practice Exercise

Cocaine Refusal Skills

Tips for responding to offers of cocaine:
Say "No" first.
Make direct eye contact.
Ask the person to stop offering cocaine.
Don't be afraid to set limits.
Don't *leave the door open* to future offers (e.g., not today).
Remember the difference between assertive, passive, and aggressive responses.

PEOPLE WHO MIGHT OFFER ME COCAINE	WHAT I'LL SAY TO THEM
A friend I used to use with:	
A co-worker:	
At a party:	

Figure 5.4 (See Appendix 5.4).

"If you wanted to use cocaine, how long would it take to get some? Is there any

Topic 5: Seemingly Irrelevant

in your house? Are you still holding on to pipes?"

"The last few times you used, you said Tommy came over to your house and suggested you take a drive. Have you thought about talking to Tommy about your decision to stop?"

Rationale and Goals

2. EXPLORING STRATEGIES FOR BREAKING OR RENEGOTIATING CONTACT WITH INDIVIDUALS WHO SUPPLY COCAINE

In spite of its illicit nature, cocaine may be offered by a range of individuals-friends, coworkers, dealers, even family members. As such individuals frequently have financial or other incentives (e.g., maintaining the status quo in a relationship) to keep the patient in the distribution network, extricating oneself from the network is often challenging. Thus, the therapist should review the patient's suppliers, and explore strategies for reducing contact with these individuals. In some cases, a clear and assertive refusal, followed by a statement that the patient has decided to stop and requests that supplier no longer offer cocaine, can be surprisingly effective. In other cases, particularly when the patient is in a close, intimate relationship with someone who uses and supplies cocaine, renegotiating contact is more difficult. For example, it may not be easy for a woman to leave a relationship where her partner continues to use or supplies cocaine, nor may she be ready to break off the relationship. Furthermore, sometimes only limited change in a patient's stance towards such a relationship be effectively undertaken in a twelve-week treatment. Thus, rather than seeing this as either-or ("I can either stop cocaine use or get out of the relationship), the therapist should explore the extent to which exposure to cocaine can be renegotiated and limits set.

"I hear you say that you feel like you want to stay with Bob for now, but he's not willing to stop using cocaine. Being there is pretty risky for you, but maybe we can think of some ways to reduce the risk. Have you thought about asking him not to bring cocaine into the house or use it in the house? You've said you know there's a lot of risk to you while he continues to do that, both in terms of your staying abstinent have having it around your kids".

3. LEARNING AND PRACTICING COCAINE REFUSAL SKILLS

There are several basic principles in effective refusal of cocaine and other substances: Responding rapidly (not heming and hawing, not hesitating), having good eye contact, and responding with a clear and firm "No" that does not leave the door open to future offers of cocaine. These same skills can be applied to offers of other illicit substances, including alcohol (see Monti et al., 1989).

Many patients, feeling uncomfortable or guilty about with saying no, feel like they need to make excuses for not using, again allowing the possibility of future refusals. Thus, "No" can be followed by changing the subject, suggesting alternative activities, and a clear request that the individual not offer cocaine

again in the future ("Listen, I've decided to stop and I'd like you not to ask me to use with you anymore. If you can't do that, I think you should stop coming over to my house").

4. WITHIN SESSION ROLE PLAY

After reviewing the basic refusal skills, the therapist should set up several role plays so the patient can practice refusal skills and problems in assertive refusals and be identified and discussed. Role plays should be developed by the patient and therapist together, and reflect situations that the patient thinks will be most difficult for him to deal with.

This is the first session that includes a formal role play as the therapist and patient practice refusal of cocaine. Thus, it is important that the therapist sets up the role play so that the patient feels comfortable. This should include: (1) picking a concrete situation that occurred recently for the patient; (2) asking the patient to provide some background on the target person; and (3) for the first role play, having the patient *play* the target individual, so the patient can convey a clear picture of the style of the person offering cocaine and the therapist can model effective refusal skills (then reversing the roles for subsequent role plays). Role plays should be thoroughly debriefed, and the therapist should praise any effective behaviors shown by the patient, but also offer clear, constructive criticism:

Key Interventions

> "That was good, how did it feel to you?.....I noticed that you looked me right in the eye and spoke right up; that was great. I also noticed that you left the door open to future offers by saying you had stopped cocaine *for a while*. Let's try it again, but this time, try to do it in a way that makes it clear that you don't want Joe to ever offer you any again."

5. REVIEWING THE DIFFERENCE BETWEEN PASSIVE, AGGRESSIVE, AND ASSERTIVE RESPONDING

Quite often, the role plays will reveal deficits in understanding and feeling comfortable with assertive responding. For such individuals, the therapist should then devote another session to reviewing and practicing assertive responding. An excellent guide to this topic is given in Monti et al., (1989).

Key areas to review include defining assertiveness, reviewing the differences between response styles (passive, aggressive, passive-aggressive and assertive), body language and nonverbal cues, and anticipating negative consequences.

The practice exercise for this session includes mapping cocaine availability and strategies to reduce availability, and anticipating and rehearsing refusals to a range of individuals who might offer cocaine (Fig. 5.4 follows).

The skills covered in the topics above are directed toward limiting exposure to events or stimuli which may threaten abstinence. As treatment progresses, however, even with the best efforts the patient will invariably encounter high risk situations and cocaine itself. Certain exposures are beyond the abuser's control, for example, living in an area where cocaine abounds but where the abuser lacks the wherewithal to relocate his place of residence. There is another class of exposures, however, which patients often experience as beyond their control but which actually involve a process of behaviors determined by the patient himself. Seemingly Irrelevant Decisions (Marlatt & Gordon, 1985) refer to those decisions, rationalizations, and minimizations of risk which move the patient closer to or even ensconced within high risk situations but which seem unrelated to the motivation to use cocaine.

A critical task for the therapist is to teach the patient how to recognize and interrupt such a decision chain before the onset of actual use. This often involves familiarizing the patient with his or her distortions of thinking (rationalizations, denial, etc.) such that these may be detected and used by the patient as signals for greater vigilance. Certain distortions are fairly common across patients, such as the thought "I can handle going to a bar". Others, however, are more reflective of the patient's cognitive style. For instance, one patient tended to project his thoughts onto others when engaging in such decisions. In describing a relapse, during which the patient had encountered a friend who had cocaine, the patient stated "I caught him with *his* guard down".

While it is possible to interrupt a chain of Seemingly Irrelevant Decisions at any point prior to the onset of use, it is more difficult toward the end of the chain when the patient may already be in a high risk situation, where cocaine is available and conditioned cues abound. Therefore, we find it desirable to teach the patient how to detect the decisions which commonly occur during the beginning of the chain where risk, craving, and availability of cocaine are relatively low. This may involve the patient's learning to detect subtle but painful affect states. For instance, the patient in the vignette below was vaguely

bored on the day he turned left instead of right, though he was relatively unaware of the connection between his boredom and use of cocaine. After exploring this issue, it became clear that the patient often used cocaine to counter feelings of boredom. He was thereafter able to use this new awareness as a *red flag* signalling the onset of the desire to use.

Practice Exercise

Cocaine cravings often become embedded within the patient's cognitive distortions. For instance, a patient, recounting a slip, described the various thoughts he experienced prior to winding up in an area of town where his former dealer resided and where the patient eventually used cocaine. He stated that earlier he thought "I have to go to XX bakery", which *happened* to be in a

Seemingly Irrelevant Decisions

When making decisions, whether large or small, do the following:
Consider all the options you have.
Think about all the consequences, both positive and negative, for each of the options.
Select one of the options. Pick a safe decision that minimizes your risk of relapse.
Watch for *red flag* thinking – thoughts like "I have to....", or "I can handle....", or "It really doesn't matter if....".

Practice self-monitoring decisions that you make in the course of a day, both large and small, and think through what are safe versus risky decisions for each.

DECISION	SAFE ALTERNATIVE	RISKY ALTERNATIVE

Figure 5.5 (See Appendix 5.5).

high risk area, but he had not linked this with a desire to use. The therapist pointed out to the patient that his use of "I have to..." sounded very much like craving. Here, again, the patient could now catch himself "having" to do certain things which led to high risk activities or locations. Another variation of this phenomenon occurs in treatment when patients will tell the therapist that they *have* to take this vacation, attend that party, spend time with particular drug-using friends, and so on. These provide the therapist with the opportunity to relate the patient's urgency to engage in such activities with the urge to use cocaine, and so help avoid further Seemingly Irrelevant Decisions.

Topic 6: An All-purpose Coping Plan

Rationale and Goals

It should be clear that working with Seemingly Irrelevant Decisions emphasizes the *cognitive* aspects of this form of cognitive-behavioral treatment. As such, those who benefit most from focusing on such processes tend to possess intact cognitive functions and some ability to reflect upon their cognitive and emotional lives. On the other hand, this session is also particularly helpful to individuals who have trouble thinking through their behavior and its consequences and temporizing their behavior, such as individuals with residual ADHD, those who exhibit antisocial traits, and others with difficulties with impulse control. For such individuals, the material in this session (as well as the session on problem solving) often takes some time to be understood and assimilated, but it is usually valued highly.

The goals of this session are:

Understanding SIDS and their relationships to high risk situations.
Identifying examples of SIDS.
Practicing safe decision making.

1. UNDERSTANDING SIDS AND THEIR RELATIONSHIPS TO HIGH RISK SITUATIONS

Although people are often not aware to it, they make thousands of decisions everyday-little *mini* decisions about what to where, what to do, who to see. Often these decisions have consequences that we are not aware of unless we pay attention to this decision making process. This is particularly important for people who are trying to stay off cocaine; as all sorts of *mini* decisions can lead eventually to cocaine use, even if they seem like they have nothing to do with cocaine use.

We call these Seemingly Irrelevant Decisions, and we will learn to deal with them by applying *Recognize, Avoid, and Cope* again—Recognizing Seemingly Irrelevant Decisions and the thoughts that go with them, Avoiding risky decisions, and Coping with high risk situations.

I'm going to tell you a story about a person who made several Seemingly Irrelevant Decisions that led to a high risk situation, and eventually, a relapse. As I tell you the story, try to pick out the decisions that he made along the way that, taken together, made him more vulnerable to using cocaine:

> Joe, who had been abstinent for several weeks, drove home from work on a night his wife was going to be out. On the way, he turned left rather than right at an intersection in order to enjoy the *scenic route* rather than go directly home. On this route, he drove past a bar he had frequented in the past and where he had bought and used cocaine. As the day was hot, he decided to stop in for a glass of cola. Once in the bar, however, he decided that as his problem was with cocaine, it would be fine to have a beer. After two beers, however, he ran into a friend who *happened* to have a gram of cocaine and a relapse ensued.

T: "When did you think Joe first got into trouble, or *thought* about using cocaine? One of the things about these chains of decisions that lead to cocaine use is that they're far easier to stop in the beginning of the chain, the farther one is away from cocaine, than later, once you're closer to cocaine use and craving kicks in and other difficulties start up."

T: "What do you think Joe was saying to himself at the point he took the scenic route home? We often find that people making Seemingly Irrelevant Decisions can catch themselves by the way they find themselves thinking—thoughts like "I have to do this..." or "I really should go home this way..." or "I need to see so-and-so because...". These end up being rationalizations, or ways of talking oneself into cocaine use, without seeming to do so. I've noticed sometimes that you *talk yourself* into high risk situations by telling yourself a situation is safe, when it really may not be, like when you told yourself last week that it was *safe* for you to go hang out in the park with your friends.... Can you think of other examples of ways you might have talked yourself into a risky situation?"

Key Interventions

2. IDENTIFYING PERSONAL EXAMPLES OF SIDS

The therapist should encourage the patient to relate a recent example of a chain of Seemingly Irrelevant Decisions.

"Can you think of your own relapse story?"

"Now, lets go through it, and try to pinpoint the places where you made risky decisions, what you were telling yourself, and how you could have interrupted the chain before you wound up in the park with nothing to do".

3. PRACTICING SAFE DECISION MAKING

"Another important thing to know about Seemingly Irrelevant Decisions is that if you can get yourself into *practice* of recognizing all the mini decisions you make every day, and thinking through safe versus riskier consequences for those decisions, you'll be less vulnerable to high risk situations."

"Returning to the story of Joe, what were the Seemingly Irrelevant Decisions he made and what would have been safer decisions for him?"

"Let's go through a few things that have happened to you in the last few weeks, and try to work through safe versus risky decisions..."

For cocaine users, common Seemingly Irrelevant Decisions include:
Using any alcohol, marijuana, or other drugs
Keeping alcohol in the house
Not destroying cocaine or crack paraphernalia
Going to parties where alcohol or cocaine might be available
Seeing people who are cocaine users
Keeping past cocaine use a secret from family members

Practice Exercise

Not telling cocaine-using associates of the decision to stop
Not planning to fill free time; having a lot of unscheduled time on nights or

All-purpose Coping Plan

Remember that running into problems, even crises, is part of life and can't always be avoided, but having a major problem is a time to be particularly careful about relapse.

If I run into a high risk situation:

1. I will leave or change the situation.
   Safe places I can go: _____
   _____
   _____
2. I will put off the decision to use for 15 minutes. I'll remember that my cravings ususally go away in ____ minutes and I've dealt with cravings successfully in the past.
3. I'll distract myself with something I like to do.
   Good distractors: _____
   _____
   _____
4. I'll call my list of emergency numbers.
   Name: _____
   Name: _____
   Name: _____
5. I'll remind myself of my successes to this point.
   _____
   _____
   _____
6. I'll challenge my thoughts about using with positive thoughts.
   _____
   _____
   _____

Figure 5.6 (See Appendix 5.6).

weekends that can lead to boredom
Getting overtired or stressed

The practice exercise for this session includes self-monitoring of mini-decisions over the course of several days, and for each one, identifying *safe* versus *risky decisions* (Fig. 5.5 follows).

Topic 7: Problem Solving

Rationale and Goals

Again, many of the early session topics are directed toward helping patients recognize and avoid common high risk situations. However, despite the patient's best efforts, a variety of unforeseen circumstances may arise that result in a high risk situation. These often have to do with major, negative stressful events or crises, such as the death or sickness of a loved one, learning one is HIV positive, losing a job, the loss of an important relationship, and so on. However, positive events can also lead to high risk situations (such as receiving a large amount of money through a settlement check, starting a new intimate relationship). As these may occur anytime, during treatment as well as after treatment ends, patients are encouraged to develop an emergency coping plan, that can be referred to and used should such crises occur.

In earlier versions of this treatment, this session also included discussion of the Abstinence Violation Effect (Marlatt & Gordon, 1985), and the extension to cocaine abuse treatment is attractive but quite challenging in practice. The Abstinence Violation Effect refers to the set of cognitive and emotional reactions that may accompany an episode of substance use in an abstinent individual: Following a slip to drug use, the individual may make negative self-attributions and experience intense feelings of guilt and failure ("I blew it this time, I guess I'll never stop using cocaine, so I might as well just keep using"), which may culminate in a full-blown binge if not handled effectively. This mix of depression and sense of failure associated with the Abstinence Violation Effect may be exaggerated in cocaine abusers, particularly when experienced in association with the intense dysphoria that may follow cocaine use. The combination of the Abstinence Violation effect and the cocaine *crash* may generate potent temptation to seek immediate relief through further use of cocaine.

Key Interventions

However, our efforts to integrate this concept into treatment for cocaine abuse, which usually involved providing the patient with strategies for dealing with the aftermath of a relapse and for preventing small *slips* from becoming full-blown relapses were often quite complicated. Many patients could not reconcile the therapist's message about the benefits of total abstinence with that of being prepared for slips. For example, despite scrupulous wording and careful timing by the therapist, many patients heard the message not as "be prepared for a relapse in case it occurs so its negative effects can be minimized" but "it's okay to slip now and then; you can always come back from it". Other patients heard it as the therapist predicting the s/he would relapse and found this so upsetting they left treatment. In other words, while therapists were seeking to convey a fire drill metaphor for the Abstinence Violation Effect (e.g., we hope a fire never happens, but it's important to have a plan and be prepared just in case), many patients were hearing us yell "Fire".

In fact, with greater experience with this population, therapists' discussion of the Abstinence Violation Effect became less and less frequent. In fact, in our 1994 study, we found that discussion of the Abstinence Violation Effect occurred in only about 17% of patients. Thus, we have eliminated it from most versions of the manual, electing to concentrate on a clear abstinence message for the majority of our patients. However, there is a smaller proportion of patients who may, in the therapist's judgment, benefit from some preparation about slips.

Attempts are then made by therapists to prepare cocaine abusers for the Abstinence Violation Effect in the following manner: Patients are encouraged to try to look at slips as isolated incidents which can be conceived as of opportunities for learning. A slip represents a high risk situation for which the individual had not yet developed an appropriate coping strategy. Preparing for the possibility of a slip is a process akin to asking the patient to anticipate high risk situations, with the emphasis on prevention, rather than permission. Care must be taken in the language and timing of the explanation of the Abstinence Violation Effect so that it is not interpreted by the patient as license to use cocaine. While isolated slips can be invaluable *in vivo* learning opportunities, repeated slips during treatment should alert the therapist to the need consider escalation of treatment interventions, such as more frequent contacts, the addition of pharmacotherapy, or referral for inpatient treatment.

The goals of this session are:

To anticipate future high risk situations.

To develop a personal, generic coping plan.

Practice Exercise

1. ANTICIPATING FUTURE HIGH RISK SITUATIONS AND CRISES

The therapist should point out that although the patient will find it helpful to recognize, avoid, and cope with high risk situations, life is unpredictable, and not all high risk situations can be anticipated or avoided. Crises, negative stressors, and even positive events can result in high risk situations.

The therapist should ask the patient to try to anticipate 3-4 major stressors that might arise over the next few months, as well as what his/her reaction might be. The therapist should also ask the patient to anticipate anything that might happen that might shake his/her commitment to abstinence. For each of the situations or circumstances the patient anticipates, the therapist and patient should develop a concrete coping plan.

2. DEVELOPING AN ALL-PURPOSE COPING PLAN

The therapist should point out that the patient may be most tempted to return to cocaine use when s/he is most stressed. In such cases, the patient may feel vulnerable, and be more likely to return to old, familiar, coping strategies, rather than some of the healthier, but less familiar strategies, that have been discussed and practiced during sessions. Thus, it is important to try to come up with a generic, *foolproof* coping strategy that can be used in the event of any major crisis. This should include a set of emergency phone numbers of supportive others who can be relied on, recall of negative consequences of returning to use, a set of positive thoughts that can be substituted for high-risk cocaine thoughts, a set of reliable distracters, and a list of safe places where the patient can ride out the crisis with few cues or temptations to use (e.g., a parent's or friend's house) (Jaffe et al., 1988).

Reminder Sheet – Problem Solving

These, in brief, are the steps of the problem solving process:

1. "Is there a problem?" Recognize that a problem exists. We get clues from our bodies, our thoughts and feelings, our behavior, our reactions to other people, and the ways that other people react to us.
2. "What is the problem?" Identify the problem. Describe the problem as accurately as you can. Break it down into manageable parts.
3. "What can I do?" Consider various approaches to solving the problem. Brainstorm to think of as many solutions as you can. Consider acting to change the situation and/or changing the way you think about the situation.
4. "What will happen if...?" Select the most promising approach. Consider all the positive and negative aspects of each possible approach, and select the one likely to solve the problem.
5. "How did it work?" Assess the effectiveness of the selected approach. After you have given the approach a fair trial, does it seem to be working out? If not, consider what you can do to beef up the plan, or give it up and try one of the other possible approaches.

Select a problem that does not have an obvious solution.
Describe it accurately. Brainstorm a list of possible solutions.
Evaluate the possibilities, and number them in the order of your preference.

Identify the problem: _____
_____
_____
_____

List brainstorming solutions: _____
_____
_____
_____
_____
_____
_____

Figure 5.7 (See Appendix 5.7).

The practice exercise for this session includes both anticipating some crises and responses, as well as developing the all-purpose coping plan (Fig. 5.6 follows).

Topic 8: Case

Rationale and Goals

This section is adapted closely from Monti et al., (1989), as well as Kadden et al., (1992) and D'Zurilla and Goldfried (1971).

Problem solving skills, while less directly related to cocaine use, is nonetheless one of the most important topics to be addressed, as it provides a basic strategy for an general approach to problem solving, which can be applied to a range of problems related to cocaine use, as well as the variety of problems that will invariably arise after the patient leaves treatment.

We stress this topic because we have found that, over time, many patients' repertoires of coping and problem-solving skills have narrowed such that cocaine or other substance use has become their single, overgeneralized means of coping with a range of problems. Thus, many patients are often unaware of problems when they come up, ignoring them until they become crises. Many others, particularly those who have impulsive cognitive styles or who are unaccustomed to thinking through alternative behaviors and consequences, find this topic particularly useful. Others *think* they have good problem-solving skills, but, when confronted with a problem, are likely to act impulsively, making practice of this skill within sessions particularly important.

It is also important to convey the proper *set* for problem-solving. For example, despite many patients' fantasies that life will be easier and problem-free after stopping cocaine use, it is often only after entering treatment and becoming abstinent that patients become aware of problems that they have neglected or ignored while they are using. Thus, it is important the therapist convey that everyone has problems from time to time, and most can be effectively coped with. Also, although having a problem may make one anxious, effective problem solving takes time and concentration, and the impulsive, first solution in not necessarily the best.

The goals of this session are:

To introduce or review the basic steps of problem solving.
To practice problem solving skills within the session.

1. INTRODUCING THE BASIC STEPS OF PROBLEM SOLVING

The basic steps in problem solving are adapted from D'Zurilla and Goldfried (1971) and Monti et al., (1989):

Recognition of the problem ("Is there a problem?"). Recognition of problems may come from several clues, including worry, anger, depression; having problems pointed out by others; being preoccupied; always feeling like one is in crisis, and so on.

Identification and specification of the problem ("What is the problem?"). It is easier to solve problems which are concrete and well-defined rather than those that are global or vague. For large problems that seem overwhelming, it is important to try to break them down into smaller,

more manageable steps.

Consider various approaches to solving the problem ("What can I do to solve the problem?). Again, good ways to approach this are to do brainstorming, that is, generating as many solutions as possible, without considering at first, which are good or bad ideas. At first, it is more important to try for quantity, rather than quality, when brainstorming. Writing down these ideas is very helpful in cases where the patient may want to return to the list in the future. It is also important to recognize that not doing anything immediately is an option.

Selecting the most promising approach ("What will happen if...."). This step involves thinking ahead. In considering each approach, it is important to consider both the positive and negative consequences of all solutions. This step may also involve collecting more information, assessing whether some solutions are feasible (e.g., can I borrow Tom's car to take the driving test?").

Key Interventions

Assessing the effectiveness of the selected approach. ("What did happen when I...?"). The therapist may need to point out that while some problems are easy to solve; others are more difficult; it may be necessary to repeat steps 1-5 several times before a complex problem is solved.

For impulsive patients, it is important to write down the problem and the selected approach, so the steps are not forgotten when its time to implement them.

2. PRACTICING PROBLEM SOLVING SKILLS WITHIN THE SESSION

The therapist should ask the patient to identify two recent problems, one that is closely related to cocaine use, one that is less so, and work through the problem-solving steps for both. The therapist may have to help the patient slow down in working through the steps, as some patients will have difficulty recognizing current problems, others will jump to select a solution as they lack practice with brainstorming and considering alternatives, and so on.

The practice exercise is based closely on Monti et al. (1989), and asks the patient to practice problem-solving skills outside of the sessions (Fig. 5.7 follows).

As noted above, most patients will present for treatment with a range of concurrent psychosocial problems in addition to cocaine abuse. Some problems are best assessed and addressed after the patient has achieved a period of stable abstinence, while other problems, if unaddressed, are likely to present barriers to treatment and undermine the patient's efforts to become abstinent. Thus, to deal with these issues, the therapist may engage in modified *case management*.

This approach differs from other approaches to case management in that rather than the therapist serving as an advocate who does extensive work on the patient's behalf *outside* of sessions, this approach focuses on the therapist using problem-solving strategies to help the patient contact and make use of the social service system largely *within* sessions and during the therapy hour. The intent is to build the patient's self-efficacy in recognizing and coping with concurrent problems and in successfully using the network of available social service agencies.

Practice Exercise

Support Plan

WHAT IS MY GOAL?	WHO IS TO BE CONTACTED? (Phone #, address)	WHEN WILL THE CONTACT BE MADE?	WHAT SERVICES WILL I REQUEST?	OUTCOME
Goal 1				
Goal 2				
Goal 3				
Goal 4				
Goal 5				

Figure 5.8 (See Appendix 5.8).

The general model for case management is based on the general model of problem-solving described by D'Zurilla and Goldfried (1971) as described above:

STEP 1: PROBLEM IDENTIFICATION. Early in treatment (Sessions 1 and 3), the therapist identifies problems that would be barriers to abstinence. Information useful in identifying psychosocial problems that may be a barrier to treatment may also come from the patient's pretreatment assessments, and particularly the ASI.

STEP 2: GOAL SETTING. The therapist and patient identify and prioritize

Termination Session

the 3-4 major problems that they will focus on during treatment, identify concrete goals for each (e.g., have a stable place to live by the end of the month, enter a job training program by the end of August). As needed, the therapist would also review the basic steps in problem solving as a general model will be used to tackle these target problems.

STEP 3: RESOURCE IDENTIFICATION. With the goals clarified, the therapist and patient then *brainstorm* solutions and needed resources to resolve each of the identified target problems.

STEP 4: SPECIFYING A PLAN. For each identified target problem, the patient and therapist come up with a clear plan for accomplishing the goals, including the community resources that would need to be contacted, and specific plan or set of steps for contacting identified agencies and obtaining needed services or information.

STEP 5: MONITORING PROGRESS IN GOAL ATTAINMENT. For each target problem, the therapist follows-up with the patient on the progress s/he has made toward resolving each plan at every session. Difficulties and obstacles would be discussed and processed as appropriate, with revision of the plan as needed.

Here, the therapist's role is to help the patient evaluate needs and then to serve as a resource to help the *plug* him/herself into the social service delivery system. To play this role effectively, the therapist should be knowledgeable about the delivery system, with current information on the type of services provided by each organization, the types of clients served by the organization, eligibility requirements, sources alternative services, and reasonable time frames for various types of service delivery. S/he should help the patient transform his/her goals into a service plan, and help the patient articulate the steps needed to get there.

The goals of this topic are:

To review and apply problem solving skills to psychosocial problems that present a barrier to treatment.

To develop a concrete support plan for addressing psychosocial problems.

To monitor and support the patient's efforts to carry out the plan.

1. REVIEWING AND APPLYING BASIC PROBLEM SOLVING SKILLS TO PSYCHOSOCIAL PROBLEMS

The general model for approaching all psychosocial problems will be problem solving. This was selected for this module because (1) it is straightforward and comparatively easy to learn, (2) it is well integrated into the rest of the treatment, as patients will have already learned the basic approach as part of the material covered in Topic 7, (3) the model, while simple, is quite flexible to the range of problems that patients may experience, both now and in future, and (4) mastery of the model should enhance patients' self efficacy as well as their

Significant Other Session

Rationale and Goals

ability to solve problems after they leave treatment.

The basic steps in problem solving are:

Recognition of the problem ("Is there a problem?"). Recognition of psychosocial problems that may complicate or pose barriers to becoming and staying abstinent from cocaine may come from several clues, including worry or anxiety, difficulty getting to sessions, always feeling like one is in crisis, and so on.

Identification and specification of the problem ("What is the problem?"). Again, it is easier to solve problems which are concrete and well-defined rather than those that are global or vague. For example, a more constructive way to frame a work problem is "I think my boss is concerned about my spotty attendance in the past month" than "My boss is a jerk and hates my guts".

Considering various approaches to solving the problem ("What can I do to solve the problem?). Again, good ways to approach this are to do brainstorming, that is, generating as many solutions as possible, without considering at first, which are good or bad ideas. Writing down these ideas is very helpful in cases where the patient may want to return to the list in the future.

Selecting the most promising approach ("What will happen if...."). This step involves thinking ahead. In considering each approach, it is important to consider both the positive and negative consequences of all solutions. This step may involve gathering additional information about available services and whether they are appropriate for the patient.

Assessing the effectiveness of the selected approach. ("What did happen when I...?"). The therapist may need to point out that while some problems are easy to solve; others are more difficult; it may be necessary to repeat steps 1-5 several times before a complex problem is solved.

Key Interventions

2. DEVELOPING A SUPPORT PLAN

Once problems are identified and goals set, the therapist and patient should begin to work on the support plan, which is simply a concrete strategy outlining how the patient will follow through on reaching his/her goals. The support plan should include, for each goal, specification of *who or which agency* is to be contacted, *when* the contact is to be made, *what* services or support is to be requested, and *what* the outcome of the contact was. The support plan thus serves as a kind of log, or organizing force, in the patient's efforts to obtain needed services. It will also provide a record of the patient's efforts and successes in this area, and thus bolster the patient's self-efficacy.

3. MONITORING AND SUPPORTING THE PATIENT'S EFFORTS TO CARRY OUT THE PLAN

Although the patient is to take primary responsibility in following the support plan and obtaining needed services, it is essential that the therapist closely monitor the patient's efforts to follow through on the support plan. This should take place at *every subsequent session*; thus, the therapist should spend time during the initial, *checking in* phase of the next sessions (e.g., the first 20 minutes of a 20/20/20 session) monitoring the patient's success in implementing the Support Plan. Similarly, a portion of the closing of each session should be devoted to reviewing the patient's plans to implement the support plan during the coming week.

The therapist should affirm the patient and praise his/her efforts to carry out the plan enthusiastically and genuinely. Even small steps are seen as significant and met with praise. The therapist should convey confidence that the patient can, and will, successfully carry out the support plan and obtain needed services. This is a *strengths based* approach, where the therapist assumes that the patient has the resources and skills to obtain needed services, both within treatment, and after treatment ends.

T: "I'm really impressed that you were able to arrange a place for yourself at Transitional Housing. I know you had real questions about whether you could handle all the admission steps on your own, but it sounds like you hung in there, were persistent when Mrs. X put you on hold several times, and kept rescheduling those interviews until you got it. It sounds like it wasn't easy, but you really made it happen. How do you feel about how you handled it."
P: "Like you said, it wasn't easy, and once or twice I felt like telling them off, but I just kept telling myself I really needed a safe place to live and that I could do it".

T: "You know, you sound and look like you're really proud of yourself, and your pride is well deserved. Knowing how to *work* the social service system is an important skill, and one I see you getting better and better at. Have you thought about your next step?"

Practice Exercise

The practice exercise for this week includes following though on the support plan, and patient's reporting back on the successes or problems the patient experienced in carrying out the plan (Fig. 5.8 follows).

HIV Risk Reduction Module

Key Interventions

The major function of the final session is to offer a final opportunity for the following (although the therapist should be eliciting and providing feedback continuously over the course of treatment):

1. Review of the treatment plan and goals, identifying areas in which the patient's goals were met and progress made, as well as areas where less progress was made and further attention may be warranted.

2. The therapist to provide feedback on his/her view of the progress made by the patient, and particularly the skills and principles that were mastered and those that the patient might continue to focus on.

3. The patient to provide feedback on the most and least helpful aspects of treatment, as well as his/her concerns about what will happen after s/he leaves treatment.

The therapist should use clinical judgment in introducing the topic of termination, but we recommend that from the midpoint (6 weeks of treatment), the therapist begin to remind the patient the patient of the time-limited nature of the treatment, and in some cases, to begin each session thereafter by pointing out "we have XX weeks to work together". In some cases, it may be helpful to deal with or reframe termination as a potential high risk situation. This is because reemergence of slips and other symptoms is common in the last weeks of treatment and may be interpreted in this context (so might emergence of new problem areas). As termination approaches, therapist might also ask the patient to imagine every high risk situation they might encounter after they leave treatment. After such relapse fantasies are elicited and explored during sessions, specific coping strategies can be developed in the weeks approaching termination, which often makes the patient feel more comfortable and confident about his/her ability to approach termination. Other patients, particularly those who have not achieved stable abstinence during treatment, are encouraged to continue in treatment, either in our clinical programs or in inpatient or day treatment facilities as appropriate.

In our clinical trials evaluating CBT, we offer each patient the option of inviting a close family member or friend to attend up to two of the sessions. The purpose of these sessions is to enhance the level of social support for the patient through: (1) offering significant others the opportunity to learn about the study and the treatment in which the patient is involved; and (2) exploring strategies through which they can help the patient become and remain abstinent. Significant other sessions are conducted within a cognitive-behavioral model, drawing from the work of O'Farrell (1993) and McCrady & Epstein (1995). However, therapists should recognize that the goals of these sessions are limited should not reflect marital or family therapy.

Significant other sessions should be carefully planned in advance by the patient and therapist. Key issues to address include:

Who should attend the significant other session? In selecting significant others, the patient and therapist should focus on identifying others who are likely to be able to provide support to the patient, as well as individuals who are close to the patient (spouses, partners, parents, siblings) and who *are not substance abusers themselves*. If an identified significant other is a substance user, we generally provide information about the treatment program and the study, as well as a referral for treatment, but do not conduct a significant other session *per se*, as the significant other is unlikely to offer substantial, meaningful support to the patient.

Practice Exercise

What are the goals of the session? Unless clear goals are articulated in advance and shared with the significant other in advance, the sessions may evolve into mere recounting of old wrongs and resentments, rather than focusing on planning for positive change.

Risk Reduction Worksheet

The changes I want to make are:

The most important reasons why I want to make these changes are:

The steps I plan to take in changing are:

The ways other people can help me are:

Some things that could interfere with my plan are:

Figure 5.9 (See Appendix 5.9).

How can the significant other offer support? It is advisable that the patient think in advance about what kind of support s/he would like from the significant other. Again, these should be as concrete and clear as possible.

Integrating CBT and Medication

1. PROVIDING INFORMATION/SETTING GOALS

Typically the therapist begins the session by greeting the significant other, praising him/her for coming in and offering support to the patient, providing some ground rules for the session, and reiterating the session goals. Substantial amounts of time should be allotted for answering questions about the study and the treatment.

Some significant others see this as an opportunity to relate complaints and express anger and distrust about the patient. Some limited *letting off steam* may be expedient, and, well managed, can enhance the patient's motivation to change ("what changes would you like XX to make?" "What concerns you about XX's cocaine use?). However, the therapist should not allow destructive criticism or dredging up of old wrongs. This can be done by reorienting the patient and the significant other to the goals of the session as soon as is appropriate ("It sounds like XX's cocaine use has been of concern to you for some time; it's hurt the family finances, and you feel like you can't trust him. I'd like to move now to spend some time on talking about specific changes that you both would like each other to make, in order to make it easier for XX to stay clean and for your relationship to be more enjoyable for both of you").

2. IDENTIFYING STRATEGIES FOR REDUCING COCAINE USE

As a prelude to exploring how the significant other can be help the patient in his/her efforts to become abstinent. The therapist should spend some time reiterating the CBT model of treatment (Topic 1) for the significant other, to establish a framework for the session.

The patient then describes the ways in which the significant other can offer support, which can include:

- Providing transportation to and from the clinic.
- Helping reduce cocaine and other substance cues in the environment.
- Engaging in pleasant activities as a reward for sobriety and behavior change.
- Offering support and talking with the patient while s/he is experiencing craving or thoughts about cocaine.
- Helping concretize the *all purpose coping plan*.
- If appropriate, monitoring the patient's compliance with study medication.

The patient should also be prepared that the significant other will ask for behavior changes as well, usually starting with continued abstinence, but this may extend to other behavior changes, such as helping more around the house, accounting for money, and so on. The changes requested should be stated clearly, and be as specific and clear as possible ("I'd like to have at least 15 minutes of quiet time with you every day", "I'd like you to watch the kids one night a week so I can go to my mother's").

The patient and significant other are asked to develop a contract, each specifying the behavior changes they would like from the other.

Many of our patients are at risk for HIV and other infectious disease, and all patients complete an HIV Risk Behaviors Inventory before and after treatment to assess their level of risk and change in risk behaviors across time. All patients are also offered HIV testing, as well as pre- and post-test counseling. Depending upon their level and type of risk, all patients are offered an HIV risk reduction module, in addition to their regular sessions.

1. ASSESSING RISK AND BUILDING MOTIVATION TO CHANGE RISK BEHAVIORS

The therapist and patient review the patient's composite/summary scores from the Risk Assessment Battery (Metzger et al., 1992), noting level of risk from unsafe needle practices, unsafe sexual practices, and history of HIV testing. Composite/summary scores are presented on a written form, with a copy for the patient to keep. The therapist asks for the patient's reaction to his/her level of risk, reflecting and elaborating the patient's reactions (P: "I guess I didn't realize how many people I slept with since I've been on this run" T: "What do you make of this?") as a strategy to bolster awareness of risk and motivation for change. Generally, comparatively few cocaine users who do not engage in concurrent opioid use also use needles, and thus tend to have low levels of risk from unsafe needle practices. However, most have substantial risk from unsafe sexual practices.

Again, in assessing and reviewing the level of risk, the therapist should use the motivational strategies described by Miller and colleagues (1992), including affirming the patient ("I think it's great that you're willing to be honest with yourself and take time to look at your level of risk"), reframing ("You're concerned about your level of risk, but you can't see yourself being celibate, either"), rolling with resistance ("You're jumping ahead a bit here. Right now, we're just getting a sense of where you are regarding needles use and unsafe sex. Later on, we can talk about what, if anything, you want to do about it"), exploring consequences of action and inaction, communicating free choice, and most importantly, eliciting self-motivational statements ("What do you want to do about this?", "Tell me why you think you might need to make a change").

2. SETTING BEHAVIOR CHANGE GOALS

If the patient is ready to make a change, the therapist and patient then set realistic, concrete risk reduction goals, for sexual and/or intravenous risk, as appropriate (e.g., "I want to start using condoms with Jim this week"). The therapist should also encourage the patient to identify barriers to risk reduction goals ("You've come up with good, realistic goals that should lower your risk substantially. Now, what might get in the way of your meeting those goals?"). These can include anticipated problems with negotiating condom use with a sexual partner, continuing to drink and frequent bars for a patient who typically drinks before using intravenously, acquiring condoms, and so on.

References

3. PROBLEM-SOLVING BARRIERS TO RISK REDUCTION

Next, the therapist should encourage the patient to apply some of the skills and problem-solving strategies covered in earlier sessions to anticipated problems with meeting risk reduction goals. This might include, for example, practicing assertiveness in the context of negotiating condom use, using positive self-talk to counter ambivalence about and objections to condom use, or applying a problem-solving strategy to clarify the connection between ongoing cocaine use and unsafe sexual practices.

4. SPECIFIC RISK REDUCTION GUIDELINES

As part of this module, the therapist offers more specific information and handouts on risk reduction. Possible areas to cover, depending on the risk profile of the patient, include:

Clarification of the concepts of harm reduction versus abstinence.
Methods of transmission of HIV, STDs, and tuberculosis.
Risks associated with sharing needles.
Needle cleaning procedures.
Effective use of condoms.
HIV testing.

The practice exercise for this session involves use of the Change Plan Worksheet (Miller et al., 1992) to clarify and set patient goals for sexual/drug risk reduction (Fig. 5.9 follows).

6. Therapist Selection, Training, and Supervision

Therapist Characteristics and Training Requirements

As noted earlier, CBT is highly compatible with pharmacotherapy. When CBT is used in combination with medication, as it has in many of the clinical trials described in Chapter 1, the range of CBT interventions expands to include focus on enhancing medication compliance. Generally, following a general initial discussion of the medication and compliance goals, medication response and compliance is monitored during the early part of each session (e.g., the first third of a 20/20/20 session). Specific strategies the therapist may use to enhance medication compliance include the following (adapted from Carroll & O'Malley, 1996):

INQUIRE AS TO PATIENT'S PREVIOUS EXPERIENCE WITH MEDICATION. The therapist should ask about the patient's prior history with pharmacotherapy for any psychiatric disorder or condition, including the patient's view of why it was prescribed, whether it was helpful, under what conditions pharmacotherapy was terminated, and, importantly, whether the patient took the medication as prescribed. Previous noncompliance should alert the therapist to the need to establish the patient's view of why s/he did not comply previously, and to attempt to address those issues proactively.

ADDRESS PATIENT CONCERNS ABOUT MEDICATION. During all sessions, the therapist should listen carefully for any patient concerns, misunderstandings, or prejudices about taking medication, and address these rapidly and assertively. This may include patient misconceptions about expected medication effects, time to effect, side effects, dosing, and interactions with cocaine and other substances. The therapist should provide clarification in clear, understandable terms, frequently checking back with the patient.

In cases where medication effects may be not immediately apparent, it is important to convey that the medication may take several weeks before therapeutic effects emerge; thus the patient should be encouraged to expect gradual, not all-or-nothing, change. Explanation of the gradual emergence of medication effects provides an opportunity for the therapist to *emphasize that the patient should not expect to benefit from an entirely passive stance regarding treatment*, simply because s/he is taking medication. The mastery and implementation of coping skills remains an essential and important part of treatment, to which the medication may be an additional, useful adjunct or tool.

ASSESS MEDICATION COMPLIANCE SINCE LAST SESSION. Close, consistent, and careful monitoring of compliance is one of the most

Therapist Training

Didactic Seminar

Supervised Training Cases

effective strategies for enhancing patient compliance with medications. Thus, a portion of each session should be devoted to evaluating medication compliance and working through any difficulties with compliance that might arise. In general, until the patient's compliance pattern is clearly established, therapists should, at each meeting, inquire about medication compliance, day by day, since the last session. This should include inquiry as to when the patient takes the medication, how the patient takes the medication, and thorough discussion of any deviation from the prescribed dose and schedule.

Fawcett (1985) has noted that compliance and retention are most difficult to achieve early and late in treatment: early if the patient is not receiving obvious benefit, and later if the patient, after obtaining a partial or full therapeutic response, does not appreciate the need to continue treatment. Thus, therapists should be particularly attentive to compliance and motivation issues during early and later sessions.

PRAISE MEDICATION COMPLIANCE. The therapist should also convey confidence in the study medication and that the study medication is likely to be of benefit to the patient and his/her current concerns. The therapist should be strongly on the side of compliance and praise patients' compliance enthusiastically and genuinely.

Example:

> T: "I see you took your medication every day since our last meeting. That's really great. I know you had your doubts about whether the medication would work for you, and I'm glad you were willing to give it a try. Have you noticed any positive changes you think might be due to the medication?"

Rating and Assessment of Therapist Adherence and Competence

RELATE PATIENT'S CLINICAL IMPROVEMENT TO COMPLIANCE *OR* LACK OF IMPROVEMENT TO NONCOMPLIANCE. A crucial role of the therapist is to establish and stress the connection between medication compliance, psychotherapy compliance, and improvement. The therapist should make explicit causal links between the patient's compliance and improvement in cocaine use, and other appropriate target symptoms. Conversely, the therapist might tie a patient's poorer compliance to failure to improve.

Example:

> T: "Since you've been taking the medication, I can see a lot of positive changes in your life....you've cut way down on your cocaine use and you say you've been feeling a lot better. I think the changes reflect that the medication is helping you. What do you think?"

> T: "I know you're feeling discouraged about how you've been feeling, but since we've begun to work together, you've also told me you haven't been taking the medication every day. As I've we've

discussed, I don't think you'll notice a real change until you take the medication more consistently. How about giving it a try?"

USE A PROBLEM-SOLVING STRATEGY FOR NONCOMPLIANCE. In cases where the patient is not compliant with medication, the therapist should take a practical, objective approach, seeking to help the patient clarify reasons or obstacles to compliance and generating practical solutions. For example, patients may report difficulty remembering to take the medication. Practical strategies to *cue* the patient to take the medication (e.g., through notes on the bathroom mirror, taking the medication in relation to a regular mealtime, enlisting family support and reminders, etc.) should be generated in such cases, and then followed up on in the next session. In all of these discussions, the therapist should be nonjudgmental and nonconfrontational. Efforts should be made to help the patient feel ownership of the plan by having the patient take the primary role in developing the plan, rather than the therapist telling him/her what to do.

Certification of Therapists

Ongoing Supervision

Bliss, R.E., Garvey, A.J., Heinold, J.W., & Hitchcock, J.L. (1989). The influence of situation and coping on relapse crisis outcomes after smoking cessation. Journal of Consulting and Clinical Psychology, 57, 443-449.

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Fawcett J, Epstein P, Fiester SJ, Elkin I, Autry JH. Clinical management-imipramine/placebo administration manual: NIMH Treatment of Depression Collaborative Research Program. Psychopharmacology Bulletin. 1987; 23:309-324.

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Jaffe, A., Brown, J., Korner, P. & Witte, G. (1988). "Relapse prevention for the treatment of problem drinking: A manual for therapists and patients". Unpublished manscript, Yale University School of Medicine, New Haven, CT.; University of Connecticut Health Center, Farmington, CT.

Kadden, R., Carroll, K.M., Donovan, D., Cooney, N., Monti, P., Abrams, D., Litt, M., & Hester, R. (1992). Cognitive-behavioral coping skills therapy manual: A clinical research guide for therapists treating individuals with alcohol abuse and dependence. NIAAA Project MATCH Monograph Series Volume 3, DHHS Publication No. (ADM) 92-1895. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

Marlatt, G.A., & Gordon, J.R., (Eds.). (1985). Relapse prevention: Maintenance strategies in the treatment of addictive behaviors. New York: Guilford.

McCrady, B.S., & Epstein, E.E. (1995). Marital therapy in the treatment of alcohol problems. In N.S. Jacobson & A.S Gurman (Eds.), Clinical

Guidelines for Ongoing Supervision

handbook of couples therapy (pp. 369-393). New York: Guilford.

Metzger, D.S., DePhilippis, D., Druley, P., O'Brien, C.P., McLellan, A.T., Williams, J., Navaline, H., Dyanick, S., & Woody, G.E. (1992). The Impact of HIV Testing on Risk for AIDS Behaviors. In: L. Harris (Ed.), Problems of Drug Dependence 1991. Proceedings of the 53rd Annual Scientific Meeting. Research Monograph 119, 297-298.

Common Problems Encountered in Supervision

Miller, W.R., Zweben, A., DiClemente, C.C., & Rychtarik, R.G. (1992). Motivational enhancement therapy manual: A clinical research guide for therapists treating individuals with alcohol abuse and dependence. NIAAA Project MATCH Monograph Series Volume 2, DHHS Publication No. (ADM) 92-1894. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

Monti, P.M., Abrams, D.B., Kadden, R.M., & Cooney, N.L. (1989). Treating alcohol dependence: A coping skills training guide in the treatment of alcoholism. New York: Guilford.

O'Farrell, T.J. (ed) (1993). Treating alcohol problems: Marital and family interventions.

In the research studies which have evaluated this approach (described in Chapter 1), CBT was implemented by doctoral level therapists with substantial experience in and commitment to cognitive-behavioral therapy, who also had extensive experience treating cocaine or other types of substance abusers. These therapists were selected to reduce the likelihood of therapist effects on treatment outcomes by utilizing a comparatively homogeneous group of highly skilled therapists. Furthermore, because the therapist training/piloting period for these clinical trials is comparatively brief, it was important to select therapists who already had a high level of expertise and experience in this approach, and thus could achieve optimal levels of adherence and competence rapidly.

However, a much broader range of therapists can, with appropriate training and supervision, implement this treatment effectively. However, because this manual, like most others, focuses on specific cognitive-behavioral techniques and does not cover basic clinical skills, we would recommend certain minimal requirements for clinicians:

A master's degree or equivalent in psychology, counseling, social work or a closely related field.

At least 3 years experience working with a substance abuse population.

Some familiarity with and commitment to a cognitive-behavioral approach.

Personal characteristics of therapists that are associated with improved outcome have not been an explicit focus of our research to date. However, we assume the attributes identified by Luborsky and colleagues (1985) as associated with better patient outcome would apply to this treatment as well, including personal adjustment, interest in helping the patient, ability to foster a positive working alliance, and high empathy and warmth.

Just as reading a textbook on surgery could not be expected to produce a qualified surgeon, mere review of this manual would be inadequate for a therapist to apply this manual in clinical practice or research. Appropriate therapist training for CBT for cocaine dependence requires completion of a didactic seminar and at least two closely supervised training cases.

The didactic seminar usually lasts from 2 days to one week, depending on the experience level of the therapists. The seminar includes review of basic cognitive-behavioral theory and technique, topic-by-topic review of the manual,

watching videotaped examples of therapists implementing the treatment, several role play and practice exercises, discussion of case examples, and rehearsing strategies for difficult or challenging cases.

The supervised training cases offer an opportunity for the therapist to *try on* this approach and to learn to adapt their usual approach to conform more closely to manual guidelines. The number of training cases varies, of course, according to the experience and skill level of the therapist. Generally, we find that more experienced therapists require only one or two training cases to achieve high levels of competence, which is consistent with experience from the NIMH Treatment of Depression Collaborative Research Program (Rounsaville, et al., 1986; Weissman et al., 1982). Less experienced therapists generally require two to four supervised cases.

For supervision of training cases, each session is videotaped and forwarded to the supervisor. The supervisor reviews each session, completes a rating form (described below) evaluating the therapist's adherence and competence in implementing the treatment that session, and provides one hour of individual supervision to the therapist. Supervision sessions are structured around the supervisor's ratings of adherence and competence, with the supervisor noting areas in which the therapist delivered the treatment effectively, as well as areas in need of improvement.

References

To have a concrete basis on which to evaluate therapist implementation of CBT, Both therapists and supervisors complete parallel adherence rating forms after each session conducted or viewed. The rating forms are provided in the Appendix. They consist of Likert-type items covering a range of key CBT interventions (review of homework, skills training, etc.).

The therapist version of the form, called the *CBT Therapist Checklist* (Appendix 6.1), asks the therapist to rate what CBT strategies and interventions were implemented in a given session, and how much the intervention was used. The CBT Checklist has a variety of purposes. First, it is intended to remind the therapist, at each session, of the key active ingredients of CBT. Second, the CBT checklist is intended to foster greater therapist adherence through self-monitoring of adherence. Third, it can organize and provide the basis for supervision, as the therapist can more readily note and explore with the supervisor the strategies and interventions s/he has trouble implementing with a given patient. Fourth, in our research studies, completion of the CBT checklist fosters process research by generating a useful record of which interventions were or were not delivered to each patient in a given session. Thus, for example, we can construct a session-by-session *map* of the order and intensity of CBT interventions introduced to a range of different patient types.

The supervisor version of the form, called the *CBT Rating Scale* (Appendix 6.2), differs from the therapist version by adding a skillfulness rating for each item.

Thus, for each intervention, both *quantity* and *quality* are rated. The CBT Rating Scale is an essential part of training, as it provides structured feedback to the therapist and forms the basis of supervision. It also provides a method of determining whether a therapist in training is ready to be certified to deliver the treatment. When used with ongoing supervision, it enables to supervisor to monitor and correct therapist *drift* in implementation of the treatment. Finally, for therapists who have trouble adhering adequately to manual guidelines but who maintain that they are, pointing out discrepancies between the supervisor-generated CBT Rating Form and the therapist-generated Therapist Checklist is often a useful strategy for enhancing adherence.

For both versions of the scale, it is important to note that not all items on the rating forms are expected to be covered, or covered at a high level, during all sessions. However, items 3-11 do reflect the essential CBT items that should be present at least a moderate level in the majority of sessions. A copy of the rating manual and rater's guidelines that accompanies this form is available from Dr. Carroll.

Therapists are *certified*, or approved to implement the treatment at lower levels of supervision, when the supervisor determines that the therapist has completed an adequate number of training cases successfully. We also use more objective criteria, that is, for the most recent case, an adherence score of a *3* or more the *key* CBT items (items 3-11), and no skill rating below a *4* (adequate) on any item that was delivered.

After certification, levels of therapist adherence are monitored closely using the CBT Rating Form. When therapist *drift* occurs, and the therapist strays from adequate adherence to the manual, supervisors increase the frequency of supervision until the therapist's performance returns to acceptable levels.

We require ongoing supervision for all therapists delivering CBT. However, the level and intensity of ongoing supervision reflects the experience and skill of the therapist, as well as the time available for supervision. The minimum acceptable level of ongoing supervision for an experienced therapist is monthly; weekly supervision is recommended for less experienced therapists. In addition, supervisors should review and evaluate, using the CBT Rating Scale, 1-2 randomly selected sessions per patient. Supervision sessions themselves should include a general review of the therapist's current cases, discussion of any problems in implementing CBT, review of recent ratings from the supervisor, and *at least one of every two supervision sessions should include review of a session videotape*, by the therapist and patient both present.

Appendix

In general, supervision is most effective when conducted at a consistent place, date, and time; the goals of the supervision are clear and both participant's roles are defined; the procedures that will be used for evaluation of the therapist are clarified; and feedback to the therapist is based on session tapes and is focused and concrete ("When you debriefed X's last slip, I thought that you didn't get enough information for either of you to really understand what was going on. For example, it wasn't clear to me what was going on beforehand, how much she used, where she got the cocaine, and how the episode ended and she got back in control. I think you should be more thorough in doing functional analyses anytime there's an episode of use".) (Witte & Wilber, 1997).

FAILURE TO BALANCE MANUAL-SPECIFIED INTERVENTIONS AND PATIENT NEEDS AND CONCERNS. As noted earlier, the structure of CBT sessions (and the 20/20/20 rule) is intended to integrate skills training with effective, supportive therapy that meets the needs of each patient as an individual. Novice therapists, particularly those with less experience in treating substance users and the need to maintain a higher level of structure than that to which they may be accustomed, often tend to let sessions become unfocused, without clear goals, and do not make the transitions needed to deliver skills training effectively. Such therapists often do not begin to introduce skills training until the last few minutes of the session, which results in rushing through important points, failing to use patient examples or get patient feedback, and neglecting review of the practice exercise, all of which gives the impression that skills training is not very important. Similarly, other therapists allow themselves to become overwhelmed by the constant substance-use related crises presented by a patient and fail to focus on skill training, or use it as an effective strategy to help the patient learn to avoid or manage crises. Falling into a crisis-driven approach tends to increase, rather than decrease, patient anxiety and undermine self-efficacy. On the other hand, maintaining a relatively consistent session *routine* and balancing the patient-driven discussion of current concerns with focus on skills and strategies is also a means by which the therapist can model effective coping and problem solving.

Conversely, some therapists become overly fixed and inflexible in their application of skills training and adherence to the manual. Some therapists, anxious to *get it right*, present the material in the manual more or less verbatim to patients. This overly wooden approach necessarily fails to adapt the skills training material to the particular needs, coping style, and readiness of particular patients. For example, some therapists launch into skills training, which requires considerable activity and commitment from the patient, with patients who are still highly ambivalent or even resistant to treatment. It is important to remind such therapists that the manual is a blueprint, or set of guidelines for treatment, to be used as to provide a clear set of goals and overall

structure to the treatment, but manuals are by no means *scripts* for treatment. This often entails considerable sufficient familiarity by the therapist with the didactic material, so the therapist can alter the material to adapt to each individual patient, and the material can be presented in a way that sounds fresh and dynamic, and not manual-generated. Patients should never be aware that the therapist is following a manual.

A NOTE ON BALANCING ADHERENCE AND COMPETENCE. There is an important distinction between adherence and competence, that is, the degree to which the therapist follows the guidelines laid out in the therapy manual, and therapist competence, which refers to the therapist's level of skill in delivering that treatment (Carroll & Nuro, 1997). Several investigators have noted that a therapist's adherence and competence are not necessarily closely related (Shaw & Dobson, 1988; Waltz, Addis, Koerner, & Jacobson, 1993). That is, a therapist can follow a treatment manual virtually word-for-word and not deliver that treatment competently or skillfully (e.g., with an appropriate level of flexibility and understanding of a particular patient, using appropriate timing and language). In some cases extremely high adherence (e.g., a wooden, mechanistic, rote repetition of material in the manual) indicates very low competence in a therapist. High adherence and low skillfulness may also occur in cases where a therapist delivers a technique competently, but at an inappropriate level during a session that is insensitive to the needs of a particular patient. Conversely, there are cases of high skillfulness and low competence, for example where a therapist empathetically responds to the patient and provides incisive interpretations at the precise moment they are most likely to be helpful, but rarely touches on material described in the manual (Carroll & Nuro, 1997). Achieving a high level of adherence to the CBT manual and fostering a positive therapeutic alliance should be seen as complementary, not contradictory, processes.

SPEEDING THROUGH MATERIAL. Many of the skills training concepts, while seemingly straightforward and based on common sense, are in fact quite complex, particularly for patients with cognitive impairment, those with dual diagnoses, and those who have low baseline levels of coping skills. Thus, a common error made by many therapists is to fail to check back with the patient to make sure s/he understands the material and thinks through how it might be applied to his/her current concerns. When this occurs, it often takes the form of presentation of the skills training material as a lecture, rather than a dialogue between the patient and therapist. Ideally, for each idea or concept presented by the therapist, the therapist should stop and ask the patient to provide an example or to describe the idea in his/her own words before presenting the next idea.

OVERWHELMING THE PATIENT. For each session topic, a range of ideas and coping strategies are presented. Another problem that arises is that some therapists try to present all of the coping strategies, in the order presented

TRIGGER (What sets me up to use?)	THOUGHTS AND FEELINGS (What was I thinking? What was I feeling?)	BEHAVIOR (What did I do then?)	POSITIVE CONSEQUENCES (What positive thing happened?)	NEGATIVE CONSEQUENCES (What negative thing happened?)

Appendix 5.1

in the manual, to each patient. For many patients, this is overwhelming. Learning and feeling comfortable with one or two coping strategies is far preferable to having only a surface understanding of several. Similarly, if too much material is presented, the time that can be devoted to practice of them is limited. Thus, a good general strategy is to start by presenting one of the coping strategies that the patient already uses and is familiar with, and then introducing one or two more that are consistent with the patient's coping strategy. Also, introduction of new coping strategies can be spread over two sessions.

FAILING TO MAKE THE UNDERLYING STRATEGY EXPLICIT. A general rule in CBT is that the therapist should attempt to teach *generalizable* coping strategies using specific examples. However, while some therapists make use of the coping strategies within sessions, they fail to effectively communicate the basic underlying strategy explicitly. For example, some therapists effectively apply a problem-solving strategy to a patient problem, but do not then also make the steps of problem-solving explicit to the patient and makes sure the patient understands the more abstract concepts as well. Thus, it is essential that the therapist uses patient examples to teach the general, underlying strategy, but it is equally important that the general strategy should be made clear as well.

FAILURE TO USE SPECIFIC EXAMPLES TO ILLUSTRATE ABSTRACT PRINCIPLES. Just as some therapists do not effectively communicate the underlying principles, other therapists some therapists fail to make the more abstract coping skills material *alive* for the patient by using specific examples based on material related by the patient. Skillful therapists make the transition from the patient reporting current concerns to the skill-focused section of the session using specific examples (e.g., "Earlier, you talked about how hard it was to deal with Joe and his continuing to use, and today, I thought we talk about some ways you might be able to effectively say "No" to him. How does that sound?"). Again, skills training should be presented as a dialogue between patient and therapist, with the therapist attempting to convey the message, "Here's something that I think can help with what you're struggling with right now".

LETTING PRACTICE EXERCISES *SLIDE*. Although process data from our clinical trials suggests that the majority of patients carry out practice exercises and those who practice outside sessions have better cocaine outcomes, a number of therapists do not sufficiently attend to practice exercises. This takes the form of cursory review of completion of tasks in the beginning of sessions (T: "Did you practice saying no like we talked about"? P: "Yes" T: "Good"), rather than letting review of the assignment provide some structure to the first part of the session. This gives the message to the patient that outside practice is not important. It also takes the form of rushing through task assignments at the end of sessions, and not being creative in task assignments. Often, this reflects a therapist's low expectations that the patient will carry out the exercise (and often reflects low expectations about the patient's prognosis). Generally, therapists who expect their patients will practice outside of sessions have

Coping with Cravings and Urges

Urges are common and normal. They are not a sign of failure. Instead, try to learn from them about what your craving *triggers* are.

Urges are like ocean waves. Thry get stronger only to a point, then they start to go away.

If you don't use, your urges will weaken and eventually go away. Urges only get stronger if you give in to them.

You can try to avoid urges by avoiding or eliminating the cues that trigger them.

You can *cope* with urges by:
...distracting yourself for a few minutes.
...talking about the urge with someone supportive.
...*urge surfing*, or riding out the urge.
...recalling the negative conseqeunces of using.
...talking yourself through the urge.

Each day this week, fill out the daily record of cocaine craving, and what you did to cope with the craving.

Example:

DATE	SITUATION (Include your thoughts and feelings)	INTENSITY OF CRAVING (1-100)	LENGTH OF CRAVING	COPING BEHAVIORS USED
Friday 3PM	*Fight with boss Frustrated, angry*	*75*	*20 minutes*	*Called home, talked to Mary*
Friday 7PM	*Watching TV, bored Trouble staying awake*	*60*	*25 minutes*	*Rode it out and went to bed early*
Saturday 9PM	*Wanted to go out and get a drink*	*80*	*45 minutes*	*Played basketball instead*

patients who do so. Also, therapists and patients are by no means limited to the practice exercises suggested in the manual. In fact, it is

DATE	SITUATION (Include your thoughts and feelings)	INTENSITY OF CRAVING (1-100)	LENGTH OF CRAVING	COPING BEHAVIORS USED

preferable for the patient to come up with his/her own extra-session tasks.

ABANDONING THE MANUAL WITH DIFFICULT PATIENTS. Many patients present with a range of complex and severe comorbid problems. Again, some therapists become overwhelmed by concurrent problems and drift from use of the manual in an attempt to address all the patient's problems. In such cases, the therapist often takes a less, rather than the more structured approach needed by the patient. Generally, if the patient is sufficiently stable for outpatient therapy, we have found that the manual, which provides guidelines for a highly structured approach to treatment, prioritizing of concurrent problems, offering limited case management, and focussing primarily on achieving initial abstinence, is adequate to contain even fairly disturbed patients.

Carroll, K.M. & Nuro, K. (1997). Treatment manuals and treatment compliance. In KM Carroll (ed.), Improving compliance with alcoholism treatment. NIAAA Project MATCH Monograph Series.

Luborsky, L., McLellan, A.T., Woody, G.E., O'Brien, C.P., & Auerbach, A. (1985). Therapist success and its determinants. Archives of General Psychiatry, 42, 602-611.

Shaw, B.F., & Dobson, K.S. (1988). Competency judgments in the training and evaluation of psychotherapists. Journal of Consulting and Clinical Psychology, 56, 666-672.

Waltz, J., Addis, M.E., Koerner, K., & Jacobson, N.S. (1993). Testing the integrity of a psychotherapy protocol: Assessment of adherence and competence. Journal of Consulting and Clinical Psychology, 61, 620-630.

Weissman, M.M., Rounsaville, B.J., & Chevron, E. (1982). Training psychotherapists to participate in psychotherapy outcome studies. American Journal of Psychiatry, 139, 1442-1446.

Witte, G., & Wilber, C. (1997). Therapy compliance and clinical supervision. In Carroll, K.M. (ed.) (1997). Improving compliance with alcoholism treatment. NIAAA Project MATCH Monograph Series.

Goals Worksheet

The changes I want to make during the *next 10 weeks* are:

The most important reasons why I want to make those changes are:

The steps I plan to make in changing are:

The ways other people can help me are:

Some things that might interfere with my plan are:

Goals Worksheet

The changes I want to make during the *next 12 months* are:

The most important reasons why I want to make those changes are:

The steps I plan to make in changing are:

The ways other people can help me are:

Some things that might interfere with my plan are:

Coping with Thoughts about Cocaine

There are several ways of coping with thoughts about cocaine:

Thinking through and remembering the end of the last high.
Challenging your thoughts.
Recalling the negative consequences of cocaine use.
Distracting yourself.
Talking through the thought.

Before the next session, keep track of your automatic thoughts about cocaine when they occur, and then record a positive thought and coping skill.

THOUGHT ABOUT COCAINE	POSITIVE THOUGHT, COPING SKILL USED

Cocaine Refusal Skills

Tips for responding to offers of cocaine:

Say "No" first.
Make direct eye contact.
Ask the person to stop offering cocaine.
Don't be afraid to set limits.
Don't *leave the door open* to future offers (e.g., not today).
Remember the difference between assertive, passive, and aggressive responses.

PEOPLE WHO MIGHT OFFER ME COCAINE	WHAT I'LL SAY TO THEM
A friend I used to use with:	
A co-worker:	
At a party:	

Adapted from Monti et. al., 1989

Seemingly Irrelevant Decisions

When making decisions, whether large or small, do the following:

Consider all the options you have.
Think about all the consequences, both positive and negative, for each of the options.
Select one of the options. Pick a safe decision that minimizes your risk of relapse.
Watch for *red flag* thinking – thoughts like "I have to....", or "I can handle....", or "It really doesn't matter if....".

Practice self-monitoring decisions that you make in the course of a day, both large and small, and think through what are safe versus risky decisions for each.

DECISION	SAFE ALTERNATIVE	RISKY ALTERNATIVE

Adapted from Monti et. al., 1989

All-purpose Coping Plan

Remember that running into problems, even crises, is part of life and can't always be avoided, but having a major problem is a time to be particularly careful about relapse.

If I run into a high risk situation:

1. I will leave or change the situation.

   Safe places I can go: _____

   _____

   _____

2. I will put off the decision to use for 15 minutes. I'll remember that my cravings ususally go away in ____ minutes and I've dealt with cravings successfully in the past.

3. I'll distract myself with something I like to do.

   Good distractors: _____

   _____

   _____

4. I'll call my list of emergency numbers.

   Name: _____

   Name: _____

   Name: _____

5. I'll remind myself of my successes to this point.

   _____

   _____

   _____

6. I'll challenge my thoughts about using with positive thoughts.

   _____

   _____

   _____

Adapted from Jaffee et. al., 1967

Reminder Sheet – Problem Solving

These, in brief, are the steps of the problem solving process:

1. "Is there a problem?" Recognize that a problem exists. We get clues from our bodies, our thoughts and feelings, our behavior, our reactions to other people, and the ways that other people react to us.

2. "What is the problem?" Identify the problem. Describe the problem as accurately as you can. Break it down into manageable parts.

3. "What can I do?" Consider various approaches to solving the problem. Brainstorm to think of as many solutions as you can. Consider acting to change the situation and/or changing the way you think about the situation.

4. "What will happen if...?" Select the most promising approach. Consider all the positive and negative aspects of each possible approach, and select the one likely to solve the problem.

5. "How did it work?" Assess the effectiveness of the selected approach. After you have given the approach a fair trial, does it seem to be working out? If not, consider what you can do to beef up the plan, or give it up and try one of the other possible approaches.

Select a problem that does not have an obvious solution.
Describe it accurately. Brainstorm a list of possible solutions.
Evaluate the possibilities, and number them in the order of your preference.

Identify the problem: _____

_____

_____

List brainstorming solutions: _____

_____

_____

_____

_____

_____

Support Plan

WHAT IS MY GOAL?	WHO IS TO BE CONTACTED? (Phone #, address)	WHEN WILL THE CONTACT BE MADE?	WHAT SERVICES WILL I REQUEST?	OUTCOME
Goal 1				
Goal 2				
Goal 3				
Goal 4				
Goal 5				

Risk Reduction Worksheet

The changes I want to make are:

The most important reasons why I want to make these changes are:

The steps I plan to take in changing are:

The ways other people can help me are:

Some things that could interfere with my plan are:

Adapted from Miller et. al., 1992

CBT Therapist Checklist:

STUDY: ___ SUBJECT: ___ ___ ___ ___ DATE: ___ ___ /___ ___ /___ ___

SITE: ___ ___ ___ THERAPIST: ___ ___ WEEK: ___ ___ SESSION: ___ ___

PLEASE COMPLETE THE FOLLOWING BASED ON THIS SESSION

---

1. What session topic(s) was covered this week?
   1 = Introduction to treatment and CBT
   2 = Coping with craving
   3 = Shoring up motivation and commitment to stop
   4 = Refusal skills/assertiveness
   5 = Seemingly irrelevant decisions
   6 = All purpose coping plan
   7 = Problem solving skills
   8 = Case management
   9 = HIV risk reduction
   10 = Spouse/significant other session
   11 = Termination

2. Did a significant other attend the session?
   1 = Yes, CIRCLE: spouse/partner, parent, sibling, friend, other:
   2 = No

---

3. To what extent did you discuss any **HIGH RISK SITUATIONS** the patient **ENCOUNTERED** since the last session and explore any coping skills used?

   1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
   Not at all Somewhat Considerably Extensively

4. To what extent did you attempt to **TEACH, MODEL, REHEARSE, REVIEW OR DISCUSS SPECIFIC SKILLS** (e.g., drug refusal, coping with craving, problem solving skills) during the session?

   1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
   Not at all Somewhat Considerably Extensively

   Approximately **HOW MANY MINUTES** of this session was devoted to discussion of the scheduled manual topic?

   ___ ___ minutes

5. To what extent did you encourage the patient to **ANTICIPATE ANY HIGH RISK SITUATIONS** that might be encountered before the next session and formulate appropriate **COPING STRATEGIES** for such situations?

   1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
   Not at all Somewhat Considerably Extensively

6. To what extent did you **ASSESS THE PATIENT'S USE OF cocaine** or other substances since the last session?

   1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
   Not at all Somewhat Considerably Extensively

7. **ASSESSMENT OF GENERAL FUNCTIONING**: To what extent did you assess the patient's general level of functioning in major life spheres (e.g., work, intimate relationships, family life, social life, etc.)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

8. **TASK ASSIGNMENT**: Did you develop one or more specific assignments for the patient to engage in between sessions?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

9. To what extent did you review the patient's **REACTIONS TO LAST SESSION'S ASSIGNMENT**, explore or address any difficulties encountered in carrying out the assignment OR **PROVIDE A RATIONALE** for homework OR reinforce the importance of extra-session practice of skills, etc.?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

10. Did the patient do last session's homework?
    1 = No, no attempt made
    2 = Some attempt made
    3 = Practice exercise completed adequately
    9 = N/A, not assigned

11. **STRUCTURE OF SESSION**: To what extent did you follow the 20/20/20 rule?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

12. To what extent did you discuss or address the patient's **CURRENT COMMITMENT TO ABSTINENCE**?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

13. To what extent did you discuss, review, or reformulate the patient's **GOALS FOR TREATMENT**?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

14. To what extent did you encourage the patient to make a **COMMITMENT TO CHANGE THEIR COCAINE USE**?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

15. **ELICITING PATIENT CONCERNS ABOUT COCAINE USE**: To what extent did you encourage the patient to explore the positive and negative consequences of cocaine use?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

16. **AMBIVALENCE**: To what extent did you attempt to focus on the patient's ambivalence about changing their level of cocaine use?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

17. To what extent did you ask the patient to monitor, report or evaluate **SPECIFIC COGNITIONS** associated with cocaine use or related problems?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

18. To what extent did you apply a **PROBLEM-SOLVING STRATEGY** to a problem/issue raised during the session (this can include psychosocial problems other than cocaine use, as in the case management module)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

19. Did you do a **ROLE-PLAY** during this session?

1 = No
2 = Yes

20. To what extent did you attempt to **IDENTIFY, ASSESS, OR PRIORITIZE** psychosocial problems other than cocaine and other substance abuse?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

21. To what extent did you attempt to **DEVELOP A SUPPORT PLAN** with the patient?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

22. **CONSISTENCY OF PROBLEM FOCUS**: To what extent did you attempt to keep the session focused on prescribed activities (e.g., by redirecting dialogue when it strayed off tasks, by organizing the session so defined tasks were covered)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

23. **AGENDA SETTING**: To what extent did you articulate and maintain an explicit agenda for the session?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

24. **CONTINUITY/REFERENCE TO PAST SESSIONS**: To what extent did you refer to material discussed or experiences of past sessions as a means of building continuity across sessions (e.g., by stressing rehearsal and repetition as a means of mastering problems, building on past lessons)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

25. **REFLECTIVE LISTENING**: To what extent did you communicate understanding of the patient's comments and concerns?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

26. **EMPATHY**: To what degree did you respond empathically to the patient (e.g., through a non-judgemental stance, showing genuine warmth and concern, helping the patient feel accepted in the relationship)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

27. **FAMILY SUPPORT**: To what extent did you inquire about or discuss the availability and nature of family or social support for the patient's involvement in treatment or efforts to become abstinent?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

28. **TERMINATION**: To what extent did you discuss the termination of the therapy (e.g., encourage the patient to discuss his/her feelings or thoughts about termination, discuss plans for the continuation of treatment after the end of the study protocol)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

CBT Rating Scale: Supervisor/tape rater versions

STUDY: ___ SUBJECT: ___ ___ ___ ___ DATE: ___ ___ /___ ___ /___ ___

SITE: ___ ___ ___ THERAPIST: ___ ___ WEEK: ___ ___ SESSION: ___ ___

PLEASE COMPLETE THE FOLLOWING BASED ON THIS SESSION

---

1. What session topic(s) was covered this week?
   1 = Introduction to treatment and CBT
   2 = Coping with craving
   3 = Shoring up motivation and commitment to stop
   4 = Refusal skills/assertiveness
   5 = Seemingly irrelevant decisions
   6 = All purpose coping plan
   7 = Problem solving skills
   8 = Case management
   9 = HIV risk reduction
   10 = Spouse/significant other session
   11 = Termination

2. Did a significant other attend the session?
   1 = Yes, CIRCLE: spouse/partner, parent, sibling, friend, other:
   2 = No

KEY ITEMS:

3. To what extent did the therapist discuss any **HIGH RISK SITUATIONS** the patient **ENCOUNTERED** since the last session and explore any coping skills used?

   1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
   Not at all Somewhat Considerably Extensively

   SKILL LEVEL:

   0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
   Not done Poor Adequate Very adequate Excellent

4. To what extent did the therapist attempt to **TEACH, MODEL, REHEARSE, REVIEW OR DISCUSS SPECIFIC SKILLS** (e.g., drug refusal, coping with craving, problem solving skills) during the session?

   1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
   Not at all Somewhat Considerably Extensively

   SKILL LEVEL:

   0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
   Not done Poor Adequate Very adequate Excellent

   Approximately **HOW MANY MINUTES** of this session was devoted to discussion of the scheduled manual topic?

   ___ ___ minutes

5. To what extent did the therapist encourage the patient to **ANTICIPATE ANY HIGH RISK SITUATIONS** that might be encountered before the next session and formulate appropriate **COPING STRATEGIES** for such situations?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

6. To what extent did the therapist **ASSESS THE PATIENT'S USE OF cocaine** or other substances since the last session?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

7. **ASSESSMENT OF GENERAL FUNCTIONING**: To what extent did the therapist assess the patient's general level of functioning in major life spheres (e.g., work, intimate relationships, family life, social life, etc.)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

8. **TASK ASSIGNMENT**: Did the therapist develop one or more specific assignments for the patient to engage in between sessions?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

9. To what extent did the therapist review the patient's **REACTIONS TO LAST SESSION'S ASSIGNMENT**, explore or address any difficulties encountered in carrying out the assignment OR **PROVIDE A RATIONALE** for homework OR reinforce the importance of extra-session practice of skills, etc.?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

10. Did the patient do last session's homework?
    1 = No, no attempt made
    2 = Some attempt made
    3 = Practice exercise completed adequately
    9 = N/A, not assigned

11. **STRUCTURE OF SESSION**: To what extent did the therapist follow the 20/20/20 rule?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

12. To what extent did the therapist discuss or address the patient's **CURRENT COMMITMENT TO ABSTINENCE**?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

13. To what extent did the therapist discuss, review, or reformulate the patient's **GOALS FOR TREATMENT**?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

14. To what extent did the therapist encourage the patient to make a **COMMITMENT TO CHANGE THEIR COCAINE USE**?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

15. **ELICITING PATIENT CONCERNS ABOUT COCAINE USE**: To what extent did the therapist encourage the patient to explore the positive and negative consequences of cocaine use?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

16. **AMBIVALENCE**: To what extent did the therapist attempt to focus on the patient's ambivalence about changing their level of cocaine use?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

17. To what extent did the therapist ask the patient to monitor, report or evaluate **SPECIFIC COGNITIONS** associated with cocaine use or related problems?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

18. To what extent did the therapist apply a **PROBLEM-SOLVING STRATEGY** to a problem/issue raised during the session (this can include psychosocial problems other than cocaine use, as in the case management module)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

19. Did the therapist do a **ROLE-PLAY** during this session?
    1 = No
    2 = Yes

20. To what extent did the therapist attempt to **IDENTIFY, ASSESS, OR PRIORITIZE** psychosocial problems other than cocaine and other substance abuse?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

21. To what extent did the therapist attempt to **DEVELOP A SUPPORT PLAN** with the patient?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

22. **CONSISTENCY OF PROBLEM FOCUS**: To what extent did the therapist attempt to keep the session focused on prescribed activities (e.g., by redirecting dialogue when it strayed off tasks, by organizing the session so defined tasks were covered)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

23. **AGENDA SETTING**: To what extent did the therapist articulate and maintain an explicit agenda for the session?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

24. **CONTINUITY/REFERENCE TO PAST SESSIONS**: To what extent did the therapist refer to material discussed or experiences of past sessions as a means of building continuity across sessions (e.g., by stressing rehearsal and repetition as a means of mastering problems, building on past lessons)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

25. **REFLECTIVE LISTENING**: To what extent did the therapist communicate understanding of the patient's comments and concerns?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

26. **EMPATHY**: To what degree did the therapist respond empathically to the patient (e.g., through a non-judgemental stance, showing genuine warmth and concern, helping the patient feel accepted in the relationship)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

27. **FAMILY SUPPORT**: To what extent did the therapist inquire about or discuss the availability and nature of family or social support for the patient's involvement in treatment or efforts to become abstinent?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent

28. **TERMINATION**: To what extent did the therapist discuss the termination of the therapy (e.g., encourage the patient to discuss his/her feelings or thoughts about termination, discuss plans for the continuation of treatment after the end of the study protocol)?

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not at all Somewhat Considerably Extensively

SKILL LEVEL:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7
Not done Poor Adequate Very adequate Excellent