The mission of the Caron Foundation is to provide an enlightened and caring treatment community in which those affected by alcoholism or other drug addiction may begin a new life.

About the Author

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# Table of Contents

**FORWARD**

Relapse – Removing the Taboos on the Topic and Promoting Honest Efforts to Address It .......................... 2

**What Is Relapse?** .......................... 5

Defining Relapse and Recovery .......................... 5

What Constitutes Recovery? .......................... 5

What Defines Relapse? .......................... 5

Cessation Versus Maintenance .......................... 6

Relapse and Recovery Rates .......................... 6

**Theories of Relapse** .......................... 8

Cognitive-Behavioral Model of Relapse Prevention .......................... 8

Immediate Determinants .......................... 8

Covert Antecedents .......................... 9

Treatment Using RP .......................... 9

Cenaps Clinical Model of Relapse Treatment .......................... 9

The Relapse Syndrome .......................... 10

Stages of Recovery .......................... 10

RP Versus Cenaps .......................... 10

Classical Conditioning Theory of Cravings .......................... 10

A Brain Disease .......................... 11

Classical Conditioning Versus RP and Cenaps .......................... 11

**Relapse Prevention at the Caron Foundation** .......................... 12

Philosophy of Care .......................... 12

Criteria for Admission to the Relapse Program .......................... 12

Relapse as a Process .......................... 12

Relapse Prevention Services .......................... 13

Psychological Services .......................... 13

Spirituality .......................... 13

Aftercare .......................... 13

**Relapse Triggers** .......................... 15

Precipitants of Relapse .......................... 15

Anger and Frustration .......................... 15

Stress .......................... 15

Positive Emotional States .......................... 15

Overconfidence .......................... 15

Psychiatric Comorbidity .......................... 16

Severity of Addiction .......................... 17

Social Pressure and Environmental Cues .......................... 17

Inter-relationship of Relapse Triggers .......................... 17

Gender Differences in Relapse .......................... 17

**Predictors of Recovery** .......................... 18

Severity of Addiction .......................... 18

Successful Addiction Treatment .......................... 18

Continued Participation in Recovery Activities .......................... 18

Motivation for Recovery .......................... 18

**Relapse Prevention Strategies** .......................... 19

Life-Style Changes .......................... 19

Commitment to Abstinence .......................... 19

Social Networks .......................... 20

12-Step Programs .......................... 20

Relapse Prevention Skills .......................... 20

Identify Relapse Cues .......................... 20

People, Places, and Things .......................... 21

Coping Skills for High-Risk Situations .......................... 21

Coping with Cravings .......................... 21

Learning from Slips .......................... 21

Medications .......................... 22

No Magic Cure .......................... 22

**References** .......................... 23
Relapse has been a very sore subject within the field of addiction. It has been considered a sign of failure. Of course, failure occasions blame, sometimes to the patient, often to a particular treatment, even to the addiction treatment field – there is plenty to go around. Failure also produces conflict and defensiveness – and these commodities are also in ready supply within our field. In this regard, I found the review of this topic by Dr. Susan Gordon to be refreshing in its candor, unapologetic in its examination of the topic and practical in its approach to addressing it. As a long time researcher in the field of addiction treatment, I found Dr. Gordon’s review and discussion to be comprehensive, stimulating and thought provoking. In what follows, I offer my own thoughts about the issue of relapse – what I think we know about the topic (most of this derives directly from Dr. Gordon’s review) and, finally, some important issues in this topic that we need to know more about.

It is interesting that over the past 10 – 15 years, relatively similar rates of relapse following the treatment of different substances – have produced very dissimilar treatment reactions – depending upon the substance. For example, those in the smoking cessation field know that relapse to cigarette smoking is associated with increased health risks, but these risks, though significant, are not immediate. In addition, cigarettes are not illegal and the level of risk to others produced by people who smoke is measurable but not severe. Perhaps because of the relatively confined and delayed risks produced by “treatment failure,” the reaction from those who treat smoking addiction is to advise smokers to keep trying. Within that field, it is clear that eventual complete cessation is a direct function of the number of quit attempts. Smokers who keep at it typically increase the length of their abstinence periods with successive attempts. Re-treatments are typically short, rather inexpensive combinations of medication (nicotine gum or patch) and some “helpful hints.” The strategy here is based on the view that smoking is a bad habit and that repeated attempts to break the habit, supported by anti-craving medications and advice, will eventually be enough to create and sustain a new habit – not smoking.

Those who deal with heroin and cocaine addiction know that return to either of these drugs carries much more severe, extended and immediate consequences. This is especially true for those who return to injection drug use with the significant threat of contracting and spreading life-threatening infectious illnesses. It is also well known that relapse to illegal drug use is often (not always) associated with crime and loss of employment. Thus, the level, likelihood and breadth of risks following return to many forms of illegal drug use are much greater than following relapse to cigarette use. Importantly, these risks affect more people than simply the addicted individual. Perhaps for this reason, there have been efforts to “aim lower” in terms of defining a good outcome. Those who advocate harm reduction efforts have correctly noted that there are significant benefits to the public if actively using drug injectors can just reduce their needle sharing – hence needle exchange programs. Those familiar with opiate agonist maintenance treatments such as methadone, take pride in the fact that once stabilized on that long-acting, orally-administered synthetic opiate, most patients will reduce their opiate use by more than 50 percent and many will stop all together. With these changes come significant reductions in crime, and often, increases in employment. At the same time, methadone maintained patients are not abstinent and, indeed, are physiologically dependent upon a synthetic opiate.

In the examples provided above, I have been careful not to suggest that one strategy is better, more effective or more humane than the other. Indeed, it appears to me at least, that there are good arguments for the different approaches to the common problem of relapse. But not everyone accepts the potential rationale or value of these differing approaches. The radical abstinence view might castigate those who would relegate an addicted patient to a life of dependence on methadone or, worse, to a life where they are assisted in maintaining illegal drug use by...
wrong-headed efforts to sanitize the injection process. Those who take a harm reduction approach often shake their heads in dismay at those who would deny health services to affected individuals and the resulting protection to the public unless those services are consistent with an unrealistic, ideological goal. These divergent views each have just enough facts, clinical anecdotes, moral high ground and researcher advocates behind them to produce the same quality of interaction seen between Israelis and Palestinians discussing settlement on the West Bank!

It is with this history of ideology and emotional rancor as background that I found the Gordon review so useful and thought provoking. Dr. Gordon's work reviews most of the notable past efforts at dealing with relapse – across many different types of drugs. Moreover, her review illustrates how the various means of dealing with relapse follow directly from the various and divergent perspectives on the nature of addiction and the nature of the relapse process. The synthesis of these various approaches is quite easy to follow and there is no embellishment of the good or the bad points from each approach. Three key points derive from Dr. Gordon's synthetic and comprehensive review of relapse – these are things we know:

1. Relapse is common following treatment for addiction and patients should understand that they are likely to be vulnerable. Discussing vulnerability to relapse during treatment is a duty of the clinician. The idea that mentioning the “R” word will give permission to relapse is simply wrong.
   a. Clinical follow-up at regular intervals for monitoring purposes is an advisable – and should be a reimbursable – service. Done properly, these monitoring efforts will communicate concern and detect early warning signs of pending relapse.

2. Relapse is reasonably predictable and patients should understand both the general precipitants as well as their own personal triggers.
   a. There are general emotional danger zones and the AA acronym of H A L T (Hunger, A ngery, Loneliness and Tired) is as good a general teaching device as you can get for communicating them.
   b. There are general social situations that are danger zones – patients need to have a rehearsed strategy for dealing with them.
   c. There are personal emotions and situations that will be danger zones and that need to be anticipated and discussed with a counselor.

3. Relapse is preventable. Patients who are not actively involved in some form of self-monitoring and abstinence maintenance activities are especially vulnerable. But there are many types of abstinence maintenance regimens that are likely to prevent relapse.
   a. Active involvement with A A remains the most focused, prevalent and economical – but it is not the only one.
   b. Active involvement with personal counseling with an office-based therapist can be helpful.
   c. Active involvement with a religious congregation, with a health club or fitness group, or with any lifestyle that is inconsistent with substance use.
   d. These options are not mutually exclusive and can be combined effectively.

A serious reader of the Gordon review will also note that there are significant issues within the relapse topic that we simply do not know enough about. Some of these issues are potentially important for clinical decision-making. I will discuss just two here.

How do you re-treat a relapsed, re-admitted patient? Is a relapsed patient a “different kind of patient;” should they receive “a different kind of treatment?” There is reason to think so and it is clear that the Caron Foundation has developed a novel and focused approach based on that view. As suggested at the outset of this discussion, relapse following smoking cessation attempts typically do not result in different treatments – simply repetitions of prior efforts. As also suggested by a review of the smoking cessation research, practice with the same approach does appear to make perfect with many who successively increase their periods of abstinence over repeated attempts. At the same time, even if “success” eventually comes from repetitions of the same treatment, is it not possible that an alternative treatment might be even better or more likely to produce improvement without failures?

It is also true, as noted by the Caron Relapse Program, that earnest but failed efforts at abstinence can produce low self-esteem, depression and a sense of hopelessness. When and for how many times is the message, “you can do it this time if you try,” appropriate for a re-treated patient? When or under what circumstances is it more helpful to communicate the message, “Okay – you did pretty well with the strategy we used last time – but this time we are going to add some new ingredients?” This is the typical approach taken by physicians treating chronic health conditions. It is the rule, not the exception, that patients in
treatment for hypertension, asthma, depression or most other chronic conditions do NOT do well in their first treatment attempt. Most do not immediately gain control of their lifestyle (eating habits, exercise, etc.) and most do not respond optimally to their first medication. Poor response (we call it relapse!) is handled by adding or changing a therapeutic intervention. I think it is fair to say that we just don’t know at this point which of these general strategies will be best – or for which patients. At the same time, I commend the Caron Foundation on its efforts to develop alternative approaches and alternative combinations of treatment ingredients. At the very least, this should send a message to a patient from the very beginning that, “if this doesn't work out, let's find out early and there is no reason to lose hope. If you come back we can try other therapies, medications and interventions.” It will be interesting and important to the field to revisit the Caron experience as they wrestle with this issue.

When is a patient ready to assume responsibility for his/her own care management? By this I mean, what are the appropriate behavioral markers that suggest a patient is likely to be ready to maintain abstinence and prevent relapse with minimal involvement from formal treatment? Please note that I did not ask the question, “when is the patient ready for discharge?” Discharge conveys finality and cure. The real question for addiction treatment providers is what level of formal or structured treatment is necessary to prepare the patient for the next (reduced) level of structure and intensity – and ultimately, self-management. A gain, a review of contemporary treatments for chronic illness is instructive. “Disease management” is a term that appears throughout that literature. With that term comes the fairly recent realization that it will not be possible to manage chronic illness care through medications alone; there is not likely to be lasting or substantial improvement of patient function unless there is a corresponding life change that will acknowledge and accommodate the illness. In turn, physicians have redirected their efforts toward developing partnerships with their patient, to diagnose and communicate the problem issues, provide alternatives for the patient to decide upon, and offer suggestions for the kinds of behavioral changes that will be necessary. Successive interactions with the patient involve proactive monitoring, often by phone, to detect early warning signs and to offer the patient different options for managing the illness. Note that in this approach, the patient is not discharged out of care, but gradually reduces reliance on structured care and becomes the manager of his condition. Correspondingly, the physician becomes a resource for management options.

Applied to the addiction field, this approach would suggest efforts to derive face-valid, clinical indicators of readiness and ability to assume more personal responsibility for the management of their vulnerability to re-addiction. Some of these efforts are obvious and have already been put into practice. For example, Dr. Gordon has discussed the efforts of Caron to place those with few social supports into half-way houses as a next step in developing a self-management plan. Similarly, it is both face-valid and supported by research findings that active involvement with AA is an important part of integrating a recovering patient into the real world management of their addiction. Beyond these face valid goals, there are few studies that advise on such important issues as:

• What level of psychiatric symptoms are too much to be managed without medication or even with medication, but no continuing outpatient therapy;
• How should chronic pain be managed in a manner that will make a recovering patient comfortable, but not promote relapse;
• For those who simply do not like AA groups, what are attractive, effective alternatives that will be acceptable to the patient?

These are only a few of the many issues that confront a patient and a treatment program. There are presently only common sense and clinical experience to guide the choices. Among the exciting things about the Gordon review and the programs in place within the Caron Foundation are the opportunities to study these issues in a systematic way – toward the goal of better informing the clinicians and, especially, their patients.
What Is Relapse?

Bill, a heavy drinker for 20 years, realizes that he is an alcoholic and decides never to drink again. Following treatment, he sporadically attends Alcoholics Anonymous meetings. Bill is successful at maintaining sobriety for a year until his daughter’s wedding when he decides to have a glass of champagne. After one toast, Bill returns to a strict policy of abstinence and fully commits to a 12-Step program of behavioral and spiritual change. Has Bill relapsed or slipped? Did Bill achieve a state of recovery prior to his full commitment to a 12-Step program?

Laura, a self-identified heroin addict, is unable to maintain long-term abstinence from heroin use. She repeatedly re-admits herself to treatment, initially abstains from heroin use and participates in daily Narcotics Anonymous meetings following treatment, only to return to heavy heroin use after a few months of abstinence. During her periods of heroin use, Laura suffers many negative social consequences, such as prostitution, arrests, and loss of her children to child welfare. Do Laura’s brief swings to abstinence constitute periods of recovery?

John realizes that his cocaine “habit” is getting out of control and is able to completely abstain without treatment or self-help programs. He does not believe he is addicted to cocaine and is not worried about his occasional marijuana use because it has not caused him any negative consequences. Has John achieved recovery? Does his continued marijuana use constitute a relapse?

Defining Relapse and Recovery

As you can see, it is not easy to precisely define relapse or recovery. These are basic questions pertaining to recovery and relapse:

What Constitutes Recovery?
- Is it necessary to view oneself as an alcoholic or drug addict to achieve recovery?
- Does recovery mandate a spiritual and behavioral self-growth process?
- How long must a person abstain from addictive substances in order to be in recovery?
- Is complete abstinence from all potentially addictive drugs essential for recovery?

What Defines Relapse?
- A re negative consequences, such as arrest or health-related problems, necessarily part of relapse?

Researchers and clinicians cannot agree on the answers to these basic questions. For example, 12-Step based treatment programs define recovery as much more than behavioral abstinence from drugs and alcohol. It is a lifelong process of behavioral and spiritual development. The goal of the 12-Step philosophy is to maintain the process of recovery throughout one’s life. Relapse is viewed as the negative end point when a person returns to addictive patterns of thought and behavior. A person is considered to have relapsed after the first use of any addictive substance.

On the other hand, most researchers consider relapse to be a complex process. Relapse for them is not viewed as a negative end point, but as a transitional process from “lapse” to “relapse”[1, 2]. Lapses or slips are thought to have cognitive and behavioral processes that are different from relapses, and interventions designed to stop a lapse may prevent a full-blown relapse. In fact, according to this approach, lapses may be inherent in the recovery process. Relapse is seen as part of a learning process that eventually leads to recovery[3].

While the 12-Step model clearly defines recovery and relapse, research definitions of recovery, lapse, and relapse vary according to the researcher. Recovery may be defined as complete abstinence from the addict’s drug of choice, complete abstinence from any potentially addictive substance, or inconsequential moderate use of any substance, including the addict’s drug of choice. Likewise, definitions of a lapse also vary from inconsequential moderate use of any substance to abusive use of the addict’s drug of choice.

Broadly speaking, relapse refers to the inability to maintain behavioral changes over time. However, “behavioral change” can mean different things to different people. Thus, relapse may be defined as one-time use of a potentially addictive substance, out-of-control dependency on the addict’s drug of choice, or out-of-control dependency on any potentially addictive substance. Some research definitions of relapse also include negative consequences suffered from the drug or alcohol use.

This report does not attempt to select the correct definitions of relapse and recovery because, as Miller notes,[4] all of these definitions are flawed since they artificially define complex processes of human behavior. Instead, this report discusses the various theories on relapse, identifies precipitators of relapse and
predictors of recovery, and presents relapse prevention strategies that have been shown to be effective in clinical practice and research.

**Cessation Versus Maintenance**

It also may be important to distinguish between initial cessation of drug or alcohol use and long-term maintenance of abstinence. The failure to maintain abstinence and other cognitive, behavioral and spiritual changes over time is widely recognized as a major problem in the treatment of addiction.

A number of researchers and those who design clinical programs believe that a person’s ability to maintain recovery may be related to skills that are different from those needed to initiate change, and so they design separate treatment programs based on the needs of each group. The Caron Foundation has separate treatment programs for individuals who are entering treatment for the first time and for those who have had periods of abstinence prior to the current relapse.

Based on clinical patient data on the electronic patient database from July 2001 through June 2002, we found relatively few differences between the patients in treatment for the first time (Primary Program) and patients who had relapsed (Relapse Program). However, the differences between the Primary and Relapse Program patients may be indicators of relapse. As illustrated in Figure 1, Relapse Program patients tend to have higher rates of divorce and lower rates of single marital status than Primary Program patients. Figure 2 shows that Relapse Program patients have a higher tendency to be unemployed than Primary Program patients. In terms of addiction, Figure 3 illustrates that Relapse Program patients have higher rates of cocaine, heroin and other opiate addiction than do Primary Program patients who are more likely to be addicted to alcohol and marijuana. Addiction is a disease that negatively impacts a person’s bio-psycho-social well-being. Inability to sustain relationships and maintain employment may be consequences of severe drug dependence.

**Relapse and Recovery Rates**

Relapse rates for addictive diseases usually are in the range of 50% to 90%. However, these rates vary by definition of relapse, severity of addiction, drug of addiction, length of treatment, elapsed time from treatment discharge to assessment, as well as other factors. For example, relapse rates of 50% have been found when relapse is defined as a return to pretreatment severity compared to 90% when relapse is defined as the consumption of any amount of alcohol. A n analysis of major national studies of
treatment effectiveness found that relapse to daily heroin use was higher than relapse to daily cocaine use.[7]

Recovery rates indicate that while many addicts relapse, a large number also experience extended periods of abstinence. A large-scale study of the course of alcohol dependence found that 62.3% of alcoholics reported at least one period of complete abstinence from alcohol lasting three months or longer.[8] Vallient[9] followed a sample of 100 hospital-treated alcoholics for 12 years. Although 95% of the group relapsed within two years following treatment, at some point during that two-year period 59% of the alcoholics achieved at least six months of abstinence. As Vallient concluded, the same group of alcoholics could be identified either as achieving recovery or as relapsing to active alcoholism.

Throughout the 1990s the Caron Foundation participated in a multi-year outcomes research project conducted by an independent evaluation service.[10,11,12] Using the stringent definition of relapse as return to any use of drugs or alcohol, we found that between 60% to 70% of our patients attained abstinence by the second half of the year following treatment. Also, over half our the patients in our Relapse Program remained abstinent the entire year compared to half of the patients in the Primary Program (see Figure 4). Less than one quarter of the patients relapsed for the entire year, and approximately 10% of patients were able to regain abstinence during the second half of the year if they slipped during the first six months.

Relapse rates for addictive diseases do not differ significantly from rates for other chronic diseases. In a landmark article, McLellan and other pre-eminent researchers[13] reviewed the medical literature for three chronic illnesses: type-1 diabetes mellitus, hypertension, and asthma. Similar to drug and alcohol addiction treatment, treatments for these chronic illnesses are effective, but require strict adherence to medical and behavioral regimens. As is the case with chemical addiction, patients with these diseases often do not comply with their treatments. McLellan found that LESS than 60% of adult patients with type 1-diabetes mellitus are fully compliant with their medication schedules and less than 40% of patients with hypertension or asthma are fully compliant with medications. In addition, less than 30% of patients with any of these three illnesses adhere to the dietary and behavioral changes necessary for successful treatment. These illnesses have remarkably similar relapse rates to addictive diseases — 30% to 50% of adult type-1 diabetes patients and 50% to 70% of adult hypertension or asthma patients return to medical care to reduce symptoms.

Thus, for many the road to recovery does not appear to be straight or swift. Long-term studies of alcoholics and addicts have found that a return to substance use is the norm for people who have had a period of abstinence.[4] Although some people are able to maintain long-term recovery on their first attempt, most people enter a sustained period of long-term recovery following periods of less intense slips and relapses sandwiched between longer periods of abstinence. However, by developing appropriate skills to sustain long-term recovery, many people afflicted with addiction are able to jump aboard and stay on the wagon of recovery.

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**Figure 4: Caron Foundation Abstinence Rates by Program**

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>Abstinent by end of year</th>
<th>Abstain full year</th>
<th>Relapse first 6 mo./abstain second 6 mo.</th>
<th>Abstain first 6 mo./relapse second 6 mo.</th>
<th>Relapse full year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>80</td>
<td>60</td>
<td>50</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Relapse</td>
<td>60</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>
The clinical methods used to decrease relapse from drug and alcohol addictions depend on underlying theories of relapse. This section describes three predominant theories of relapse and the clinical prevention strategies for each: cognitive-behavioral relapse prevention program, Cenaps clinical program, and a classical conditioning theory of cravings. These three theories are discussed because they form the basis of theories of relapse and clinical programs for relapse prevention.

Cognitive-Behavioral Model of Relapse Prevention

Marlatt’s model of relapse prevention (RP) is based on social learning theory and cognitive-behavioral psychotherapy. His approach assumes that people can learn new skills and behaviors by changing the ways they think about situations. Marlatt prefers not to think of addiction as a chronic physiological disease, but sees it as learned habits consisting of maladaptive thoughts and behaviors that can be changed. He distinguishes between a slip, which is a brief return to the dysfunctional behavior and a relapse, which is a full-blown cessation of attempts to change the behavior. The goals of RP are to anticipate and prevent a relapse and to assist recovery from a slip before it becomes a relapse. Recovery occurs gradually as the person increases his or her sense of self-efficacy and self-esteem from prolonged abstinence.

RP therapy focuses primarily on events or factors that can precipitate a relapse episode and divides these factors into two categories: immediate determinants and covert antecedents. Immediate determinants are exposure to high-risk situations, levels of coping skills, anticipated outcomes, and whether or not the person develops a negative response to a slip (what Marlatt and Gordon call the “abstinence violation effect,” or AVE). Covert antecedents include lifestyle, overall stress levels, and powerful cognitive urges or cravings.

Immediate Determinants

High-risk situations pose threats to the person’s sense of self-control and can be caused by negative emotional states, interpersonal disagreement or conflict, social pressure, or positive emotional states in which the person is exposed to an addictive substance, such as a party. Although the high-risk situation exposes the person to a relapse trigger, the way the person copes with the trigger will determine if he or she will experience a slip. Learning functional coping skills is a major component of RP.

It also is important for the person to change his or her attitudes about substance use. If the person anticipates a pleasant outcome from substance use, this will decrease his or her motivation to abstain from the drug or alcohol. People who focus primarily on the immediate pleasurable effects of drugs or alcohol are more likely to slip than are people who focus on the longer-term negative effects.

In addition, a person’s attitudes toward a slip are also seen as a precipitant to relapse. A person who sees his or her slips as a failure will respond differently from a person who is able to learn from his or her mistakes. AVE is hypothesized to occur if a person has a stringent goal of abstinence and views any slips as complete relapse. In this case, the person could attribute the slip to personal failure that could lead to negative emotions that could lead to
increased drinking or drug use as a way of escaping those negative feelings. AVE also is hypothesized to occur when people attribute their addictive behaviors to powerful factors beyond their control. On the other hand, people who are able to learn from their slips and who view themselves as in control of their behaviors are hypothesized as being less likely to abandon their attempts at abstinence.

Research has not supported AVE. A study of over 200 alcohol, opiate or nicotine addicted individuals found that participants with a goal of complete abstinence were significantly less likely to relapse that participants who had less stringent goals.\[15\]

Covert Antecedents

In addition to immediate precipitants of relapse, Marlatt also has identified a number of less obvious factors that influence the relapse process. These factors include lifestyle, overall stress levels, and powerful cognitive urges or cravings. It is theorized that these factors can increase the risk of relapse because they increase exposure to high-risk situations or decrease motivation to resist substance use in high-risk situations. These covert antecedents may not be obvious at the time of the slip because they result in seemingly benign choices, or as “apparently irrelevant decisions.”\[2\]. Thus, lifestyles that involve friends who use addictive substances or lives that are governed by things a person “should” do instead of what the person wants to do facilitate choices and decisions that could lead to a relapse. Cravings are ongoing desires to experience the positive effects of addictive substances. If unchecked, they also can lower a person’s motivation for recovery.

Treatment Using RP

RP treatment strategies focus on teaching patients to anticipate the possibility of a relapse and to recognize and cope with the immediate and covert precipitants of relapse. Patients are taught how to change habits through the process of acquiring new skills. They also are taught new ways of thinking about addictive substances so that positive expectancies are replaced by negative examples. Slips are predicted and patients are taught how to stop the slip while learning from it. In addition to focusing on specific cognitions and behaviors, RP also attempts to repair global lifestyle factors by advocating balanced lifestyles and positive activities to replace the ones the patient used while engaging in addictive behaviors. Treatment is individualized according to each patient’s relapse triggers and progress.

RP was developed in a research setting and it is not surprising that it has been extensively studied. A large review of over 26 studies\[16\] found that RP is generally effective, especially for alcoholism, but generally not as effective for nicotine or cocaine addiction. Its effectiveness appears to be enhanced when used with medication and when it is evaluated immediately after treatment. In addition, research has not totally support RP’s claim that self-efficacy will increase with successful coping in relapse situations. For example, a study of former smokers found that their self-efficacy decreased following a high-risk situation regardless of whether or not they had a slip. The people who successfully refrained from smoking were just as worried about their ability to handle future high-risk situations as the people who slipped.\[17\]

Cenaps Clinical Model of Relapse Treatment

Cenaps is an acronym for the Center for Applied Sciences. The Cenaps clinical model of relapse prevention was developed by Gorski\[18,19\] as a clinical program to enhance recovery for people who chronically relapse to substance use. It differs from RP in that it was developed as a clinical initiative, not as part of a research program. Unlike RP, the Cenaps model adheres to 12-Step philosophy and assumes that addiction is a disease, not a bad habit. However, both Cenaps and RP are based in cognitive-behavioral therapeutic interventions. In addition, they both realize the importance of lifestyle changes in order to maintain long-term recovery.

Gorski has categorized chemically dependent people into three groups: (1) recovery prone, (2) transitinally relapse prone, and (3) chronically relapse prone. He feels that basic addiction treatment methods are effective for most people in the first two groups, but do not address the special issues of chronically relapse prone individuals.

Relapse prone individuals can be sub-divided by their levels of motivation for recovery. Unmotivated people are defined by their unwillingness to accept that they are suffering from chemical dependency. Motivated relapse-prone patients, on the other hand, understand they are addicted, have the goal of complete abstinence, and work to maintain their recovery through a 12-Step program that includes lifestyle changes. However, despite their best intentions and efforts, these motivated relapse-prone individuals develop symptoms of dysfunction that precipitate a return to drug and alcohol use. Gorski’s model of relapse prevention is designed especially for these motivated relapse-prone individuals.
The Relapse Syndrome

Gorski has identified brain dysfunction as a significant physical consequence of addiction because brain dysfunction interferes with a person’s ability to think clearly, manage emotions, and regulate behavior, especially during stressful situations. Personal distress caused by the compromised ability to handle thoughts, emotions and behaviors, is the precipitating cause of a relapse. Thus, the process of relapse is thought to begin prior to a return to drugs and alcohol. Gorski believes that relapse-prone people cannot experience recovery without experiencing a tendency toward relapse. Even while a person is abstinent from addictive substances, he or she may develop symptoms of what Gorski calls “the relapse syndrome.”

Post acute withdrawal (PAW) symptoms occur after a person has recovered from the initial acute withdrawal symptoms caused by cessation of addictive substances. According to Gorski, PAW is precipitated by abstinence. PAW results from the damage the addictive substances have caused to the individual’s nervous system and the psycho-social stress of coping with life’s problems without the crutch of drugs or alcohol. Symptoms of PAW include unclear thinking, memory impairment, unregulated emotions or numbness, sleep disturbances, impaired physical coordination, and over-sensitivity to stress.

In order to maintain long-term recovery, it is necessary to address the relapse syndrome and symptoms of PAW by correcting the negative physical, emotional, and social consequences of addiction. This process of correction is a normal part of recovery. Without correction, PAW symptoms will intensify until the person relapses to drug or alcohol use as a dysfunctional attempt to relieve the symptoms.

Gorski’s method of relapse prevention directly addresses relapse tendencies and provides tools for the addicted person to cope with life without the need to engage in addictive behaviors. His method of relapse prevention teaches people to become alert to their dysfunctional cognitive, emotional, and behavioral warning signs of relapse and to utilize positive coping strategies to decrease PAW symptoms.

Stages of Recovery

The Cenaps model of recovery also postulates six developmental stages of recovery. In the first pretreatment stage the goal is for the individual to recognize he or she has an addiction. The second stabilization stage enables the person to regain control of thinking, emotions, and behavior in order to manage PAW. In the next early recovery stage the person learns how to cope healthily without addictive substances. Middle recovery focuses on the development of a normal balanced lifestyle. Finally, late recovery is based on development of personality changes, such as self-esteem, intimacy, and positive values. Abstinence is only one step toward recovery according to Gorski. In order to prevent relapse, his program is designed to correct the bio-psycho-social damage caused by chemical addiction.

RP Versus Cenaps

Similar to Marlatt and Gordon’s work, Cenaps relies heavily on cognitive-behavioral strategies that increase awareness of sobriety-based addictive thoughts and behaviors and replace them with healthy ways of coping. Unlike RP, the Cenaps model focuses mainly on stress as a precipitating factor for relapse. RP, on the other hand, has identified a wide range of relapse triggers and has developed individualized treatment programs to address the various triggers experienced by different people. Cenaps, however, pays more attention to brain damage caused by addictive behaviors than does RP. Cenaps also has embraced the disease theory of addiction while RP narrowly defines relapse as a bad habit.

Both therapies understand that the tendency to relapse is part of recovery and focus on ways to break the cycle of recovery to relapse. RP, however, is designed for any alcoholic or addict since it is assumes that the tendency to relapse is a normal part of recovery, while the Cenaps method focuses its treatment more narrowly on chronic relapsers with high motivation for recovery.

Classical Conditioning Theory of Cravings

Classical conditioning theories pay much greater attention to the impact of internal and external cues on cravings than do either the RP or Cenaps models. Cravings are strong desires or compulsions to engage in a behavior, such as drug or alcohol use, in order to experience positive effects or to avoid negative ones. Two types of cravings are common among individuals with a chemical addiction: cravings to alleviate unpleasant emotional states or symptoms of acute withdrawal, and cravings to increase the short-term positive effects of drug use. Similar to cognitive behavioral theories, classical conditioning is a theory of learning. It postulates that a conditioned stimulus, such as the sound of an alarm, becomes able to elicit an automatic response, such as fear, from a person if the person has
learned to associate the sound of a bell (conditioned stimulus) with the original cause of the fear (the unconditioned stimulus), which could be a fire. Although the sound of the alarm itself should not produce the response of fear, it has been paired with a fearful event, a fire, and, thus, becomes associated with fear even when there is no fire.

The classical conditioning theory of cravings explains cravings and relapse in the following way. Suppose a person develops strong positive feelings from consuming alcohol (the unconditioned stimulus). For this person, the often-repeated act of drinking and the positive feelings that result from inebriation become connected to something other than the alcohol, such as a wine glass (the conditioned stimulus). Eventually, the person begins to crave alcohol when he or she sees a wine glass because the wine glass has become associated with the feelings originally produced by the alcohol. Seeing an empty wine glass without the possibility of drinking alcohol then produces a craving for the alcohol.

Not everyone, of course, experiences cravings for alcohol when they see a wine glass. Conditioned stimuli are very individualized and some people experience cravings much stronger than others. Typical conditioned stimuli for addictive behaviors include the presence of drugs or alcohol, equipment used while taking drugs or alcohol, and places where drugs or alcohol are sold. C Conditioned stimuli also can be other triggers more idiosyncratic to the individual.

Classical conditioning theories assume that a person’s responses to conditioned stimuli persist long into recovery. For example, a drug addict who has been in recovery for a number of years may experience a strong craving for his drug when he walks down a street where he used to buy drugs. While engaged in treatment programs, patients rarely experience cravings for drugs or alcohol. Instead, the cravings seem to return after the patient is discharged and returns to old neighborhoods, people, and activities associated with their addictive behaviors.

A Brain Disease

Classical conditioning theory supports research that views addiction as a brain disease in which repeated use of an addictive substance leads to changes in how the brain responds. The reward pathways of the brain are closely linked to motivational, emotional, and memory centers, which allow people to learn the signals for pleasurable rewards and to anticipate the reward. These conditioned responses have been found in laboratory studies of abstinent opiate-, cocaine-, and alcohol-dependent individuals through the use of positron emission tomography (PET). PET scans show how the body’s organ systems function and how cells grow.

The understanding of craving as an ingrained, automatic response to a wide variety of triggers makes sense to many people in recovery who deal with unexpected cravings after many years of abstinence. Learning how to cope with powerful, seemingly irrational, cravings is an important component in any relapse prevention program.

A number of treatment strategies have been developed from the classical conditioning model. Medications to reduce cravings or break the memory of pleasure are discussed in this report in the final section titled “Relapse Prevention Skills.”

One behavioral treatment developed to reduce the cravings induced by conditioned stimuli is cue-exposure treatment. Cue exposure repeatedly exposes patients to the cues of conditioned stimuli in a safe clinical environment. Patients practice coping skills in the presence of their cues in order to reduce cravings. Theoretically, repeated exposure to a drug or alcohol cue without the usual response of using or drinking should result in decreased cravings over time. However, the decrease in cravings that occurs is specific to the particular cue and does not extend to other cues, which continue to elicit cravings. Extinction of cues in clinical settings does not always generalize to the patient’s normal environment, and addicts often report strong cravings to the same cues that supposedly were extinguished during treatment. A Iso, if the person pairs the cue with his or her former response of using or drinking, the cue may again elicit powerful cravings.

Classical Conditioning Versus RP and Cenaps

The classical conditioning model of relapse is important for its research on the underlying brain mechanisms regarding craving, as well as for the clinical interventions based on the theory. It pays much greater attention to the impact of internal and external cues on cravings than do either RP or Cenaps modes. Its conceptualization of craving as a brain response to repeated drug or alcohol use contrasts to RP’s description of craving as a cognitive expectation. Classical conditioning and craving research have given credence to the theory of addiction as a long-term brain disease. It also challenges the viewpoint that addicts are weak people who are unwilling to control their behavior.
Relapse Prevention at the Caron Foundation
By Brian Halstead, Executive Director of Adult Services, and Sharon Matthew, Clinical Coordinator of the Relapse Program.

Philosophy of Care
The Caron Foundation considers chemical addiction to be a chronic disease, and that the potential for relapse is part of all chronic disease processes. For example, people treated for cancer remain concerned about its return, and the longer the cancer remains in remission the better the prognosis. The same concerns are heard about chemical dependency, and people who attend 12-Step programs state “there are no guarantees,” although the longer the abstinence, the better the prognosis. If the cancer does return, you will hear someone say, “after the return of cancer, the doctors are treating it more aggressively.” At Caron, we take the same approach with relapse to chemical addiction – we work on the issue with more and different treatments.

The Caron Foundation has developed a separate treatment program for patients who have relapsed, because we believe they require different treatments from those used with patients who are admitted to treatment for the first time. Patients who relapsed to substance use may feel more hopeless about recovery and may have more severe co-occurring issues, such as psychiatric or relationship problems, than patients in primary care. The Relapse Program at Caron is designed to address feelings of hopelessness, and other issues, in addition to teaching the skills for recovery. The more often a patient has relapsed, the more treatment episodes a patient has undergone, the more severe a patient feels about recovery, and the more severe the patient’s co-occurring issues, the more appropriate this patient is for the relapse prevention program at Caron Foundation.

Caron believes that a separate treatment program for patients who relapse is necessary for several reasons. First, we feel it is important for patients who have relapsed to interact with other patients dealing with relapse issues to address the overwhelming shame they feel because they relapse. This shame can become a barrier that does not allow them to move into solution-oriented thinking. Unlike patients in the Primary Program, which is geared toward identification of the problem and solutions for recovery, many relapse patients already have identified their addiction problems. What they need now is a program that enables them to develop a strong recommitment to acting on their recovery plan.

Criteria for Admission to the Relapse Program
The Relapse Program is different from the Primary Program. The Primary Program is designed to introduce patients who have not had prior treatment to the 12-Step recovery process. Primary care educates patients on the disease of addiction, helps patients to self-diagnose as an addict or an alcoholic, and educates them on taking responsibility for their recovery. Primary patients have had little or no sobriety, or previous treatment.

The Relapse Program, on the other hand, is designed for recovering people who have experienced a relapse to addictive behavior. The criteria used to place a patient in the Relapse Program is, the following:

1. Knowledge of the 12-Step recovery process through prior treatment or 12-Step involvement,
2. Ability to maintain the recovery process as demonstrated by six months or more sobriety,
3. Understanding of one's addictive disease through self-diagnosis as an addict or alcoholic.

Relapse as a Process
At Caron, the Gorski model of relapse treatment is utilized. According to Gorski, the disease of addiction manifests itself in distorted thinking, behaviors, and emotions. People who are in the relapse process struggle with thinking clearly, managing their emotions, and regulating their behaviors, especially in stressful situations. For most addicts and alcoholics the process of relapse begins prior to the return to using drugs or alcohol.

The Caron Foundation Relapse Program helps patients to
identify their high-risk situations and to develop strategies to avoid or cope with these situations. We also focus on early relapse warning signs and help patients to become more aware of them early in the relapse process. The earlier one intervenes in the process the better the prognosis.

Following Gorski’s model, Caron also addresses the patient’s post-active withdrawal (PAW) symptoms that occur after a person has gone through acute withdrawal symptoms. In order to maintain long-term recovery, it is necessary to address the symptoms of PAW by correcting the negative physical, emotional, and social consequences of addiction. This is a normal part of recovery. Caron’s method of relapse prevention teaches people to become alert to their dysfunctional cognitive, emotional, and behavioral warning signs of relapse and to utilize coping strategies to decrease PAW symptoms.

In the Relapse Program at Caron, we have developed relapse-specific lectures addressing such topics as phases of relapse, cognitive distortions, high-risk situations, situation mapping, developmental model of recovery, and cost of recovery. Because relapse patients tend to experience tremendous feelings of shame, we address this by helping them understand that relapse can be a part of the disease process. Not everyone has to relapse but many people do and relapse does not necessarily constitute failure. A relapse can be the foundation for continued recovery if handled appropriately.

Because chemical dependency erodes self-esteem, the Caron Foundation helps patients begin to rebuild their sense of worth. Our goal is to help people find hope, and help them to maintain the recovery process regardless of their prior relapses.

**Relapse Prevention Services**

In addition to teaching the basic skills of relapse prevention, the Caron Foundation believes it is very important to address other areas of patient functioning. The relapse process may be triggered by psychological problems and spiritual emptiness. Therefore, we have developed strong programs to diagnose and treat problems in these two areas.

**Psychological Services**

We have found that a number of our patients suffer from mental health as well as addictive problems. As a result, all patients are evaluated by one of our staff clinical psychologists and are screened for psychological symptoms and are referred to one of our consulting psychiatrists for further evaluation and treatment if appropriate. Proper mental health treatment can stabilize the patient’s ability to function and, thereby, increase his or her involvement in the addiction treatment program. Appropriate treatment of psychological symptoms also can reduce the patient’s likelihood of relapse.

**Spirituality**

Twelve-step programs view addictive behaviors as symptoms of an underlying spiritual crisis. The first step addresses powerlessness (addictive behavior) over drugs or alcohol. The other eleven steps of the 12-Step programs focus on spiritual awakening and character development.

We have found that many relapse patients are emotionally and spiritually bankrupt. In their addiction they have isolated their values and morals. At the Caron Foundation we believe patients need a spiritual component in order to heal and continue in recovery. We offer weekly lectures on spirituality, spiritual consultations with our chaplains, and daily morning and evening meditation.

Additionally, for patients who are ready for further self-exploration, we encourage completion of the fourth and fifth steps of the 12-Step recovery process. Step four states “we made a searching and fearless moral inventory of ourselves”. The purpose of a searching and fearless moral inventory is to sort through the confusion and the contradiction of a person’s life to enable the patient to come to terms with his or her past. Typically, the patient’s inventory includes shortcomings, such as guilt, shame, remorse, self-pity, resentments, anger, depression, frustration, failure and fears, as well as the patient’s current feelings and frustrations. Completing step four can enable the patient to view life more positively and feel relieved from past shame.

Step five states “we admitted to God, to ourselves and to another human being the exact nature of our wrongs.” In this step the patient reveals his or her step four inventory to another trusted person on the staff. Completion of step five can increase the patient’s connection with others and deepen spiritual experience.

**Aftercare**

Addiction is a chronic disease and appropriate aftercare is essential to recovery. Aftercare can consist of an extended care program, a structured halfway house, or outpatient care. We believe that the longer a patient remains involved in treatment the better the prognosis for recovery. An important element in residential treatment is preparing and motivating the patient for continuing aftercare. Clinically, we noticed that many patients admitted to our Relapse Program had not followed through with aftercare treatment recommendations in their prior episodes of addiction treatment.
Sometimes a major focus of relapse treatment is helping a patient commit to aftercare treatment recommendations. Caron’s participation in a national study of treatment programs confirmed our observation about the importance of aftercare in recovery. Analysis of our patients’ treatment outcomes confirms that participation in aftercare is an important element of long-term recovery. As illustrated in Figure 5 over 60% of patients who regularly attended some form of aftercare treatment following discharge from Caron’s residential treatment program remained completely abstinent from any drug or alcohol use for an entire year post-treatment, compared to approximately 40% of patients who attended aftercare sporadically and 30% of patients who did not attend an aftercare program.[11]

The Caron Foundation provides addiction treatment at every level of care needed by patients. In order to increase the likelihood of continued recovery, it is important for patients discharged from the residential treatment program to receive aftercare treatment at a level appropriate for their individual needs. For example, patients who would benefit from a structured environment are referred to an extended care or halfway house, which provides ongoing structure so they can continue to develop more constructive coping skills. Patients who are ready for a less structured environment receive outpatient aftercare. Aftercare is arranged through our patient advocacy department. The patient advocates are trained to find an appropriate treatment provider, and finalize transportation arrangements and aftercare appointments.

The Caron Foundation also offers patients a completely free service called “focused aftercare.” Our focused aftercare counselors call patients to check on their recovery status every three months for a year following discharge. This brief but therapeutic telephone contact often re-connects patients to their recovery process before their addictive thinking returns them to active addictive behavior and a relapse.

The Caron Foundation also provides case management services, which is a customized plan for post-discharge. This service includes a weekly telephone consultation from a case manager to provide weekly monitoring and support for prevention of relapse issues. Participation in the case management aftercare program also includes support for crisis situations, including evaluations, interventions, telephone conferences with family, sponsors, peers, and therapists, and consultation with Caron therapists. In addition, the program allows patients to attend two life enrichment workshops, and a five-day program at the Caron Center for Self Development. Case management provides a strong network of support and education to prevent relapse. A preliminary analysis of the first 20 patients to complete this program found that only one patient reported a relapse. Currently, Caron staff is working on ways to make this program more accessible to all patients.

Caron’s innovative programs give patients an essential opportunity to overcome feelings of failure, identify with others in a similar situation and find hope. We have developed a blend of therapeutic approaches which are individualized to meet each patient’s unique needs for recovery.
Relapse Triggers

Each of the three theories of relapse to addictive behaviors — RP, Cenaps, and classical conditioning — addresses the precipitators of relapse, also known as cues or relapse triggers. Although these triggers vary from person to person, they are remarkably similar across different substances. Smokers generally face the same types of relapse triggers as alcoholics or heroin addicts.

The three most commonly identified relapse triggers are unpleasant emotions, interpersonal conflict, and social pressure. These triggers account for almost three-quarters of the relapses reported by individuals addicted to alcohol, nicotine, and heroin. Much of the research on relapse triggers is conducted by assessing individuals after they experience a relapse episode and waiting to see if these people experience another relapse when exposed to these specific triggers. The retrospective nature of most of this research may give a distorted view of the amount of relapses accounted for by any one factor because people often do not clearly recall the specifics of relapse events.

However, the triggers identified above illustrate the pervasive nature of relapse precipitants. Antecedents to relapse can be found within an individual, such as the person's mood or coping style. Alternatively, relapse may be triggered by interpersonal events, such as conflict with another person or social pressure to use drugs or alcohol.

It is not possible to identify all relapse triggers, since they are specific to each individual, but we do know of certain precipitants of relapse that are identified most often by recovering addicts and alcoholics.

Precipitants of Relapse

Anger and Frustration

Marlatt found that heavy social drinkers who were angry drank significantly more alcohol than social drinkers who were not angry. He also discovered that research participants who were able to express their anger before drinking, drank significantly less alcohol than participants who were not given the opportunity to express anger. Thus, it appears that while anger is a trigger to relapse, learning how to express the anger in a constructive fashion can mitigate it.

Frustration is closely linked to anger. People often feel frustrated when they are unable to complete a goal or activity. Sometimes this frustration is directed toward oneself and may be linked to unpleasant feelings of guilt or incompetence. Frustration also may be directed toward others who may be perceived as blocking the goal.

Stress

Stress refers to the body's response to events that a person perceives as potentially harmful and people who experience severe stressful events often abuse drugs or alcohol. Following the traumatic events of September 11, 2001, nicotine, alcohol, and marijuana use in New York City increased among the city's population. Approximately one quarter of New Yorkers who were surveyed reported they were drinking more alcohol following September 11, than they had used prior to the trauma.

We respond to stress through various behavioral, emotional, and physiological reactions, such as avoidance behaviors, feelings of anxiety, and increases in heart rate and blood pressure. Ultimately, the relationship between stress and addiction may be found in the brain. Animal studies show that chronic stress can modify development of the brain and increase vulnerability to drug abuse. A body of research suggests that drug use, withdrawal, and tolerance symptoms are related to changes in the brain stress system. Recent research also indicates that the nervous systems of substance-dependent individuals are hypersensitive to stress, which may explain why addicts often relapse to drugs and alcohol following exposure to relatively mild stressors.

The influence of stress as a relapse trigger appears to be lessened by the individual's method of coping with it. For example, women who take specific actions to address the source of stress have been found to consume less alcohol during stressful situations than women who focus on relieving the immediate negative emotions. It appears that problem-solving coping styles are more beneficial than emotionally focused coping styles.

Positive Emotional States

It is not surprising to learn that negative emotional states, such as anger, frustration, and stress, are related to relapse. People generally do not expect to experience relapse triggers during times of positive emotional states. However, people often use substances to enhance feelings of pleasure during celebrations and other positive events. According to classical conditioning, the use of drugs and alcohol during "good times" may connect the initial positive feelings to a need to use drugs or alcohol to experience pleasure.
Overconfidence

There is a difference between confidence and overconfidence. Confidence is the realistic assessment of one's ability to achieve a goal, and usually occurs over time as people repeatedly are successful at activities. For example, we would not expect a novice airplane pilot to be confident on her first attempt to fly an airplane. However, as the pilot matures and completed numerous trips under a wide variety of conditions, we would expect her confidence to increase.

Confident individuals are more likely to persist despite obstacles and are more likely to succeed. Research into relapse has related long-term recovery rates to a person's confidence or self-efficacy that he or she will not use drugs or alcohol in specific situations. A nnis's program of relapse-prevention training is based on the theory that self-efficacy increases as a person learns and practices skills of recovery.

Overconfidence, on the other hand, is an unrealistic belief in one's abilities. Overconfidence is a trigger to relapse when the addict or alcoholic unrealistically assesses his or her abilities to refuse alcohol or drugs without having the essential skills to do so. Overconfidence also hampers recovery when individuals do not understand the difficulties of maintaining long-term changes in their ways of thinking and acting. Research has found that confidence or self-efficacy scores obtained at the conclusion of a treatment episode in which new skills were learned and practiced are a much better indicator of recovery than high ratings of confidence obtained at the beginning of treatment when the patients had poor relapse prevention skills.

Psychiatric Comorbidity

Psychiatric comorbidity refers to any psychiatric problems the individual may experience in addition to drug or alcohol addiction. There is a high prevalence of comorbidity in chemical addiction populations. Studies have reported co-occurrence of addiction and psychiatric illness in the range of 65% to 75% of populations seeking addiction treatment. The most common psychiatric disorders identified in chemically addicted populations are antisocial personality disorder, anxiety disorders, and affective disorders, such as depression, borderline personality disorder, and psychosexual disorders.

The Caron Foundation assesses all of its adult patients with a well-known psychiatric screening questionnaire, the Symptom Checklist 90-R (SCL-90-R). Based on a sample of 121 patients we found the male and female average scores were higher than a non-patient normative sample to which they were compared (see Figure 6).

It also is well documented that individuals who have both a psychiatric and chemical addiction problem tend to have higher rates of relapse than people without additional psychiatric diagnoses.

Higher severities of psychiatric conditions are related to lower compliance with addiction treatment and higher rates of relapse. Drugs and alcohol may be abused as a way of managing emotions and when not treated, these unregulated emotions may become triggers for relapse.

Treatment programs that address psychiatric comorbidity can decrease relapse rates for patients. First, the treatment program must correctly assess its patients for co-occurring psychiatric problems. Because many withdrawal symptoms mimic symptoms of depression, anxiety, and psychotic disorders, it is important to distinguish between an actual psychiatric disorder and a transitory withdrawal symptom.

Following assessment, integrated psychiatric and addiction treatment can be instituted for appropriate patients. Behavioral and pharmacological treatment strategies have been developed to address psychiatric symptoms of addicts and alcoholics. These patients must learn new ways of coping with feelings of anxiety and depression without turning to drugs or alcohol for relief.

Treatment manuals are being developed to address specific areas of comorbidity. For example, post-traumatic stress disorder (PTSD), a psychiatric disorder that results from extreme exposure to stressful events or trauma, is a common psychiatric diagnosis of addicted women. Between 30% to 59% of female patients in substance abuse treatment programs are estimated to have PTSD. Therapists at the Caron Foundation are trained in Seeking Safety, an evidence-based treatment that integrates treatment for PTSD and addiction.

Research studies also support the initiation of non-addictive medications to address psychiatric symptoms. Patients who receive appropriate psychiatric assessment and treatment are likely to have increased rates of engagement and completion of addiction treatment.
Severity of Addiction

The degree to which a person is physically dependent on alcohol is related to the person’s risk of relapse.[5] A study of smokers found that half of the smokers relapsed when they experienced withdrawal symptoms.[5] Several research studies have found that alcoholics with severe physical dependency have stronger cravings for alcohol and respond differently to drinking alcohol than do less severely dependent individuals.

Long-term alcohol and other drug use also have been shown to produce impairments in learning. Even moderate consumption of alcohol may negatively impact cognitive functioning and brain damage commonly occurs with long-term heavy drinking.[39] It may be more difficult for severely dependent individuals to learn new skills than for individuals who have a shorter history of addiction and use. Impulse control may also be negatively affected by severe drug or alcohol use and it may be more difficult for severely addicted individuals to restrain themselves from impulsively returning to drug or alcohol use.

Social Pressure and Environmental Cues

A major precipitant of relapse is pressure by other people to drink alcohol or use drugs. A person who is alcohol or drug dependent may experience direct pressure as others urge him or her to have a drink or use a drug. Or the person may experience indirect pressure to use drugs or alcohol when he or she attends activities at which others are drinking or using drugs.[27]

In addition to social pressure, other environmental cues may trigger a relapse, including certain people, places, and things associated with a person’s addictive behaviors. An environmental cue could be a bar where the person relaxed after work, or it could be seemingly more innocuous, such as Monday night football on television.

Inter-relationship of Relapse Triggers

As we have seen, relapse does not occur in a vacuum. There are powerful intrapersonal and interpersonal factors that influence whether or not a person is likely to relapse. These relapse triggers also do not occur in isolation. Rather, the inter-relationships among the relapse trigger most likely are responsible for a relapse. For example, a conceptual model of relapse developed by Connors and his colleagues,[6] postulates that the inter-relationships of a person’s background characteristics, including psychiatric functioning, coping skills, treatment type, duration of treatment, and satisfaction with treatment, stressors, and alcohol severity will predict relapse.

Others have noted that environmental factors, such as high-risk situations or social pressure, may provide the setting for a relapse, while the person’s internal risk factors, such as coping skills, impulse control or attitudes toward alcohol and drug use, also influence the relapse. Thus, alcoholics and addicts with poor coping skills may remain abstinent until they are faced with a stressful or pleasurable event that triggers intense cravings. Without the skills or impulse control to control the cravings, they most likely will relapse.

Gender Differences in Relapse

Gender also is an important factor in relapse. Research has found that women in drug treatment tend to relapse less frequently than men do, in part because the women are more likely to engage in group counseling than are the men.[40] Also, women may be more willing to seek and accept professional help for problems and may be more motivated for treatment than are men.

Men and women also tend to have different precipitants to relapse. In a study of cocaine addiction,[40] women were more likely to report negative emotions and interpersonal problems prior to relapse. The male patients, on the other hand, were more likely to report positive feelings prior to the relapse. These differences also were found in a comparison of men and women in treatment for alcoholism.[41]

In the alcoholism treatment study,[41] the men were more likely to relapse while alone, while women were more likely to take their first drink with female friends or a romantic partner. Male alcoholics also tended to report a positive mood more often following the drinking episode than did the female participants. Women also reported more depression than the men reported.

Other gender differences were found in the cocaine study.[40] Women were more likely to impulsively relapse to cocaine use than were the men. The male patients were more likely to engage in self-justification and rationalization following their relapse than were the women.

These gender differences suggest that different factors may contribute to relapse for men and women. Relapse prevention treatment may benefit by focusing on different skills for male and female patients.[40]
Predictors of Recovery

It is possible for alcoholics and addicts to maintain abstinence from drugs or alcohol without experiencing a relapse or to re-experience recovery following a relapse. A number of different factors may be related to the ability to sustain long-term periods of abstinence.

Severity of Addiction

It appears that addicts and alcoholics with severe addiction histories are more likely to eventually abstain from their drug and alcohol use than are people who do not believe they have a significant drug or alcohol problem. A large study of over 1,800 alcohol dependent men and women[8] found that certain characteristics of the alcoholics predicted their ability to sustain at least a three-month period of abstinence from alcohol. The research participants in the study who abstained experienced earlier onset of alcoholism and more alcohol-related problems than the research participants who relapsed. The abstainers also were more likely to have also been dependent on drugs than were the relapers.

Two studies of several hundred men that monitored alcohol-use behaviors from adolescence through old age[42] found that the men who became abstinent tended to experience a number of negative medical, legal, or social consequences as the result of their alcohol use.

Successful Addiction Treatment

Completing treatment for addiction also is related to successful recovery. In the previously cited study of over 1,800 alcohol-dependent men and women, abstainers were more likely than relapers to have received treatment and to have attended Alcoholics, Narcotics, or Cocaine Anonymous meetings.[8]

A study of cocaine addicts following treatment[43] found that patients who maintained abstinence for two years generally completed the 21-day inpatient program and followed it with outpatient treatment and involvement in self-help groups, such as 12-Step programs. The study also found that recovery was enhanced for relapsers if they returned to additional episodes of residential treatment. A nother review[44] of longitudinal research studies on the course of substance use disorders concluded that the following factors are associated with recovery: commitment to abstinence, strong sense of self-efficacy, and coping skills for stress and relapse-inducing situations. A nother review of treatment study outcomes[45] identified improved social functioning during treatment as a predictor of recovery.

Motivation for Recovery

A person's motivation also plays a large role in recovery. Marlatt[2] believes that one of the most important aspects of RP is to evaluate the client's level of motivation and ability to cope with high-risk situations. Gorski[18] also highlights the importance of motivation by dividing addicts and alcoholics into two groups of people – those who are motivated to change their addictive behaviors and those who are not.
Motivation can be inspired by either external pressure from others to change, or internal pressure from oneself. Internal motivation has been found to be a more powerful predictor of abstinence than external pressure. Project MATCH, a large study of the effects of alcohol treatment found a strong relationship between motivation and treatment outcomes among outpatients. Also, studies have shown lower motivation among the addicts who did not enter treatment compared to those who did seek treatment.

It is possible to enhance a person's motivation through addiction treatment. Miller has developed a specific therapeutic intervention designed to increase motivation for people who are ambivalent or unconcerned with their addictive behaviors.

A positive therapeutic milieu also may increase motivation. From September 2001 through March 2003, we assessed the motivation for treatment of women who were admitted to Caron's residential rehabilitation program at the beginning of treatment and again at the conclusion of the treatment episode. Forty-five women completed the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES) within the first five days of admission and again, prior to discharge. We compared the scores to the standardized scores of a sample of patients assessed by Miller and Tonigan, the developers of the SOCRATES scale and found that our patients significantly increased their recognition of the addiction, decreased their ambivalence, and also increased their behavioral steps toward change (see Figure 8).

Relapse Prevention Strategies

Following addiction treatment, alcoholics and addicts face the major challenge of maintaining their recovery. Equally challenging for addiction treatment programs is successfully teaching patients the skills they will need to maintain abstinence. It is not easy to teach relapse prevention skills without predicting that a patient will relapse. Treatment providers fear that addicts may misconstrue any mention of a slip or a relapse as permission to return to drug or alcohol use.

However, a number of strategies have been developed to promote long-term recovery from drug and alcohol addictions. Some of these strategies involve major lifestyle changes while others deal primarily with specific high-risk situations. Other aspects of people's functioning, such as psychological well-being, also may influence their likelihood of relapse and should be addressed as a relapse prevention strategy. Finally, medications, such as disulfiram and naltrexone decrease the positive effects of drugs and alcohol or reduce an addict's cravings. As discussed later in this report, these medications also play a role in relapse prevention.

Commitment to Abstinence

A commitment to complete abstinence may be one of the most effective strategies to prevent relapse. Valli's long-term study of male alcoholics found that controlled drinking was not a viable strategy. Even men who experienced few alcohol-related problems were not able to control their drinking for long periods of time. By the time these men reached 60 years of age most men who had attempted controlled drinking either had relapsed or had become completely abstinent. A study of nicotine-, alcohol- or opiate-addicted participants found that individuals who committed to complete abstinence at the end of their treatment episode experienced significantly fewer slips or relapses in the first 12 weeks following treatment than...
participants who selected a less restrictive goal of controlled use.

Social Networks

It may be very difficult for a person to completely commit to sobriety without leaving a drug-using subculture. Studies of people who have recovered from opiate addiction indicate that the people usually had to break all ties with other opiate addicts and develop new interests and social networks.[17]

Social support is a major aspect of relapse prevention. People help recovering addicts through modeling and teaching desired behaviors, helping with stressful situations and cravings, and by praising and encouraging progress as well as by imposing consequences on slips.

It may not be easy to find supportive social networks. Many women are caught in abusive relationships with drug-using partners and they may need additional resources to leave these relationships. It also may be difficult for workers to maintain recovery in work environments that ignore nicotine, alcohol, or other drug use. Adolescents have an especially difficult time extricating themselves from drug- or alcohol-using cliques in school since the other groups may reject the recovering student.

Family education, such as Caron’s Family Education and Co-dependency Programs, and family therapy may strengthen the family's ability to create a home environment supportive of recovery. Family members can learn how to eliminate enabling behaviors, change interactions that become relapse triggers, and respond to slips and relapses.[17] Family members and friends also may help the recovering person develop rewarding alternative recreational activities to drug or alcohol use.

12-Step Programs

Alcoholics Anonymous, Narcotics Anonymous and other programs based on the 12-Step philosophy have proven to be very successful in helping recovering people maintain major lifestyle changes. Twelve-step programs view the addictive behavior as a symptom of an underlying spiritual crisis. In order to recover from the addiction, the individual must address these larger issues of spirituality and character development.[51,52]

Participation in the fellowship meetings and sponsorship are essential parts of 12-Step programs. AIso, an important goal of membership is the awareness of the consequences of one’s addiction, especially the social consequences of addictive behaviors. AA appears to be very helpful to individuals who have destructive social networks that are supportive of their drinking because it introduces them to new constructive social networks of people who support each other’s sobriety.[53] Individuals with heavy alcohol use and psychiatric problems have been found to benefit from AA involvement, possibly because the 12-Step social network provides them with external supports to compensate their for poor internal resources.[54]

Alcoholics Anonymous has been conducting triennial anonymous scientific surveys of its members since 1968. A survey completed in 1998[55], the average length of sobriety for its members is more than seven years with almost half of its members sober for more than five years. Project MATCH, a major national research trial of three treatments for alcoholism, found that AA involvement is related to positive treatment outcomes regardless of the type of treatment[56]. A survey of Narcotics Anonymous (NA) members in Great Britain found positive relationships between length of membership in NA, sobriety from drugs, and healthy levels of self-esteem and anxiety.[57] Two large-scale analyses of many research studies on AA found that participation in AA is related to improved psychosocial functioning and decreased drinking.[58] A study of employed alcoholics who were referred to inpatient treatment, were mandated to attend AA, or given a choice between the two programs found that patients who completed inpatient treatment and followed it with voluntary AA involvement had the lowest rates of relapse of the three groups.[59]

Active involvement in 12-Step programs repeatedly has been found to be a better predictor of long-term recovery than attending meetings.[60] Involvement in AA following addiction treatment is related to increased positive ways of coping, high commitment to continued abstinence, and an increased sense of self-efficacy.[61]

However, a major impediment to the effectiveness of 12-Step programs is the high dropout rate. It has been estimated that 50% of AA members drop out within the first three months and that only 20% of alcoholics referred to AA regularly attend meetings.[61] In order to determine why people do not become actively involved or drop out from 12-Step programs, researchers have examined the attributes of individuals who successfully use these programs compared to those who drop out. Self-identification as an alcoholic or addict appears important for successful 12-Step program affiliation. A study of AA affiliation following discharge from treatment found that individuals who remained involved in AA were more accepting of all aspects of the 12-Step program than were individuals who rejected the program or who thought their drinking was not very serious.[62]

Relapse Prevention Skills

A number of relapse prevention skills that address faulty ways of thinking and behaving have been developed using the techniques of cognitive-behavioral therapy.

Identify Relapse Cues

In order to avoid or otherwise successfully cope with relapse cues, it is necessary to be able to identify them. Individuals are able to
identify relapse cues by reviewing the antecedents of past relapses, analyzing relapse dreams or fantasies, or by keeping an addiction cravings diary and recording the events and emotions surrounding the craving. As we have seen, relapse cues may differ for people. In order to identify relapse cues, the recovering person must become an observer of him- or herself and not depend on others to identify the cues. In this way, the recovering person also takes more responsibility for his or her own recovery.

Gorski [18] and Marlatt [14] stress the importance of awareness of a wide range of relapse cues. These cues can be negative or positive emotions, thoughts about drug or alcohol use, beliefs about the positive effects of drugs or alcohol, any behaviors that may have accompanied prior drug or alcohol use, or lack of lifestyle balance.

People, Places, and Things

Recovering people should try to avoid the high-risk situations that are associated with relapse cues. These situations include people who could directly or subtly pressure them, places where it is easy to obtain drugs or alcohol, and things that remind them of addictive activities. All items associated with drug or alcohol use should be avoided, including removing them from one’s home.

Sometimes people mistakenly think it would be helpful to set up a deliberate test to see if they are able to resist temptation. Testing oneself in this way can be an especially bad idea because one can never predict the situation. It is very possible that unforeseen events will occur making it very difficult for the person to remain abstinent.

High-risk situations may also exist within a person’s mind. Faulty beliefs about the effects of alcohol can increase the possibility of a relapse. Early in recovery, people should identify their belief system regarding positive expectancies of alcohol or drug use. These beliefs then may be countered by accurate perceptions often based on the person’s own experiences.

Coping Skills for High-Risk Situations

Of course, it is not possible to avoid all high-risk situations. Unexpected or anticipated situations that may lead to relapse call for the use of specific coping skills. In order to deal successfully with these situations, people should practice the strategies they plan to use before the event occurs.

Behavioral skills for high-risk situations involve active behaviors that reduce cravings. These include removing oneself from the cues by leaving the situation or by throwing away the drugs or alcohol and related supplies. If it is not possible to leave a situation, other active coping skills involve practicing relaxation, writing in a diary, engaging in another activity, and calling a sponsor or other supportive person.

Cognitive skills are also important coping skills for high-risk situations. Thinking about one’s reasons for recovery is an important means of decreasing the risk of relapse. It may be helpful for a person to carry a card listing the positive reasons to remain abstinent along with the negative consequences of relapse. A further means of decreasing the risk is to repeat positive motivational statements to oneself. Positive mental imagery that mentally removes the person from the stressful situation also is helpful.

Coping with Cravings

Unfortunately, most recovering people continue to experience cravings to use drugs or alcohol. As we have seen, cravings are a normal conditioned response to a stimulus that has been paired with the addiction. They do not indicate that the person “wants” to drink or use drugs, and recovering people should not feel they are failures because they experience cravings.

In fact, people in recovery who experience cravings and who correctly identify the craving may be protected against relapse because the craving prompts them to utilize their coping skills. On the other hand, people who avoid experiencing cravings may be at higher risk of relapse because the avoidance results in overconfidence.

There are specific skills to use to overcome the cravings without relapsing to drug or alcohol use. One skill taught by Marlatt is to visualize the craving as a wave and to experience it rising and falling as an observer. All cravings subside if they are not acted upon. This technique allows the individual to accept the craving, but not to become consumed by its intensity. Instead, by observing the “wave,” the person is aware of the intense feelings while anticipating the wave dissipating as it washes on to a beach.

Learning from Slips

Regardless of whether a person considers any drug or alcohol use to be a relapse or precursor to a relapse, it is possible to avoid a lengthy relapse by learning from the event. A slip always should be considered to be a major event and should be taken very seriously. It is foolish for recovering people to test their willpower by trying to use even a small amount of drugs or alcohol since even a small amount may trigger strong cravings for more.

However, if a person does slip to drug or alcohol use, following these three steps may decrease the possibility of further relapse:

1. Immediately cease all drug and alcohol use; remove oneself from the situation; call a sponsor or other supportive person.
2. Analyze the events preceding the slip to learn how to avoid this type of situation in the future.
3. Recommit to a program of complete abstinence and recovery.

In order to successfully cope with a slip, it may be helpful for recovering people to carry a card listing the steps to take, similar to
the ones listed above. The card should clearly identify the people and their telephone numbers to call in the event of a slip.

**Medications**

A research discovers the ways in which alcohol and drugs affect the brain, medications are emerging as important treatment tools in relapse prevention. Similar to the goal of 12-Step programs and psychosocial treatments, the goal of pharmacological treatment for addiction is to assist recovery by modifying activity of the brain that is negatively affected by the drug. Pharmacotherapy is designed to combat the changes that the addictive substances produced on the brain. Relapse prevention medications have been developed for nicotine, alcohol, and opiate addictions. To date, none have been developed to treat cocaine or other stimulants, hallucinogens, inhalants or marijuana addiction. Two medications, disulfiram and naltrexone, that address alcohol and opiate addiction in very different ways are discussed in this section.

Disulfiram, commonly known as Antabuse, is the grandparent of alcohol relapse prevention medications. It was developed 50 years ago and is one of the few drugs approved by the FDA for treatment of alcoholism. It works by promoting unpleasant physical symptoms if a person drinks after taking it. The theory behind the development and use of disulfiram is that alcoholics will not drink if they know that alcohol will make them physically ill. Research studies that compared disulfiram to placebo (false medication that has no effect) have found little evidence that disulfiram works better than the placebo because alcoholics who take their dosage of disulfiram will avoid alcohol use. However, alcoholism is a disease characterized by ambivalence, denial and relapse, so an alcoholic may easily find an excuse not to take disulfiram and then find another reason to drink.

More recent medications focus on reducing the pleasurable aspects of alcohol and opiates, such as heroin, instead of creating aversive effects. The idea underlying these treatments is that alcoholics and opiate addicts will not continue addictive behaviors if they do not experience the positive “rewards” of the drug or alcohol. Naltrexone was developed and approved by the FDA for the treatment of alcoholism in 1994. It suppresses pleasurable opioid activity in the brain that may be increased by alcohol or opiate use. However, the research results on naltrexone also are mixed. It seems to reduce the frequency of slips and relapses, but does not substantially increase total abstinence rates. Some research studies have found that naltrexone produces significantly positive effects only for addicts and alcoholics who are compliant about taking their medication. Otherwise, its success rates are comparable to those of a placebo.

Compliance is a crucial aspect of successful pharmacological treatment. A medication cannot be effective if the patient does not take it consistently as prescribed. People do not comply with their prescriptions for a wide variety of reasons. A medication is completely free of side effects, and toleration of unpleasant symptoms may be a problem with some of the alcohol treatment medications. The ambivalence of addiction also may lead some addicts and alcoholics to question the continuation of a medication that causes adverse effects or reduces the pleasurable consequences of drinking or using drugs.

Additionally, some clinicians and researchers are concerned about the underlying messages that reliance on these medications give to recovering people. If individuals attribute their ability to abstain from a drug to an external factor, like a medication, they may not internalize their recovery to their own ability. In this case, the individuals may be likely to relapse as soon as they stop taking the medication.

**No Magic Cure**

In conclusion, there is no magic cure for relapse prevention. As we have seen, relapse is a complex construct that means different things to different people. It also is a pervasive phenomenon in recovery from drug and alcohol addiction, as well as other chronic diseases. However, despite high rates of relapse across addictions and chronic diseases, many people enter and remain in a process of recovery.

There are a wide variety of tools for recovery. These range from 12-Step programs to cognitive-behavioral skills to medications. The decision to use one of these tools does not preclude the use of others. In fact, this report has highlighted many underlying similarities of the approaches to relapse prevention and ways that the different approaches complement each other. Thus, attention to co-occurring psychological symptoms, such as depression or anxiety, may help to reduce triggers related to negative mood and may help to increase the likelihood of abstinence.

One of the most important tools of recovery is motivation to change. Initial motivation can move a person to obtain treatment and to learn the skills of recovery. Motivation is required for persistence in maintaining these changes, like taking medication as required, and attending meetings regularly. Motivation also sees people through the difficult times of increased cravings and stressful situations. As we have seen, motivation can be enhanced by positive treatment milieu, spiritual connections, and through the experience of successful efforts to prevent relapse. The negative cycle of addiction and relapse can be changed into a positive cycle of recovery in which every success propels a person to increased motivation for the life-long process of recovery.
References


About the Author

Susan Merle Gordon, Ph.D., Director of Research and Professional Training, is responsible for directing research projects and designing and implementing internship and residency programs for students, therapists and physicians. She publishes and speaks frequently, and serves as consultant to Caron program directors on internal studies and evaluation projects. She has worked extensively with women and adolescents. She holds a Ph.D. in psychology and master's degree in psychological services from the University of Pennsylvania, and psychology licensure from the Commonwealth of Pennsylvania. She is a member of the American Psychological Association, the Pennsylvania Psychological Association and the APA Division 50 Addictive Behaviors Association. She frequently serves as a resource to the media.

The mission of the Caron Foundation is to provide an enlightened and caring treatment community in which those affected by alcoholism or other drug addiction may begin a new life.