

# Relapse of Substance Use Disorder and Its Prevention Among Persons With Co-occurring Disorders

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**This article summarizes the scientific literature on the relapse process, describes the basic principles of relapse prevention treatment, highlights the major empirical studies, and offers suggestions for future research and application, especially in terms of ongoing care for persons with co-occurring disorders. Relapse prevention treatments have a well-established efficacy and effectiveness for persons with substance use disorders. Key ingredients include reducing exposure to substances, fostering motivation for abstinence, self-monitoring, recognizing and coping with cravings and negative affect, identifying thought processes with relapse potential, and deploying, if necessary, a crisis plan. Relapse prevention approaches may be best suited for persons in the action of maintenance stages of treatment or recovery. Further research is needed to examine relapse prevention therapies as a key component to continuing care for persons with co-occurring substance use and psychiatric disorders. (*Psychiatric Services* 56:1270–1273, 2005)**

The scientific approach to relapse of substance use can be credited to the early work of Brownell and colleagues (1) as well as Marlatt (2). Consistent with behavioral and cognitive-behavioral psychology, these authors carefully studied the relapse process, using the methods of functional analysis of the antecedents and consequences of substance use. This model articulated and studied relapse as a process, not simply an event or a “breakdown of willpower” (2).

On the basis of a number of studies of relapse antecedents, attempts to categorize them and develop predictive schemes, limitations to the original model of relapse have been iden-

tified (3–11). Among these are the nonlinearity of the true relapse process, limited emphasis on culture and context, and, perhaps most significantly, lack of attention to neurobiology, particularly the fundamental brain changes inherent in the addiction process (12–15). The most current relapse prevention model is less linear and hierarchical as well as more complex, developmental, recursive, and dynamic (16).

## Core ingredients of relapse prevention therapy

Relapse prevention therapy as a specific intervention is one of a number of evidence-based practices for sub-

stance use disorders and now has a well-documented track record of producing positive outcomes (17–19). Recent reviews have shown relapse prevention therapy to be “empirically supported” (20) and evidence based (21). Relapse prevention therapy, a form of cognitive-behavioral therapy, consists of a number of key ingredients (22,23): reducing exposure to substances, fostering motivation for abstinence (decisional balancing of pros and cons of use and abstinence and processing ambivalence), self-monitoring (situations, settings, and states), recognizing and coping with cravings and negative affect, identifying thought processes with relapse potential, and deploying, if necessary, a crisis plan.

Aspects of relapse prevention therapy have evolved to become core ingredients in nearly all psychosocial treatments for substance use disorders, including traditional 12-step model rehabilitation programs (24). In an analysis of 24 randomized controlled trials of relapse prevention, Carroll (23) concluded that relapse prevention was an effective treatment for disorders related to nicotine, alcohol, cocaine, marijuana, and other drugs. Minimal differences in effectiveness were found across classes of substances. Compared with a control condition, relapse prevention demonstrated effectiveness approximately 50 percent of the time; more often than not, the effects were sustained at follow-up. Compared with alternative active psychotherapeutic treatments, relapse preven-

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tion results were comparable but not significantly better.

In a second review, Irvin and colleagues (25) conducted a meta-analysis of 26 relapse prevention therapy studies (total  $N=9,504$ ). The overall treatment effect size was .14, with a relatively small 95 percent confidence interval (.10 to .17). For alcohol use, the effect size was .37; polysubstance use, .27; cocaine use (effect derived from only three studies), -.03; and tobacco smoking, .09. The finding of differential effects by substance was contrary to those in the earlier review by Carroll. Effect sizes were not significant for individual format (.10) compared with group treatment (.16) and for inpatient treatment (.11) compared with outpatient treatment (.16).

### Application of relapse prevention therapy within a stagewise model

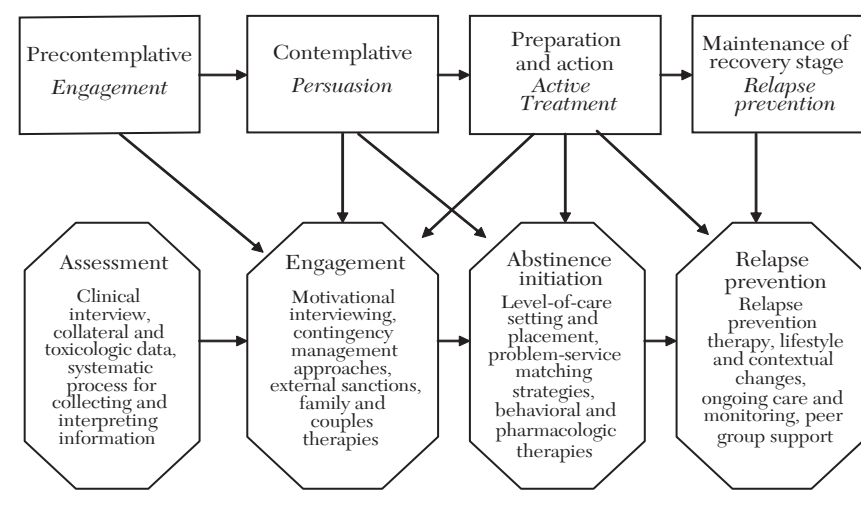
Relapse prevention approaches may be best suited for persons in the action or maintenance stages of treatment or recovery. In the action stage, the individual is exposed to a functional analysis of the antecedents to and consequences of his or her substance use. Personal knowledge about this process helps to enhance motivation and facilitate initial abstinence. In the maintenance stage, however, the individual has achieved some stability in his or her abstinence from substances and is focusing on lifestyle change and on dealing with changes in family and social relationships. The availability of ongoing professional care and monitoring is often less emphasized but remains important during this stage.

Within a context of the stagewise approach to continuing care, as shown in Figure 1, addiction treatment may be conceptualized in stages based on readiness for change. Indeed, assessment provides the basis for appropriate interventions at all stages. Therapeutic approaches can be aligned to readiness on the basis of assessment findings. Specific evidence-based practices are indicated at each of these stages (21). In other words, the therapeutic task varies according to the stage of treatment readiness (26,27).

For example, for persons at the precontemplative stage, motivational

**Figure 1**

Stagewise model of readiness for change and treatment approaches to readiness among persons with co-occurring substance use and severe mental disorders, matched to intervention goals and strategies.



enhancement therapies or contingency management approaches promote therapeutic engagement, increased readiness, and movement toward the action stage. Offering active treatments (that is, those directed at achieving and stabilizing abstinence) at this juncture is premature, poorly received, and likely to be met with noncompliance (18). In contrast, persons at the action stage seek tools and skills to stop using substances and are motivated to receive such help. As with the reductionistic limitations to any linear model of human processes, including the newer model of relapse prevention (16), this stagewise model is, in reality, dynamic, recursive, and essentially chaotic. Nonetheless, it serves as a framework within which relational goals and treatment services may be organized.

The stagewise model for integrated dual diagnosis treatment (26) is highly consistent with the chronic disease model for addiction as developed by McLellan and associates (15). These authors noted that the traditional approach to both treatment of and research on addiction has been naively based on an acute condition paradigm. In this paradigm, a single episode of treatment is hypothetically required to "fix" a relatively circumscribed problem. It is as though a single course of treatment will result in long-term abstinence. In contrast,

McLellan and associates compared the etiology, course, outcomes, and treatment compliance for substance use disorders with those for other chronic medical conditions, such as asthma, hypertension, and diabetes. The similarities are striking. In the case of substance use, both the clinical reality and longitudinal studies show that treatment duration, continuing care, and monitoring are likely to be associated with positive outcomes more than is the type or amount of the index treatment at the acute phase (15,28,29).

Evolving conceptions of relapse prevention services extend beyond the index episode and are conceptualized as ongoing routine care—much like an internist would monitor and treat expected variability in the blood pressure of a person with hypertension over the course of a long-term relationship (15). As part of ongoing positive lifestyle changes, the focus becomes recovery, not just remission. In fact, the self-help recovery model has long recognized this—for example, by emphasizing the benefits of service to others in securing one's own abstinence and improving quality of life (30). Likewise, for persons with chronic and persistent mental illness, developing a meaningful life becomes the larger ongoing goal that supports the proximate objective of symptom remission. These are in fact

core principles of evidence-based practice in the areas of illness management and recovery (31,32).

### Relapse prevention with co-occurring disorders

Within the stagewise model, during maintenance of the recovery stage for persons with substance use disorders, monitoring and treating co-occurring psychiatric disorders that are not substance related is clinically essential. Individuals who have more severe and persistent disorders, such as schizophrenia, bipolar disorder, and severe mood disorders, should be receiving integrated treatments (26). The form and timing of treatments for disorders of the mild to moderately severe type, such as depression, anxiety, social phobia, posttraumatic stress disorder, and axis II disorders, are less certain, although these too will require ongoing monitoring and care (33).

In fact, few studies have specifically examined relapse prevention therapies for persons with substance use and other psychiatric disorders. Given that co-occurring psychiatric disorders are common among persons with substance use disorders, and these are typically associated with negative outcomes, this area of research remains critically important. A more complete review of this subject is provided in one of the other articles in this special section (34).

The rapidly developing research literature on integrated mental health and addiction treatment for persons with dual disorders has focused on the engagement and persuasion stages of the therapeutic relationship. The goals of these stages involve engaging clients in treatment and initiating abstinence rather than on the prevention of relapse to substance use. Longitudinal data about correlates of remission and recovery for persons with dual diagnoses have only recently become available, but no interventions have been formally tested during the maintenance stage (34). Three recent reviews found 26 controlled trials of integrated dual disorder treatments and verified the paucity of research during the maintenance phase of treatment (35–37).

One promising approach to inte-

grated group therapy (as opposed to integrated treatment services) for relapse prevention was developed by Weiss and colleagues and is currently being tested in stage III effectiveness trials (38). This integrated group therapy focuses on relapse prevention skills for co-occurring substance use and bipolar disorders and addresses triggers and relapse risks for both disorders during the course of a structured manual-guided psychotherapy (39). However, studies of this approach focus only on symptom change and substance use associated with the index treatment (40).

In summary, no studies of relapse prevention therapies have been reported for the maintenance stage or within the context of ongoing or continuing professional care for persons with co-occurring disorders.

### Conclusions

Relapse prevention treatments have well-established efficacy and effectiveness for persons with substance use disorders. As a generic approach, relapse prevention strategies are found in most treatments and services for persons with substance use disorders. Models of the relapse process have evolved from being purely cognitive-behavioral and linear toward a more dynamic interplay among dispositions, contexts, and past and current behaviors. The emergence of physiological measures and neuroimaging technology provide compelling neurobiological evidence for the nature of addiction and relapse as a process (41,42). Biological, social, and cultural factors, as well as the influence of other co-occurring psychiatric disorders, must now be key features to models and studies of the relapse to substance use and its prevention.

Relapse risk and protective factors associated with neurobiologic factors, management of psychiatric symptoms, and environmental and social contexts are important topics for future research for persons with co-occurring disorders. Relapse prevention therapy can be more broadly conceptualized and focused on lifestyle change and recovery rather than simple substance use or abstinence. Furthermore, relapse prevention thera-

pies can easily be targeted to both the action and maintenance stages of treatment. This approach is highly consistent with the chronic disease model that recommends routine ongoing professional monitoring and continuing care for persons suffering from co-occurring substance use and psychiatric disorders. ♦

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