

# Addressing Suicidal Thoughts and Behaviors

## Part 3: A Review of the Literature

*Treatment Improvement Protocol (TIP) Series*

# 50

## Contents

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\*This document is available online only (<http://www.kap.samhsa.gov>) and supports TIP 50, Addressing Suicidal Thoughts and Behaviors in Substance Abuse Treatment.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Substance Abuse and Mental Health Services Administration  
Center for Substance Abuse Treatment  
1 Choke Cherry Road  
Rockville, MD 20857

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# Section 1—A Review of the Literature

## Overview of the TIP

This Treatment Improvement Protocol (TIP) is designed to assist **substance abuse counselors** in working with adult clients who may be suicidal, their **clinical supervisors**, and **administrators** in supporting the work of substance abuse counselors. Suicidal behavior is of the highest level of concern to counselors and requires an immediate response from the counselor. People with substance use disorders have a higher incidence of suicidal behaviors than those without this diagnosis (Kessler, Borges, & Walters, 1999; Wilcox, Conner & Caine, 2004).

Suicide is of increasing concern to the U.S. Department of Health and Human Services. The President's New Freedom Commission identified it as "a serious public health challenge" deserving more attention than it receives (New Freedom Commission on Mental Health, 2003; p. 22). The Surgeon General's National Strategy for Suicide Prevention (U.S. Public Health Service, 2001) draws attention to the preventable nature of suicide and describes a plan of action. The Centers for Disease Control and Prevention and the Substance Abuse and Mental Health Services Administration (SAMHSA) have been charged with implementing the National Strategy. SAMHSA has given suicide prevention a high priority by including it on the agency's matrix.

This TIP will not prepare substance abuse counselors to become mental health treatment specialists or to independently treat suicidal behavior. Clients with diagnosed mood disorders (e.g., major depression, dysthymia, cyclothymia, bipolar disorder) need specialized treatment from a trained and licensed mental health professional. Rather, the TIP acknowledges that substance abuse treatment providers must be prepared to routinely gather information from, refer, and participate in the treatment of clients at risk for suicidal behavior, as well as to manage suicidal crises. Although substance abuse counselors undergo training, that preparation most likely did not include addressing clients' suicidal thoughts and behaviors. This TIP is designed to fill that gap.

Material in this literature review, as in the TIP, is confined to addressing suicidal thoughts and behaviors in adult clients and their families. Counseling for adolescents in substance abuse treatment who display suicidal behaviors is markedly different from treatment for adults and is not addressed in this TIP.

## TIP Organization

This TIP is divided into three parts that are bound or produced separately:

**Part 1: Addressing Suicidal Thoughts and Behaviors in Substance Abuse Treatment.** Part 1 is for substance abuse counselors and consists of two chapters:

- Chapter 1 presents the "what," "why," and "how-to" of working with substance abuse clients with risk factors and warning signs for suicide. It covers background issues such as the nature and extent of risk factors and warning signs in substance abuse treatment clients, an introduction to counseling approaches, screening for suicide, the counselor's role and responsibilities, and concrete procedures for working with clients at risk for suicidal behavior that are summarized by the acronym GATE (**G**ather information, **A**ccess supervision, **T**ake responsible action, **E**xtend the action). The chapter presents a set of competencies substance abuse counselors should have to help their clients who are experiencing suicidal thoughts and behaviors.
- Chapter 2 goes into greater detail in the "how-to" of working with clients with suicidal signs and symptoms and contains six representative vignettes, with "how-to" notes describing specific counseling techniques, and comments from a "master clinician."

**Part 2: Addressing Suicidal Thoughts and Behaviors: An Implementation Guide for Administrators.** One of the basic tenets of the field of knowledge dissemination and adoption is that leadership must accept and support new professional practices to ensure that they are adopted and practiced by counselors. This guide identifies reasons why program administrators should be concerned about managing clients with risk factors and warning signs for suicide. It also identifies a systematic approach to designing and implementing an infrastructure that will support performing the clinical practices that are identified in Part 1.

Printed and electronic copies of Parts 1 and 2 can be obtained from SAMHSA's National Clearinghouse for Alcohol and Drug Information (<http://www.ncadi.samhsa.gov>).

**Part 3: Addressing Suicidal Thoughts and Behaviors: A Review of the Literature.** This section is a literature review on the topic of addressing suicidal thoughts and behaviors in substance abuse treatment. Part 3 consists of three sections: a review of the recent literature, an annotated bibliography of the literature most central to the topic, and a general bibliography of other available literature. It includes literature that addresses both clinical and administrative concerns. To facilitate ongoing updates, which will be performed every 6 months for up to 5 years from first publication, Part 3 will only be available online at <http://www.kap.samhsa.gov>. The review is not intended for academics. Rather, it is written for clinical supervisors, counselors, and administrators who are seeking to apply this TIP in their work.

The following topics are addressed in **Part 3**:

- Review of the literature pertaining to clinical issues discussed in Part 1 of this TIP.
- Review of the literature pertaining to administrative issues discussed in Part 2 of this TIP.
- Information about the methodology used to perform the literature search (see appendix A).
- An annotated bibliography of almost 40 core sources and a general bibliography.

This literature review is organized as follows:

Introduction

Definitions

Focus of the TIP

Extent of the Problem

Risk Factors for Suicide

Protective Factors

Warning Signs and Precipitating Events

Neurobiological and Genetic Factors

The Role of Substance Use in Suicidal Behavior

Specific Populations

Co-Occurring Mental Disorders and Suicidal Behavior

Accidental Versus Suicidal Overdose

The Role of Trauma and Abuse

Assessment of Suicidal Thoughts and Behaviors

Treatment of Suicidal Thoughts and Behaviors

The Effects of Suicide on Family and Friends

The Effects of Suicide on Counselors

## Introduction

Suicide is a particularly awful way to die: the mental suffering leading up to it is usually prolonged, intense, and unpalliated. There is no morphine equivalent to ease the acute pain, and death not uncommonly is violent and grisly. The suffering of the suicidal is private and inexpressible, leaving family members, friends, and colleagues to deal with an almost unfathomable kind of loss, as well as guilt. Suicide carries in its aftermath a level of confusion and devastation that is, for the most part, beyond description.

—Kay Redfield Jamison

Suicide has been recognized since early civilization. Hanging was a method frequently used before such tools as knives became commonplace. Attitudes toward suicide have shifted through the centuries as people gave names to feelings like shame and guilt (van Hooff, 2000). Suicide is now seen as an act with complex motivation and many contributing factors. It occurs in every culture, although at widely differing rates, and is affected by cultural practices, expectations, and values.

## Definitions

Detailed discussions of various ways of defining suicidal thoughts and behavior, along with recommended definitions, were most recently offered by a distinguished panel of experts in a seminal paper by Silverman and colleagues (Silverman, Berman, Sanddal, O'Carroll, & Joiner, 2007). The following definitions are informed by this paper.

### Suicidal Behaviors

Suicide is a deliberate act of self-harm with at least some intent to die that results in death.

Suicide attempt is a deliberate act of self-harm with at least some intent to die that does not result in death. Such acts have a wide range of medical seriousness.

### Suicidal Thoughts

Suicidal ideations are thoughts of attempting suicide. Such thoughts have a wide range of specificity, intensity, and frequency.

Suicide plans are a severe form of suicidal ideation that include identifying a method or scenario to attempt suicide.

### Nonsuicidal Thoughts and Behaviors

Death ideations are thoughts of dying but without ideas for suicidal behavior per se.

Nonsuicidal self-injurious behaviors are self-directed acts of self-harm without intent to die. Broadly, these acts tend to have intrapersonal (e.g., manage emotion) or interpersonal (e.g., communicate distress) motivations and include a variety of behaviors (cutting, piercing, burning) and a wide range of medical seriousness.

## Focus of the TIP

This TIP focuses on suicidal behaviors (suicide, suicide attempt) and suicidal thoughts (suicidal ideation, plans). Nonsuicidal thoughts and behavior (death ideation, non-suicidal self-injury) are not emphasized in this TIP, although they are cause for clinical concern and may confer risk for suicidal behavior.

## Extent of the Problem

### Suicide

In 2005, the latest year for which data have been collected, 32,637 individuals died by suicide (National Center for Injury Prevention and Control [NCIPC], 2007). This translates to an age-adjusted rate of 10.84 suicides per 100,000 individuals in the U.S. population per year. Males die by suicide about four times more often than females (rates of 17.7 and 4.5, respectively). Suicide is extremely rare in the first decade of life. In the second decade of life, for males, rates of suicide increase until about age 21, are fairly stable through the young adult and middle years of life, and then increase beginning at age 70 and continue to rise throughout late adulthood. For females, suicide rates are steadier throughout the life course, showing a small peak between ages 41–50 (NCIPC, 2007).

### *Suicidal ideation and suicide attempts*

Approximately 420,000 individuals received emergency medical care after intentional self-inflicted injuries, primarily suicide attempts, in 2005 (Nawar, Niska, & Xu, 2007). This is an underestimate of the prevalence of suicide attempts because many attempts do not come to emergency medical attention (or clinical attention of any kind). The National Co-Morbidity Survey (NCS; 1990–1992) and its more recent replication (NCS-R; 2001–2003) used surveys to estimate the rates of suicidal ideation, planning suicide, and attempting suicide. These studies showed that the rates have remained relatively consistent since 1990 (Kessler, Berglund, Borges, Nock, & Wang, 2005). Rates of these behaviors in the 12 months of 2005 are provided in Figure 1.

<b>Figure 1</b>		
<b>12-Month Rates</b>		
	<b>National Co-Morbidity Study (1990–1992)</b>	<b>National Co-Morbidity Study Replication (2001–2003)</b>
Suicidal ideation	2.8%	3.3%
Suicide plans	0.7%	1.0%
Suicide attempts	0.4%	0.6%
Source: Kessler et al., 2005		

### *Gender differences and suicide and suicide attempts*

Researchers have long recognized a “gender paradox” in suicidality: women have a higher prevalence of suicide attempts and a higher prevalence of depression—two of the most recognized risk factors for suicide—yet in the United States and other Western countries their rate of suicide is lower compared with men. Some progress has been made in understanding the paradox. First, several protective factors from suicide may be at work in women. These include a tendency to seek help when they are depressed, a less intense wish to die when

attempting suicide, lower rates of substance use disorders, less access to firearms, lower tendency to use highly lethal methods (firearms, hanging), and the assumption of primary responsibility for childrearing (Gold, 2006; Young, Fogg, Scheftner, & Fawcett, 1994). Second, national survey data show that men and women do not differ in the rate of suicide attempts when individuals showing nonsuicidal self-injury are excluded from the calculation (Nock & Kessler, 2006).

***Suicide and specific subpopulations***

Most people who die by suicide in the United States are White males (NCIPC, 2007). Figure 2 indicates the interaction of gender and race or ethnicity in rates per 100,000 population. White males and American Indian and Alaska Native males have the highest rates of suicide in the United States. African-American females and Hispanic/Latino females have the lowest rates.

Data from the recently collected National Survey of American Life (Joe, Baser, Breeden, Neighbors, & Jackson, 2006) showed that among Blacks in the United States, lifetime prevalence of suicidal ideation was 11.7 percent,

<b>Figure 2</b>					
<b>Age-Adjusted Suicide Rates by Gender and Race/Ethnicity</b>					
	<b>White</b>	<b>African American or Black</b>	<b>American Indian or Alaska Native</b>	<b>Asian or Pacific Islander</b>	<b>Hispanic/Latino</b>
<b>Male</b>	19.6	9.2	18.8	7.3	9.4
<b>Female</b>	4.8	1.8	4.6	3.3	1.8

Source: NCIPC, 2007

and lifetime prevalence of attempts was 4.1 percent. The study further showed subgroup differences among Blacks of African and Caribbean descent, illustrating the importance of examining subgroup differences among racial groups in the study of suicidal behavior. For example, among Blacks of Caribbean descent, males had a higher rate of suicide attempts than females. The study suggested that anxiety disorders may be especially salient to suicidal behavior among Blacks in the United States, an important area for further study.

People in jails and prisons have high suicide rates, with jail suicide rates three times higher than prison rates (Mumola, 2005). Figure 3 shows the percentage of deaths from illness (excluding AIDS), AIDS, suicide, and homicide in U.S. jails and prisons. The data illustrate that suicide is a leading cause of death in jails.

There are wide differences in suicide rates among jails, with differences depending on the region of the country, State, and size of the facility, among other factors. Risk for suicide is much higher in jails than in prisons, with risk concentrated within the first 24 hours of incarceration, particularly the first few hours following arrest (Hayes, 1994). Jail suicides are most often carried out by hanging; risk factors consist of alcohol intoxication, nonviolent offense (e.g., drunk driving), non-career criminal, acute shame associated with the offense, isolation (e.g., being alone in the cell), direct or indirect statements that suggest suicidal thoughts, and having access to the implements to hang oneself (Hayes, 1994). Compared with jail suicide, risk for suicide in prisons is lower, and the risk factors are not as clearly defined. They appear to mirror those that confer vulnerability in the general population: substance dependence, depression, stressful events that occur during the course of incarceration, and isolation (Hayes, 1995).

Figure 3

	Jail Deaths 2000–2002	State Prison Deaths 2001–2002
All causes	100%	100%
Illness	47.6%	80.4%
AIDS	5.9%	8.8%
Suicide	32.3%	5.8%
Homicide	2.1%	1.5%

Source: Mumola, 2005.

Among subgroups with high suicide rates are individuals with substance use disorders, mental disorders, and co-occurring substance use and mental disorders. The NCS and the NCS-R found that the most common single diagnosis among those with suicide-related behaviors was major depression (34–42 percent in the NCS; 37–51 percent in the NCS-R). Mental disorders are highly prevalent among individuals who have attempted suicide or died by suicide. To illustrate, a meta-analysis by Arsenault-Lapierre, Kim, and Turecki (2004) found that 87 percent of people who died by suicide had been diagnosed with one or more mental disorders. These researchers found significant gender differences. Substance use disorders, particularly alcohol problems, personality disorders, and childhood disorders were

more prevalent among men whereas depressive disorders and other affective disorders were more common among women.

In their meta-analysis, Harris and Barraclough (1997) also found that about 90 percent of those who died by suicide have diagnoses of mental disorders. People with active mental disorders are between seven and ten times more likely to die by suicide. The most common diagnosis among those who die by suicide is major depression (Cavanagh, Carson, Sharpe, & Lawrie, 2003).

## Risk Factors for Suicide

Maris, Berman, and Silverman (2000a) list a number of significant risk factors related to suicide. Some of these factors are more salient in some individuals than in others, but all can contribute to risk of suicide. Other experts emphasize different risk factors. Most individuals who attempt or die by suicide have a number of these factors:

- *Mental disorder.* As discussed above, rates of major depressive disorder, bipolar disorder, and schizophrenia are high among those who die by suicide.
- *Substance use disorder.* This is discussed below.
- *Previous suicide attempt(s).*
- *Suicidal ideation.* The more specific and concrete the individual's thinking is and the more detailed the plan, the more likely the person is to die eventually by suicide.
- *Lethality of method chosen.* People using methods of higher lethality are more likely to die by suicide. In general, women use less lethal methods than men.
- *Access to lethal means.* This includes both firearm access in the general population and access to means and opportunity for hanging in institutions.
- *Family member who attempted or died by suicide.* Family members of people who attempt or die by suicide are more likely to attempt or die by suicide than those without a relative who is or was suicidal (Moscicki, 2001).
- *Male.* In the United States, in all age groups, for all races, men have higher suicide rates than women (NCIPC, 2007).
- *Older age.* Men over age 70 have the highest rate of suicide in the United States.

- *Unemployed.* Most studies show suicide to be more prevalent among individuals who are unemployed.
- *Unmarried.* The highest rates of suicide are among the divorced and widowed, but they are also somewhat elevated among the never married compared with those in an intact marriage.
- *Low socioeconomic status.*
- *Low educational achievement.*
- *Social isolation.* Living alone or having no close friends are markers for social isolation. Isolation also makes it less likely that a suicide attempt will be interrupted or that an individual who has made an attempt will receive life-saving medical attention.
- *Subjective interpersonal factors.* Perceived loneliness, a belief that one does not belong, and a perception of being a burden on others are potentially relevant variables.
- *Trauma exposure.*
- *Childhood maltreatment.* Sexual abuse in childhood creates particularly high risk.
- *Barriers to mental health treatment.* These include both psychological barriers, such as the stigma of receiving treatment for mental disorders, as well as physical barriers, such as geographically distant clinics.
- *Belonging to a cultural or religious group supportive of suicide.* Some cultures regard suicide as a noble resolution to a personal dilemma or martyrdom to a higher cause (as with suicide bombers).
- *Acute stressful life events.* These include relationship disruption, loss of employment, financial loss, and legal/civil crisis (Heikkinen et al., 1994).
- *Hopelessness.* This is an enduring trait that confers long-term risk and a temporary state that confers risk acutely (Beck, Steer, Kovacs, & Garrison, 1985).
- *Aggression and impulsiveness.* There is some evidence that aggression and impulsiveness in combination is an especially potent combination. Functioning of the neurotransmitter serotonin is implicated in explaining the link between aggression/impulsiveness and suicide (Mann, Waternaux, Haas, & Malone, 1999).
- *Select personality disorders.* These include, but are not limited to, borderline personality disorder.
- *Physical illness.* Among the diseases with the highest increased risk of suicide are kidney failure, cancers of the head and neck, and HIV/AIDS (Kelly, Mufson, & Rogers, 1999). The relationship of physical illness and suicide is particularly true for older men. Chronic pain may also be relevant (Fisher, Haythornthwaite, Heinberg, Clark, & Reed, 2001).

The Centers for Disease Control and Prevention (CDC, n.d.) offers a similar list of risk factors for suicide:

- Family history of suicide.
- Family history of child maltreatment.
- History of mental disorders, particularly depression.
- History of alcohol and substance abuse.
- Feelings of hopelessness.
- Impulsive or aggressive tendencies.
- Cultural and religious beliefs (e.g., belief that suicide is the noble resolution of a personal dilemma).
- Local epidemics (or clusters) of suicide.
- Isolation, a feeling of being shut off from other people.
- Barriers to receiving mental health treatment.
- Loss (relational, social, work, or financial).
- Physical illness.
- Easy access to lethal methods.
- Unwillingness to seek help because of the stigma attached to mental health and substance abuse disorders or to suicidal thoughts.

## Protective Factors

Risk factors can be affected by protective factors that mitigate against suicide. Examples of protective factors include getting treatment; being a healthy, young female; participating in religious activities; and having a wide network of social support. It is important to note that such factors may afford limited protection among individuals showing warning signs and/or multiple risk factors. The CDC (n.d.) considers the following to be protective against suicide:

- Effective clinical care for mental, physical, and substance use disorders.
- Easy access to a variety of clinical interventions and support for help-seeking.
- Family and community support.
- Support from ongoing medical and mental health care relationships.
- Skills in problem solving, conflict resolution, and nonviolent ways of handling disputes.
- Cultural and religious beliefs that discourage suicide and support instincts for self-preservation.
- Having a child in the home or having childcare responsibilities.

These protective factors vary in their influence in specific populations. For instance, among African Americans with limited access to mental and physical health care, rural residence, educational attainment, having been married, and older age are protective factors (Willis, Coombs, Drentea, & Cockerham, 2003). For some American Indian and Alaska Native groups, protective factors include strong group affiliation, support from the extended family and community, cultural respect, spirituality, wisdom and strength of elders, and humor (Bruning, Clark, Gomez, & Grenier, 2007). Again, such factors may afford limited protection among highly vulnerable individuals.

## Warning Signs and Precipitating Events

Researchers have noted that there is little consistency in the warning signs listed in materials distributed to teachers, primary care providers, and across web sites, as these lists are not based on a set of clear empirical guidelines (Simon, 2006). Nor is it clear whether all warning signs are equally salient.

Rudd and colleagues (2006a) explored the distinction between a risk factor for suicide and a warning sign. Risk factors, such as depression, are more static and enduring and suggest risk over longer time periods, of a year or a lifetime. Warning signs, however, imply near-term or immediate risk and are episodic and variable (threatening to kill self, seeking a weapon).

Researchers and clinicians have also identified events that *precipitate* a suicide attempt in clients. Hendin, Maltzberger, Lipschitz, Haas, and Kyle (2001) analyzed 26 cases of suicide submitted by the therapists who were treating them at the time of their deaths. Fourteen of these patients had co-occurring substance use disorders, and nine were actively abusing substances. In this analysis, the researchers identified a precipitating event that was also associated with one or more intense affective states (other than depression) in response to the event, and one or more of three behavioral signs (including speech or actions suggesting suicide, deterioration in functioning, and an increase in alcohol abuse). The researchers noted that the increased alcohol abuse appeared to be a way of managing increasing anxiety prior to the suicide.

Studies have also examined clients' reports of the triggers that were followed by their suicide attempt by overdose and found that a disruption in a primary relationship was cited most often:

- Respondents cited overdosing with suicidal intent in response to a break in a primary relationship, after leaving treatment, or a recent discharge from a therapeutic community (Heale, Dietze, & Fry, 2003).
- Overdoses among people who use heroin were associated with multiple drug use, more severe dependence on drugs, and a precipitating event, such as the recent death of someone close, a recent relationship breakdown, or problems with housing (Neale & Robertson, 2005).

- Respondents cited conflicts or fights with their partner or significant other, depression and boredom, or negative emotions at what should be a happy occasion such as a birthday or Christmas, as a trigger for their overdose (Pfab, Eyer, Jetzinger, & Zilker, 2006).

It is well documented that stressful life events often occur before suicide attempts and suicide. In studies of suicide, individuals with substance use disorders are more likely to have partner-relationship disruptions, legal difficulties, and work-related difficulties compared with suicide decedents without substance-related problems (Heikkinen et al., 1994; Rich, Fowler, Fogarty, & Young, 1988). Among people who abuse substances, disruptions of interpersonal relationships, most often partner relationships (e.g., marital separation, break-up with a spouse) are the most common events preceding suicide (Duberstein, Conwell, & Caine 1993; Heikkinen et al., 1994; Murphy Armstrong, Hermele, Fischer, & Clendenin, 1979; Rich et al., 1988). Data such as these have inspired models of suicide that emphasize the role of interpersonal factors (Conner, McCloskey, & Duberstein, in press; Joiner, 2005).

## Neurobiological and Genetic Factors

Neurobiological studies have most consistently implicated dysregulation of the neurotransmitter serotonin in risk for suicidal behavior (Mann, 2003; Turecki, 2005). Studies have found lower levels of serotonin and its principle metabolite, 5-hydroxyindoleacetic acid (5-HIAA), in the brain stems (Beskow, Gottfries, Roos, & Winblad, 1976; Shaw, Camps, & Eccleston, 1967) and in various brain structures (Cheetham et al., 1989; Korpi et al., 1986; Owen et al., 1983) of people who died by suicide compared with nonsuicide subjects. Further, studies have yielded findings consistent with the hypothesis of reduced serotonergic function among individuals who died by suicide (Arato et al., 1987; Gross-Isserof, Israeli, & Biegon, 1989) and attempted suicide (Mann, Brent, & Arango, 2001). Overall, these studies point to reduced serotonergic functioning in key central nervous system areas among suicidal individuals, and many researchers believe that this provides a neurobiological explanation of why individuals who die by suicide as a group show a tendency for aggression and impulsiveness. There is intensive interest among suicide researchers in linking such neurobiological findings with genes that affect serotonin expression (Anguelova, Benkelfat, & Turecki, 2003). There are other neurobiological and genetic mechanisms that suicide researchers are examining, but such a discussion is beyond the focus of this review.

## The Role of Substance Use in Suicidal Behavior

### Suicide Risk Associated With Substance Use Disorders

Wilcox et al. (2004) conducted a comprehensive statistical analysis of data from studies conducted in the United States and internationally that contained both information on people who abuse substances and information on their mortality. This study updated the substance use section of a detailed review of suicide studies by Harris and Barraclough (1997) by including reports published after Harris and Barraclough's review and by more thoroughly sampling substance abuse research journals. The analysis enabled the researchers to compare risk for suicide in individuals with alcohol dependence, opioid dependence, injection drug use, and mixed drug use disorders with risk for suicide among individuals in the general population. The analysis showed that people with substance use disorders in each of these groups were at nine-fold greater risk for suicide or higher, with the level of risk varying somewhat depending on the substance. There was not sufficient information on other substance use populations (e.g., cocaine, cannabis, methamphetamine) to estimate risk for suicide associated with these substances. The study (Wilcox et al., 2004) showed definitively that people being treated for substance use disorders are at greatly elevated risk for suicide.

## Alcohol

The Wilcox et al. (2004) review estimated that individuals with alcohol dependence are at nearly 10 times greater risk for suicide compared with the general population. National survey results have reported that alcohol dependence confers 4.6 times greater risk for suicidal ideation and 6.5 times greater risk for attempted suicide compared with individuals not dependent on alcohol (Kessler et al., 1999). These data underscore that suicide prevention efforts must focus on alcohol use disorders. Although suicide typically occurs during periods of drinking among individuals with alcohol use disorders, suicide may also occur while abstinent from alcohol. When this occurs, another mental illness is nearly always involved, most often major depression (Conner, Duberstein, Conwell, Herrmann, Cox, Barrington, et al., 2000).

In addition to chronic alcohol use and its consequences, acute use of alcohol is also strongly implicated in suicidal behavior. A review of studies containing data on alcohol use at the time of suicide attempts and suicide deaths (Cherpitel, Borges, & Wilcox, 2004) estimated that 37 percent of suicide decedents (range 10–69 percent) and 40 percent of people who attempt suicide (range 10–73 percent) had been drinking at the time of the act. Hufford (2001) has posited that acute alcohol use may affect suicidal behavior by four mechanisms, alone or in some combination:

- Alcohol can heighten psychological distress, thus increasing hopelessness and despair.
- Alcohol can intensify aggressive behavior, of which suicide is an example.
- Alcohol expectancies can tip people who are thinking about suicide to acting on those thoughts, particularly if they expect the alcohol to help them resolve their ambivalence about suicide or loosen their inhibitions against making an attempt.
- Alcohol can cloud and constrict thinking, making it more difficult to identify and implement possible alternative coping strategies that could help resolve the individual's problems.

Studies that have examined the relationship between substance use and suicidal behavior are of two major types: (1) those that begin with groups of people with substance use disorders and study suicidal ideation and suicide attempts and (2) those that study individuals who have exhibited suicidal behavior and explore the role of alcohol and drugs in their self-harming behaviors. The first type is called a “prospective study” and it is designed to tease out predisposing factors for suicide. The latter is called a “retrospective study.” The larger share of prospective and retrospective studies deal with alcohol, in part because the potential sample sizes are larger, although data on other psychoactive substances including legal and illicit drugs is increasing.

Many individuals who attempt or die by suicide, whether or not they have a substance use disorder, use alcohol in the hours before their act. A review of 37 published studies on acute alcohol use and suicide found that a mean of 37 percent of cases used alcohol. In reviewing 16 articles on suicide attempts, 40 percent, on average, involved acute alcohol use (Cherpitel, et al., 2004). Even alcohol dependence in remission may play a role in suicidal behavior. Among those with remitted alcohol use disorder, it appears that older people who have major depression and younger people with psychotic disorders are at increased risk of suicide (Conner et al., 2000).

Research that focuses on the relationship between the abuse of one substance and suicidal thoughts and behaviors, however, must be put into a larger perspective, as the majority of suicide attempts involve co-occurring mental health disorders, stressful life events, and multiple substances of abuse. Using data from New Zealanders, Conner, Beautrais, and Conwell (2003a) found that people with current alcohol dependence who died by suicide were more likely to have been diagnosed with a mood disorder and to have experienced negative interpersonal events (e.g., disruptions in partner relationships or problems with family members or neighbors), and to be older and male, compared with people with alcohol dependence who did not die by suicide. Another study found that people with alcohol use disorders who attempted suicide were more likely to be female, younger, unemployed, separated or divorced, and lacking a college degree compared with those with no suicide attempts (Preuss et al., 2002b). They also had co-occurring mental disorders more frequently, particularly independent depression and substance-induced depression. Indeed, co-occurring substance use disorders and

depression are the most common combination of behavioral disorders among people who die by suicide. This fact is illustrated by a comprehensive review study that showed that 38 percent of people who die by suicide are experiencing both types of difficulty at the time of their death (Cavanagh et al., 2003). A history of childhood sexual abuse also confers risk for suicidal behavior in this population (Roy & Janal, 2007).

The research literature pertaining to alcohol use disorders and suicidal behavior is complex. For example, analyses of national survey data showed that the number of substances used is more important in predicting a suicide attempt than the type of substance (Borges, Walters, & Kessler, 2000). Among individuals with alcohol dependence, there are somewhat different risk factors for suicidal ideation, planning, impulsive attempts, and planned attempts (Conner et al., 2007b). The data illustrate that the role of substance use disorders in suicidal thoughts and behaviors depends to some extent on the specific measure of suicidal thoughts (ideation, planning) or suicidal behavior (impulsive suicide attempt vs. planned attempt; suicide attempt vs. suicide).

Treatment status is also linked with suicidality among individuals with substance use disorders. A large-scale study of individuals with alcohol dependence showed that engagement in treatment during a 5-year period was associated with a greater likelihood of suicide attempt during this interval (Preuss et al., 2003). This finding should not be interpreted to indicate that treatment increases risk. Rather, in all likelihood, individuals with alcohol use disorders who sought treatment were also more likely to be those that had the most severe alcohol-related problems. Another report of a large clinical sample of people who abused substances followed up after 1 year showed that a higher level of engagement in substance abuse treatment during that year was associated with a reduced risk of suicidal behavior, consistent with the idea that treatment can be protective (Ilgen, Harris, Moos, & Tiet, 2007). Consistent with the general literature, a history of suicidal behavior is a potent risk factor for future suicidal behaviors among people who abuse alcohol (Preuss et al., 2003).

## Heroin

A comprehensive review of international studies (Wilcox et al., 2004) showed that treated individuals who use injection drugs and opioids are at 10 to 18 times greater risk for suicide compared with the general population. The studies reviewed were composed primarily of people who used heroin, and underscore the high risk for suicide in this population. People with heroin use disorders are also at high risk for attempted suicide, with studies of people who had been treated for heroin use showing that between 17 and 47 percent of this population have made a lifetime suicide attempt (Darke, Williamson, Ross, & Teesson, 2005). Because of the difficulty in determining whether overdose deaths were deliberate (suicide death) or unintentional (accidental death) in this group, suicide risk among people who inject drugs may be underestimated. Some data supports that attempted suicide and unintentional overdose among people who use opioids share similar risk factors (Neale, 2000b; Rossow & Lauritzen, 1999). There is more data, however, to support the idea that these outcomes have different predictors, with risk factors for suicidal behavior including depression and social isolation (Conner, Britton, Sworts, & Joiner, 2007a; Darke & Ross, 2001; Kosten & Rounsaville, 1988), similar to the risk factors for suicidal behavior shown in the general literature. A history of suicidal thoughts and suicide attempts in this population is a potent predictor of future acts of suicide (Darke et al., 2005).

## Cocaine

A study that compared individuals in substance abuse treatment for cocaine dependence with and without a history of suicide attempts showed that those who attempted suicide were more likely to show depressive symptoms, have a history of childhood abuse, have co-occurring dependence on alcohol and opiates, show greater hostility, and be female (Roy, 2001a). These risk factors are consistent with those described based on the alcohol and opioid literature reviewed thus far, suggesting a similar risk profile for suicidal behavior among people with substance use disorders who have been treated. Unlike the abundance of data on risk for suicide deaths associated with dependence on alcohol and opioids, data are insufficient to estimate the risk for suicide associated with cocaine use disorders (Wilcox et al., 2004). However, other lines of evidence support the idea that

those who abuse cocaine are at risk for suicide, including data that cocaine users show elevated levels of depression (Falck, Wang, Carlson, Eddy, & Siegal, 2002; Kilbey, Breslau, & Andreski, 1992; Shaffer & Eber, 2002; Willis et al., 2003) and that, after statistically controlling for other types of substance use disorders and other risk factors, people who are treated for cocaine use disorders are at elevated risk for suicidal ideation (Garlow, Purselle, & D'Orion, 2003) and suicide attempts (Ilgen et al., 2007).

## **Methamphetamine**

Among the deleterious effects of methamphetamine use are depression symptoms, anxiety disorders, and high rates of suicidal ideation. About 25 percent of people who use methamphetamine have a lifetime history of a suicide attempt (Darke, Kaye, McKetin, & Duffell, 2008). About twice as many females as males who use methamphetamine have a history of suicide attempt (Glasner-Edwards et al., 2008).

## **Cannabis**

Data are inconsistent as to the association of cannabis use disorders with suicidal ideation or behavior after accounting for other risk factors for these outcomes (see Beautrais, Joyce, & Mulder 1999; Ferguson, Horwood, & Swain-Campbell, 2002).

## **Specific Populations**

### **Alaska Natives**

A study by Marshall and Soule (1998) found that alcohol use disorders were identified in about three fourths of suicides among Alaska Natives. This population shows suicide rates that are far higher than rates in the remainder of the United States, and most are among young (15–29 years of age), unmarried men. The researchers note that many had just broken up with girlfriends, and few had regular jobs. The suicides generally used violent means, including firearms and hanging.

### **African Americans**

Analysis of the National Survey of American Life, a nationally representative household survey of Blacks, showed that Caribbean Black men had the highest prevalence of suicide attempts among respondents (7.5 percent) with African-American women next (5.0 percent; Joe et al., 2006). About one third of respondents who reported suicidal ideations made a plan for suicide. People with suicide plans made their initial suicide attempt up to 35 years after ideation had begun. People with suicidal ideations who had mental disorders were eight times more likely to make a suicide attempt, and the more psychiatric diagnoses a respondent had, the more likely he or she was to attempt suicide. Results of this survey also revealed that in this population, anxiety disorders rather than depression were the strongest mental health risk factor for suicide attempt, a novel finding.

Limited research supports that undertreated depression confers risk for suicidal behavior among African Americans (in addition to other populations) who abuse substances (Havens et al., 2005; Kung, Pearson, & Wei, 2005). Willis et al. (2003) used data from the National Mortality Followback Survey to compare 153 African American with 1,185 White suicide decedents. Analysis showed that significantly fewer African Americans used antidepressants or stimulants, but cocaine use was 4 times more common. The researchers found that African Americans who died by suicide were younger than their White counterparts and significantly less likely to have used drugs 24 hours before their suicide or to have used alcohol 4 hours before their death. In another analysis of this dataset, Castle and colleagues showed that there were several risk factors in common between White and Black suicide decedents (Castle, Duberstein, Conner, Meldrum, & Conwell, 2004). Additionally, alcohol abuse was a stronger risk factor for suicide among Whites compared with Blacks. Results of these two analyses

suggest that acute use of alcohol and alcohol use disorders are more strongly implicated in suicide among White than Black individuals. Research on these questions is at an early stage, so firm conclusions cannot be drawn at this time.

Roy (2003a) compared African-American veterans with a substance use disorder who made suicide attempts with Caucasian peers for child abuse, legal problems, marital status, age, extraversion, psychoticism, and hostility. The only difference was that the African Americans experienced significantly less childhood emotional neglect.

## Age

In the United States, younger age confers risk for suicide attempts (Kessler et al., 1999). Studies of attempted suicide among individuals with alcohol dependence have generally shown the same age-related pattern, with younger substance abusers at higher risk for attempts (Conner et al., 2003b; Preuss et al., 2002b; Roy & Janal, 2007). Older adulthood is associated with greater risk for suicide deaths (NCHS, 2006). There are fewer data on age and suicide among persons with alcohol use disorders, although some data suggest that older persons with alcohol use disorders are at greater risk for suicide (Conner et al., 2003a, b), consistent with the pattern in the general population. Unlike data on people with alcohol use disorders, studies of people treated for cocaine and opioid use have not consistently shown an age-related pattern of risk for attempted suicide (Conner et al., 2007a; Darke et al., 2008; Roy, 2001a, 2002). Solid data on age and suicide deaths in these populations are not available.

## Co-Occurring Mental Disorders and Suicidal Behavior

Co-occurring mental and substance use disorders are a common and potent combination among those who die by suicide. An exhaustive review of psychological autopsy studies conducted internationally showed that mood disorders (particularly major depression) and substance use disorders were the most common disorders in people who died by suicide, and that 38 percent had a substance use disorder(s) plus one or more other psychiatric disorder(s) (Cavanagh et al., 2003). A wealth of data illustrate that this combination also confers risk for attempted suicide (e.g., McCloud, Barnaby, Omu, Drummond, & Aboud, 2004; Yen et al., 2003).

**Mood disorders** commonly co-occur with substance use disorders and confer significant risk for suicidal behavior (Conner et al., 2003b; Darke & Ross, 2002; Dhossche, Meloukheia, & Chakavorty, 2000; Preuss et al., 2002a; Roy, 2001a, b, 2002; Windle, 1994). Major depressive episode (MDE), in particular, is associated with suicidal behavior. Among adults with a past year diagnosis of MDE, those who reported past month binge alcohol use and/or illicit drug use were more likely to report past year suicidal ideation and suicide attempts than those who did not (Office of Applied Studies, 2006). Moreover, whether or not depression is induced by a substance use disorder or occurs independent of substance use, it confers risk for suicidal behavior among individuals with substance use disorders (Aharonovich, Liu, Nunes, & Hasan, 2002; Preuss et al., 2002a). In other words, it is essential that substance-induced depression not be dismissed or minimized by providers because this type of depression confers risk, as does independent depression. Bipolar disorders also increase risk for suicidal behavior (Harris & Barraclough, 1997), with most studies indicating that when substance use disorders co-occur, the risk for suicidal behaviors increases (Comtois, Russo, Roy-Byrne, & Ries, 2004; Dalton, Cate-Carter, Mundo, Parikh, & Kennedy, 2003). People with bipolar disorder tend to kill themselves while depressed or in a mixed state, as opposed to during periods of mania (Hawton, Sutton, Haw, Sinclair, & Harriss, 2005; Institute of Medicine, 2002).

**Personality disorders** are found significantly more often than expected among people who die by suicide (Duberstein & Conwell, 1997). The rate of suicide attempts across all personality disorders is nearly equal to the rate across affective disorders, according to one review (39 percent, compared to 41 percent; Linehan, Rizvi, Welch, & Page, 2000).

Suicidality is a criterion for the diagnosis of borderline personality disorder (BPD; American Psychiatric Association, 2000). Among individuals treated for borderline personality disorder, the majority report a previous suicide attempt (Davis, Gunderson, & Myers, 1999; Linehan et al., 2000). This is particularly true for young adults, who are more likely to be diagnosed with these disorders than their older counterparts. Solid epidemiological data are unavailable but it has been estimated that suicide may occur at a lifetime rate of about 9 percent among those with BPD (Davis et al., 1999). A large-scale study of alcohol-dependent inpatients that rigorously assessed all of the personality disorders defined by the *Diagnostic and Statistical Manual, Third Edition, Revised* showed that BPD alone was associated with a lifetime suicide attempt, after controlling for other risk factors and personality disorders (Preuss, Koller, Barnow, Eikmeier, & Soyka, 2006). The relevance of this study to suicide deaths is unclear.

The role of other personality disorders in suicide attempts and suicide among individuals with substance use disorders is not well established. For example, two large-scale studies of patients with alcohol dependence failed to show that antisocial personality disorder was associated with suicide attempts, after controlling for other risk factors (Conner et al., 2007b; Preuss et al., 2006).

## Aggression, Impulsiveness, and Impulsive Aggression

A longstanding hypothesis is that impulsive aggression (also commonly referred to as reactive aggression) is a potent risk factor for suicidal behavior (Conner, Duberstein, Conwell, & Caine, 2003c; Turecki, 2005). Individuals prone to this type of aggression experience emotional hyperarousal including anger and anxiety, have poor modulation of physiological arousal, and show a loss of behavioral control (Barratt, 1991), characteristics that are presumed to describe an acutely suicidal state (Shneidman, 1985). An empirical review of studies of personality measures and suicide showed an association between suicide and continuous trait measures of aggression and impulsivity (Conner, Duberstein, Conwell, Seidlitz, & Caine, 2001). Most measures appeared to tap constructs most relevant for impulsive aggression: impulsivity (Duberstein, Conwell, & Caine, 1994), anger (Angst & Clayton, 1998), explosiveness (Farberow, Kang, & Bullman, 1990), irritability (Allebeck, Allgulander & Fisher, 1988; Berglund, 1984), and reactive aggression (Angst & Clayton, 1998). Similar findings have been reported in studies of suicide attempts. For example, an influential study that showed that a measure of “aggression/impulsivity,” created by combining scales of aggression and impulsiveness, was a potent correlate of suicide attempts in a high-risk clinical sample (Mann et al., 1999). These reports and other studies of aggression, impulsiveness, and related scales in suicide and attempted suicide are summarized in a recent review (Brezo, Paris & Turecki, 2006). Other widely cited evidence comes from neurobiological studies that have consistently found that low levels of the neurotransmitter serotonin are associated with impulsive aggressive behaviors. These studies have been interpreted to suggest that suicide and impulsive aggressive acts are closely related behaviors that are manifestations of serotonergic dysregulation (Coccaro, 1992; Mann, 2003; Shaikh, De Lanerolle, & Siegel, 1997; Turecki 2005). Impulsive aggression proneness has also been used to explain why interpersonal conflict and disruption so frequently precede suicide (Conner et al., 2003c), a scenario that is especially common among people with substance use disorders (Conner et al., 2003b; Duberstein et al., 1993; Heikkinen et al., 1994; Murphy et al., 1979).

## Schizophrenia

A small study of 50 patients hospitalized for schizophrenia found that 36 percent of the patients also abused substances (Gut-Fayand et al., 2001). (Other studies have found higher rates of substance use disorders in this population.) Of these, 78 percent had attempted suicide at least once, compared with 42 percent of patients with schizophrenia who did not abuse substances.

A review by Tsuang, Fleming, and Simpson (1999) found that 10–15 percent of those diagnosed with schizophrenia die by suicide. Most are in a depressive rather than a psychotic state when they die, and more than

half made previous serious attempts. Between 75 and 90 percent are male, supporting that males with schizophrenia are indeed at high risk of suicide whereas risk among females is less clear (Tsuang et al., 1999).

Another study team took a different statistical approach and concluded that the 10–15 percent estimate of suicide risk among individuals with schizophrenia is an overestimate (Palmer, Pankratz, & Bostwick, 2005). These researchers concluded that studies on this topic were overrepresented by first admissions or recent-onset patients. In their meta-analysis, they were careful to include patients with a longer duration of illness, and generated a lower estimate that 5.6 percent of those diagnosed with schizophrenia will die by suicide over their lifetime. Note that such a rate is still considerably higher than the approximately 1 percent lifetime risk observed in the general population.

Because schizophrenia and substance dependence are potent risk factors for suicidal behavior, it is a certainty that patients in substance abuse treatment with schizophrenia are at elevated risk. Data are limited, however, because studies of clients with substance use disorders typically contain relatively small samples of individuals with schizophrenia. Usually diagnostic data are not available and/or these patients are excluded from studies, so the extent to which they are at risk and the factors that drive risk among these patients are unclear.

## Accidental Versus Suicidal Overdose

Fatal overdoses are increasing in the United States (CDC, 2007), driven in part by the increasing availability of prescription pain medications and contributing to what has been called a “national epidemic of drug poisoning deaths” (Paulozzi, Budnitz, & Xi, 2006, p. 618). It is important to note that an overdose (1) may be intentional or unintentional, (2) may result from the use of a single drug or drug combinations, and (3) may involve drugs with (e.g., prescription opioids, cocaine, benzodiazepines) or without (e.g., acetaminophen, antidepressants) euphoric effects that promote abuse liability. Overdose is prevalent among clients with substance use disorders, especially opioid users (Darke, Ross, & Hall, 1996). A prospective study of 470 detoxification patients found that the lifetime prevalence for any overdose requiring emergency treatment was 31 percent of the entire cohort and 42 percent of a subgroup of patients with opioid abuse. History of overdose and elevated depressive symptoms predicted overdose within 2 years (Wines, Saitz, Horton, Lloyd-Travaglini, & Samet, 2004).

A suicide attempt involves suicidal intent, distinguishing it from an unintentional overdose that does not involve suicidal intent. However, suicidal intent may be ambiguous, especially when opioids are involved (Cantor, McTaggart, & De Leo, 2001). A continuum of intent has been suggested, between nonfatal overdoses, fatal unintentional overdoses, and intentional fatal overdoses (Farrell, Neeleman, Griffiths, & Strang, 1996). A large Norwegian study of clients in substance abuse treatment found a significant positive relationship between overdosing and suicide attempts: clients who experienced an overdose were six times more likely to have a suicide attempt than clients who did not have an overdose, and one quarter of clients reported a history of both accidental overdose and suicide attempt. The researchers suggest that overdosing, even without conscious suicidal intent, reflects a state of carelessness about one’s own life and indifference with regard to whether one lives or dies (Rossow & Lauritzen, 1999). Other researchers, however, have concluded that unintentional overdose and suicidal behavior are qualitatively distinct outcomes with a different set of predictors, rather than lying on a continuum (Conner et al., 2007a; Darke & Ross, 2001). The extent to which unintentional overdose and suicidal behavior among people with substance use disorders are related (versus categorically distinct) outcomes with related (versus widely dissimilar) predictors is unresolved at this time.

Although the literature indicates that the majority of drug overdoses, at least those involving opioids, are considered unintentional (Darke & Ross, 2001), numerous studies have shown that a significant subgroup of patients with a substance use disorder who overdose have suicidal intent. An analysis of 2,567 drug-related presentations to a Chicago-area emergency department over a 10-year period showed that 29.4 percent of these presentations were life-threatening overdoses and 8.5 percent were suicide attempts (Leikin, Morris, Warren, & Erickson, 2001). Another emergency department study in Germany reported that 43 percent of nonfatal over-

doses were intentional, and 32 percent of the intentional overdoses had some level of suicidal intent (Pfab et al., 2006). Similarly, Neale (2000b) found that nearly half (49 percent) of subjects seen in an emergency department following an illicit drug overdose reported some level of suicidal intent prior to the overdose. Motivations for intentional overdose included depression, nothing to live for, childhood sexual abuse, relationship breakdown, recent bereavement, relationship problems, and problems with housing. Heale et al. (2003) found that 17 percent of severe heroin overdoses were intentional, often preceded by some precipitating event or adverse mood state. Finally, an analysis (Oyefeso, Ghodse, Clancy, & Corkery, 1999) of deaths over 25 years among persons in substance abuse treatment in the United Kingdom showed that drug overdose accounted for about 45 percent of known suicides in this population.

In summary, drug overdose is a common life-threatening event among clients with substance use disorders. Determining intent or motivation for a drug overdose, including suicidal intent, can be challenging. Moreover, some clients will have a history of both intentional (suicide attempt) and unintentional overdose, indicative of very high risk for drug-related death.

## The Role of Trauma and Abuse

Posttraumatic stress disorder (PTSD) and co-occurring substance use disorder have been linked with suicidal behavior in a number of studies. Some research examining the relationships between physical or sexual abuse, substance abuse, and suicidal behavior suggests that the relationships differ in men and women. However, Rossow and Lauritzen's (2001) comprehensive study suggests that with more severe childhood stress and trauma, gender differences in suicidal behavior disappear.

Roy (2004) analyzed 1,078 males and 202 females in substance abuse treatment and found that 42 percent had attempted suicide at least once. The greater the client's childhood trauma, the more suicide attempts they reported, suggestive of a dose-related relationship. Those who had made their first of several suicide attempts before age 20 showed the most trauma. In other analyses of veterans, Roy (2002, 2003b, c) found that among those dependent on opiates, cocaine, or alcohol, suicide attempts were significantly associated with childhood trauma, as well as a family history of suicide and a history of at least one major depressive episode.

Benda's (2005) analysis of suicidal thoughts and behaviors among veterans who were homeless and abused substances also showed an association with sexual abuse. Among the 310 women surveyed, suicidal ideation and attempts was most closely associated with current sexual abuse, although childhood sexual and physical abuse also reached significance. Among the men, however, a number of other variables were also predictive of suicidality, including substance abuse, aggression, cognitive disorders (ideas of reference, confused thinking, memory loss), and combat-related PTSD. The data suggest that child abuse is more predictive of suicidality among female veterans, whereas among male veterans, other variables may play an equal or greater role.

## Women, Trauma, Substance Abuse, and Suicide

Jarvis and Copeland (1997) noted the combined effect of substance dependence and history of childhood sexual abuse (CSA) in contributing to the likelihood of a woman's attempting suicide. Of the women in substance abuse treatment, 70 percent of those with a history of CSA had attempted suicide, while only 36 percent of those who had no such history attempted suicide. Among those receiving counseling for CSA who did not have substance use disorders, 38 percent attempted suicide. Those who also had experienced adult physical abuse or who had experienced a greater number of lifetime traumas showed higher odds of attempting suicide. An analysis of women with PTSD and substance use disorders found that 32.3 percent had made a suicide attempt or self-harmed in the past 3 months (Harned, Najavits, & Weiss, 2006). The women who displayed suicidal behaviors were more likely to be diagnosed as alcohol dependent or polysubstance dependent and less likely to be opioid dependent, compared with those who were not suicidal.

McFarlane et al. (2005) surveyed and followed 149 women who were actively seeking help from the justice system following assault by their intimate partner. The women who experienced more than one sexual assault were more than three times as likely to report beginning or increasing substance use compared with women who reported only one assault, suggesting a dose-related relationship. Remarkably, 22 percent of the women who had been sexually assaulted had threatened or attempted suicide within 90 days of the event, including one suicide, suggesting that risk in the weeks and months following sexual assault may be especially pronounced.

Low-income African-American women who had made repeated suicide attempts experienced more childhood trauma than those who had made one suicide attempt. The two groups had similar numbers of traumatic events during adulthood (Kaslow, Jacobs, Young, & Cook, 2006). A study of African-American women in treatment for crack cocaine dependence showed that 62 percent reported a past traumatic sexual experience, and of these, 54 percent reported suicidal ideation and 42 percent had attempted suicide (Hill, Boyd, & Kortge, 2000).

## Men, Trauma, Substance Abuse, and Suicide

Trauma also plays a role in male suicidal thoughts and behaviors. Rodell, Benda, and Rodell (2003) analyzed interview data from 188 homeless male veterans, and found that the best predictors of suicidal thoughts were (1) the interaction of early sexual abuse and intensity of alcohol abuse and (2) the interaction of early sexual abuse and intensity of drug abuse. Price, Risk, Haden, Lewis, & Spitznagel (2004) examined PTSD, substance abuse, and suicidality (frequent thoughts of suicide, plans for suicide, or suicide attempts) over 25 years in a cohort of Vietnam veterans and concluded that drug dependence plays a causal role in PTSD and suicidal thoughts and behaviors and PTSD in early adulthood, but in later adulthood, PTSD and suicidality lead to continuation of drug use as self-medication. Research has also shown that remission from suicidality occurs more slowly for Vietnam veterans with co-occurring PTSD and drug dependence (Price et al., 2004).

Benda (2003) analyzed data from 600 male Vietnam veterans who were homeless and who were admitted for substance abuse treatment (30.7 percent had attempted suicide) and found that the factors that most highly discriminated between those who attempted suicide and the other veterans were number of psychiatric hospitalizations, disturbing thoughts, depression, confused thinking, and sexual abuse. Alternatively, the factors that most strongly associated with an absence of suicidality were self-efficacy, resilience, religiosity, employment, and social support, suggesting that these variables serve as protective factors.

# Assessment of Suicidal Thoughts and Behaviors

## Screening

A screening protocol is the routine administration of standard questions to all individuals in a given setting in order to identify those who require more in-depth assessment and perhaps additional treatment. All clients presenting for substance abuse treatment should be screened for suicidal thoughts and behaviors (Center for Substance Abuse Treatment [CSAT], 2005; Wines et al., 2004). Independent assessment for suicidal risk is beyond the scope of practice for most substance abuse counselors; however, counselors are a valuable resource in screening and should be trained to screen for suicide.

Scales that are useful in researching large, community-based samples (e.g., Cooper-Patrick, Crum, & Ford, 1994; Kessler et al., 1999) may be useful as screens in clinical settings. An example is a 4-item screen developed in the Epidemiologic Catchment Area (Cooper-Patrick et al., 1994):

- Have you ever felt life is not worth living?
- Have you ever thought of hurting or harming yourself?
- Have you considered specific methods for harming yourself?
- Have you ever made a suicide attempt?

Although potentially useful as screens, such instruments cannot be used as stand-alone assessments in clinical settings. In other words, follow-up questions are always necessary to get a fuller picture. Part 1 of this TIP suggests other specific screening questions that might be asked in certain circumstances.

## Assessment

Assessment is a more in-depth evaluation of the severity and nature of suicidal thoughts and behavior. It typically also includes evaluation of warning signs and risk and protective factors. For the National Institute of Mental Health, Brown (2002) compiled a highly detailed, annotated list of instruments used in intervention research in seven categories: suicide ideation and behavior, medical lethality of suicide attempts, brief screening measures, hopelessness, reasons for living, provider attitudes and knowledge, and measures in development. In addition to a brief description and evaluative summary of each measure, information about the samples it has been used with, its reliability and validity, and its dimensionality has been provided. Since this compilation, work has been done to develop other instruments including the Suicide Attempt Self-Injury Interview (SASII; Linehan, Comtois, Brown, Heard, & Wagner, 2006a).

Instruments that assess additional clinically relevant domains, such as depression, may serve as a complement to suicide-specific instruments. There are several reliable and valid instruments for assessing depression to select from, including the self-administered Beck Depression Inventory-2 (Beck, Steer, & Brown, 1996; available online at <http://www.harcourtassessment.com>) and the Hamilton Depression Rating Scale (Hamilton, 1960).

The Joint Commission on Accreditation of Healthcare Organizations recently added a requirement that clients at risk for suicide be identified. Pursuant to this goal, Screening for Mental Health, Inc., issued the Basic Suicide Assessment Five-step Evaluation (B-SAFE). This includes determining the level of suicide risk and developing a treatment plan.

The American Psychiatric Association's *Practice Guideline for the Assessment and Treatment of Patients With Suicidal Behaviors* (2003) recommends that the following domains be assessed:

- Current presentation of suicidality.
- Psychiatric illnesses.
- History.
- Psychosocial situation.
- Individual strengths and vulnerabilities.

Shea (2002) presents practical techniques to use in assessments that can improve their validity. Jobes (2006) uses a combination of a self-report scale and an interview. Rudd (2006) suggests an interview in which the client's suicidal history is explored as well as the current crisis. However the assessment is conducted, checking in with high-risk clients should be done periodically to determine if there are changes in risk, such as during times of transition that are likely to prove difficult, when the client experiences increased stress, and when the counselor notices warning signs (Suicide Prevention Resource Center [SPRC] and American Association of Suicidology, 2006).

## Caution

A caution with the use of assessment instruments is that they are not predictive of suicide. Indeed, as demonstrated more than two decades ago (Pokorny, 1983) and as emphasized by Simon (2004) and many other experts, **no standardized instrument has been developed that can accurately identify which clients will kill themselves.** Given that many high-risk clients never kill themselves, prediction of suicide is extraordinarily difficult, and so it is unlikely that such an instrument will ever be developed. Accordingly, the purpose of suicide-related screening and assessment is to identify at-risk individuals who require further evaluation

and/or treatment, and to provide information that will help plan such treatment, rather than to make “predictions.” Accordingly, use of language such as “acute” rather than “imminent” to describe patients requiring intensive intervention may be preferable because the former speaks to the immediate need without suggesting that the future is knowable. Note that the inability to predict suicide does not absolve clinicians and administrators from the responsibility to seek to identify and respond appropriately to clients at risk. Referral to a specialist for in-depth assessment is among the actions that may be taken.

## Treatment of Suicidal Thoughts and Behaviors

The knowledge base for treating suicidal thoughts and behaviors is at an early stage of development. The earliest efforts were in crisis intervention through hotlines and emergency services for people in emergency rooms and mental health centers who were actively suicidal. Assessment for suicidal risk has since become more sophisticated, as has the application of cognitive–behavioral therapies, other psychotherapies, and pharmacotherapy. As with substance abuse, groups at high risk for suicide (e.g., American Indian males showing risk factors, older White males showing risk factors, and clients diagnosed with substance use disorders and co-occurring mental disorders) can be treated with appropriate methods.

These advancements are reflected in the literature. Although the literature on treatment for substance use disorders and for suicidal thoughts and behaviors respectively is considerable, studies that examine treatment for suicidal thoughts and behaviors among adults with substance use disorders have only recently begun to be conducted and are limited at this stage.

When the need for evidence-based practices to treat suicidal individuals is considered, a small number of randomized, controlled trials of treatment methods have been published, particularly when considering data on people with substance use disorders. Rudd (2000) identified 19, of which three examined pharmacological treatment. Six additional studies examined the effects of procedural changes (e.g., case management by volunteers, home visits by a community care nurse, followup letters and phone calls). Many of these studies are hampered by small sample sizes, in part owing to the comparative infrequency of the behavior. Another difficulty in doing this type of research is that people who are suicidal, especially those with multiple attempts and/or frequent ideation, are typically excluded from these studies because of the perception of risks involved (Linehan, 1997; Rudd, Joiner, & Rajab, 2001).

## Interventions and Programs That Address Suicidal Thoughts and Behaviors

Between 2003 and 2005, SPRC collaborated with the American Foundation for Suicide Prevention (AFSP) to create a registry of best suicide prevention practices. Based on expert review of evaluated practices, 12 were identified for inclusion on the registry and can be accessed at [http://www.sprc.org/featured\\_resources/bpr/ebpp.asp](http://www.sprc.org/featured_resources/bpr/ebpp.asp).

The analysis of 19 studies by Rudd and colleagues (2000) does not take substance use or mental disorders into account. The majority of the studies they examined concerned short-term (up to 3 months' duration) cognitive–behavioral therapy (CBT) with a problem-solving component as the main element. These showed positive treatment effects. Not all showed a drop in number of suicide attempts, but suicidal ideation declined, as did some of the symptoms that accompany suicidal thoughts and behaviors. Rudd et al. (2000) note significant methodological problems with many of these studies, such as imprecise definition of the treatment and high dropout rates.

In a randomized controlled trial using CBT and case management, Brown and colleagues (2005) report that treatment reduced the number of subsequent suicide attempts by about 50 percent in a group of adults who had made a previous attempt compared with a similar group who received treatment as usual. The majority of par-

ticipants were diagnosed with one or more substance use disorders.

Women with BPD who received dialectical behavior therapy were half as likely to make a suicide attempt during 1 year of treatment and 1 year of followup as women who received community treatment by experts. A majority of the women in both groups had lifetime substance use disorder diagnoses (Linehan, Comtois, Murray, Brown Gallop, Heard et al., 2006b). The group that received dialectical behavior therapy had fewer hospitalizations for suicide ideation, lower medical risk, and were less likely to drop out of treatment.

King County in Washington State responded to suicide attempts in its jail system after studying the pattern of suicide attempts in its population. The intervention program included greater mental health screening and collaboration with mental health professionals in the community, treatment for inmates found to be actively using substances (including methadone), greater consensus building about housing decisions, using group housing rather than isolation for individuals at risk, placing inmates at risk under suicide observation, installing barriers to prevent jumping off balconies, and training on suicide prevention (Goss, Peterson, Smith, Kalb, & Brodey, 2002).

The U.S. Air Force instituted a servicewide suicide prevention program in 1997 that is summarized in an 18-point list of requirements on managing suicidal behavior (U.S. Air Force, 2007). It includes assessment, matching interventions with level of risk, monitoring risk, ensuring continuity of care, and use of community resources. The program was endorsed by Air Force leadership, and implementation mandated education and training for many individuals. Other initiatives were designed to reduce the stigma of help-seeking behavior and integrate services delivery. An outcome study documents a 33-percent reduction in suicide rate between the 7 years before implementation of the program and the 6 years after it was implemented (Knox, Litts, Talcott, Feig, & Caine, 2003).

Rudd, Williamson, and Trotter (in press) reviewed 53 clinical trials of treatments for suicidal behavior, the majority of which used CBT. Among the common elements in the treatments that effectively reduced suicide attempts are:

- The theoretical models easily translated into language clients could understand.
- They specifically targeted suicidal behavior.
- They emphasized treatment compliance and included plans to focus on noncompliance if it arose.
- They identified skill sets to help reduce suicidal thoughts and behaviors that could be practiced.
- They emphasized personal responsibility for care.
- They provided planning for crisis management and access to emergency services.

Also useful for counselors is a set of 24 core competencies for mental health professionals, *Assessing and Managing Suicide Risk*, developed by the SPRC, the American Association of Suicidology (AAS), and the Education Development Center (Education Development Center; 2006). The advanced training provided by AAS is *Recognizing and Responding to Suicidal Risk*. The American Psychiatric Association's *Practice Guideline for the Assessment and Treatment of Patients With Suicidal Behaviors* (2003) provides a detailed look at the field, including the complex issues involved in co-occurring disorders with suicidal thoughts and behaviors. A great

#### **Treatment Programs, Manuals, and Training**

Rudd, M. D., Joiner, T., & Rajab, M. H. (2001). *Treating suicidal behavior: An effective, time-limited approach*. New York: Guilford Press. A cognitive-behavioral treatment manual.

Jobes, D. A. (2006) *Managing suicidal risk. A collaborative approach*. New York: Guilford Press. A clinical manual of Jobes's Collaborative Assessment and Management of Suicidality (CAMS) approach to treatment.

Owen, P. L. (2003). *Understanding suicide and addiction*. Center City, MN: Hazelden. The material includes a 46-page booklet written for clients, a 43-page workbook for use in treatment, and a video.

Wenzel, A., Brown, G. K., & Beck, A. T. (in press). *Cognitive therapy for suicidal patients: Scientific and Clinical Applications*. Washington, DC: APA Books.

deal of work remains to be done before the field can recommend specific treatments for suicidal thoughts and behaviors that are based on empirical evidence.

## **Substance Abuse Treatment and Suicidal Thoughts and Behaviors**

When a client is suicidal, the counselor must make an immediate effort to reduce the acute risk of suicide. In addition, attention must be paid to symptoms of substance use disorders and co-occurring mental disorders. The quality of the counselor's relationship with the client will be reflected in the client's cooperation in providing information and participation in planning for treatment. Hospitalization of clients at immediate risk should be considered, both to institute suicide precautions and to provide detoxification services (Modesto-Lowe, Brooks, & Ghani, 2006).

Ilgen, Tiet, Finney, and Harris (2005) looked at the effects of inpatient versus outpatient substance use disorder treatment for those who either had or had not made a recent suicide attempt. Patients with a past attempt who received inpatient treatment had higher abstinence rates than clients receiving outpatient treatment at 6-month followup. In a naturalistic study, men making a recent suicide attempt and receiving residential substance abuse treatment showed alcohol-related outcomes that were as good as those of a comparison group that had not attempted suicide (Ilgen, Tiet, & Moos, 2004). The improvements were noted at 1-year and 5-year followup. Although improved, psychiatric symptoms in the suicide attempt group were somewhat more severe after treatment compared with the nonsuicidal group, probably attributable to the high prevalence of psychiatric illness among individuals who are suicidal.

Using data from the Australian Treatment Outcome Study along with 12-month followup data, Darke and colleagues studied the effects of substance abuse treatment on suicidal behavior (Darke et al., 2005). Compared with the 12 months before treatment, the rate of suicide attempts did not decline significantly for the group as a whole during the 12 months after treatment, although among women, the rate halved. This drop appeared only marginally associated with treatment. Suicidal ideation and major depression declined across the study population. During the 3-year followup, rates of suicidal ideation, suicide attempts, and major depression in the group declined at each interview point, but they continued to be higher than in the general population (Darke et al., 2007).

Methadone treatment may have a positive influence on suicide. Of people who died in Texas between 1994 and 2002, people in methadone programs were less likely to die from suicide than others who died during this time (Maxwell, Pullum, & Tanner, 2005).

## **No-Suicide Contracts**

The use of no-suicide contracts is controversial. They are clinical, not legal, agreements (Simon, 2004). Two reviews of the literature (Lewis, 2007; Rudd, Mandrusiak, & Joiner, 2006b) concluded that there is no empirical evidence to support their efficacy in reducing suicide, nor are they useful for protecting clinicians from malpractice litigation (Lewis, 2007). When a client signs a no-suicide contract, the counselor's and staff's tendency is to be less careful in attending to her or him, when in fact there has been no lessening of risk for suicide (Jacobs & Brewer, 2004).

## **Alternatives to No-Suicide Contracts**

Rudd et al. (2006b) proposes using a "commitment to treatment" statement as a practical alternative. This type of statement spells out the counselor's and the client's expectations, identifies a crisis response plan, and commits the client to living. It is effective for an agreed-on length of time, specified in the statement. Use of a safety plan may also be helpful.

## Suicidal Thoughts and Behaviors and 12-Step Groups

The authors were unable to find data as to the potentially protective or therapeutic influences of 12-Step group attendance or affiliation on suicide-related outcomes. This is an important area for future research studies. One attempt to research this issue is provided by Wilke (2004), but the area is not sufficiently researched at this point to draw conclusions.

## The Effects of Suicide on Family and Friends

Suicide is a far-reaching concern not only because of the loss of a valued life, but also because of the toll it takes on the family, friends, caregivers, and others who loved and/or knew the person who died by suicide. Suicide survivors (those who have had a family member, friend, or acquaintance die by suicide) may have an even greater sense of loss than survivors of accidental deaths or deaths from natural causes, although studies have shown equivocal evidence on this point (e.g., Cleiren, Diekstra, Kerkhof, & van der Wal, 1994). This difference lessens over time (Jobes, Luoma, Husted, & Mann, 2000). Other factors such as the relationship to the deceased, the age of the deceased, and the pain or suffering the individual was experiencing can affect the survivors' responses.

A wide range of emotional reactions comprises the grieving response of suicide survivors. It includes shock and disbelief, horror, guilt and shame, feelings of rejection, blame, anger, and suicidal thoughts. Other symptoms of distress can include substance abuse, sleep and appetite problems, and impaired performance at school or work (Kaslow & Aronson, 2004). Symptoms of bereavement that persist for several months or more, also called complicated grief, can also negatively affect survivors of suicide (see, e.g., Lichtenthal, Cruess, & Prigerson, 2004).

Other emotional components of bereavement may be more positive, such as the relief that a feared event is now past, that the deceased is no longer suffering, and that the individual's wish was fulfilled (Clark & Goldney, 2002).

Social support is important to suicide survivors during bereavement. In addition to support from relatives and friends, formal and informal support groups can educate survivors about suicide and promote the knowledge that others have gone through this experience and that coping methods for dealing with life after the suicide can help ease the grief. A number of support groups meet throughout the country. Survivors of Suicide (SOS) is a national group, and others are local. People who are active in the 12-Step recovery community often find social support via this alternative as well.

Social support for suicide survivors may be different in different cultures. A qualitative study of African-American suicide survivors indicates that many felt they had "nowhere to turn" in their community for support (Barnes, 2006). To one degree or another, the survivors felt the stigma of the suicide of their family member and sensed that friends expected them to "just get on with their lives."

The means one uses to come to accept a suicide within the context of one's own life are unique for each survivor. Professional help from a therapist is necessary when a survivor's grief becomes disabling. Supportive therapy in conjunction with short-term use of medications that are not susceptible to abuse may be necessary (Jobes et al., 2000). Family therapy may be appropriate, especially when children are involved. These sessions might deal with denial, fears of family disintegration, and the stigma of suicide (Kaslow & Aronson, 2004).

Family history of suicide is a risk factor for suicide, including among people with substance use disorders (Roy, 2001a). Data generally support that such risk is largely attributable to heritable factors (Mann et al., 2001). A suicide in the family can also potentially lower one's threshold to engage in suicidal behavior by modeling the behavior, making it a more legitimate perceived option (e.g., "individuals in our family die by suicide"), or experiencing it as a form of trauma exposure (Joiner, 2005). Because a family history of suicide is associated with suicide risk among surviving family members, it is important to assess family history when conducting a suicide risk assessment.

## The Effects of Suicide on Counselors

Packman, Pennuto, Bongar, and Orthwein (2004) noted that clinicians consistently rank treating clients who are suicidal as the most stressful of clinical situations. For the counselor, the consequences of a client's suicide can be profound. Counselors may feel that they have failed, fear for their reputation, or distance themselves or become overly involved with their clients. They may find themselves unable to deal simultaneously with both their own emotions and those of the family of the deceased (Clark & Goldney, 2002). A supervisor's intervention may become necessary in these instances. For a discussion of this issue, see DeAngelis, 2001.

McAdams and Foster (2000) analyzed responses from 376 professional counselors and found that 23 percent had at least one client who had died by suicide. Younger counselors were more adversely affected than older, more experienced counselors. Respondents in this study indicated that in addition to heightened stress levels, they also reacted to the client suicide by increasing their attentiveness to the legal liabilities of their work, increasing their tendency to refer at-risk clients for hospitalization, strongly increasing their focus on potential cues to client suicides, becoming more likely to seek consultation around high-risk cases, becoming more conservative in their record-keeping, and experiencing an overall increased concern with death and dying.

McAdams and Foster (2002) report that the way in which supervisors and administrators respond to the counselor whose client has died by suicide has a considerable impact on the coping and recovery of counselors. The researchers interviewed 66 counselors who had experienced a client suicide and identified several factors that help counselors cope. Personal therapy received the highest rating for helping the counselors recover, and second most important was the support of an immediate supervisor, especially in the form of an administrative review in which the more experienced supervisor took the lead in going over the case and debriefing the counselor.

Most malpractice cases involving patient suicide concern inpatients or recently discharged patients. However, a recent search of legal databases (Packman et al., 2004) showed that lawsuits involving suicides in outpatient settings are increasing. The authors describe risk management procedures that are particularly relevant to those working with patients who are suicidal. These include properly involving the family, excellent recordkeeping and documentation, routine consultation with colleagues who have expertise with suicidal patients, knowing one's legal and ethical responsibilities, knowledge of suicide risk factors, familiarity with needed community resources, performing appropriate clinical assessments, understanding one's clinical competence and knowing when to refer, obtaining adequate histories, understanding and using the diagnostic system, and following malpractice insurance guidelines.

## REFERENCES

- Aharonovich, E., Liu, X., Nunes, E., & Hasin, D. S. (2002). Suicide attempts in substance abusers: Effects of major depression in relation to substance use disorders. *American Journal of Psychiatry*, *159*, 1600–1602.
- Allebeck, P., Allgulander, C., & Fisher, L. (1988). Predictors of completed suicide in a cohort of 50,465 young men: Role of personality and deviant behavior. *British Medical Journal*, *297*, 176–178.
- American Association of Suicidology, Suicide Prevention Resource Center, & Education Development Center, Inc. (2006). *Assessment and management of suicide risk: Core competencies for mental health professionals. Participant manual*. Washington, DC: Education Development Center.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders*. (4th Text Revision ed.) Washington, DC: American Psychiatric Association.

- American Psychiatric Association, Workgroup on Suicidal Behaviors (2003). *Practice guideline for the assessment and treatment of patients with suicidal behaviors*. Arlington, VA: American Psychiatric Association. Retrieved August 1, 2006, from [http://www.psych.org/psych\\_pract/treatg/pg/pg\\_suicidalbehaviors.pdf](http://www.psych.org/psych_pract/treatg/pg/pg_suicidalbehaviors.pdf)
- Angst, J. & Clayton, P. J. (1998). Personality, smoking and suicide: A prospective study. *Journal of Affective Disorders*, *51*, 55–62.
- Anguelova, M., Benkelfat, C., & Turecki, G. (2003). A systematic review of association studies investigating genes coding for serotonin receptors and the serotonin transporter: II. Suicidal behavior. *Molecular Psychiatry*, *8*, 646–653.
- Arato, M., Tekes, K., Tothfalusi, L., Magyar, K., Palkovits, M., Demeter, E., et al. (1987). Serotonergic split brain and suicide. *Psychiatry Research*, *21*, 355–356.
- Arsenault-Lapierre, G., Kim, C., & Turecki, G. (2004). Psychiatric diagnoses in 3275 suicides: a meta-analysis. *BMC Psychiatry* 1–11. London: BioMed Central Ltd. Retrieved February 4, 2005, from <http://www.biomed-central.com/1471-244X/4/37>
- Barnes, D. H. (2006). The aftermath of suicide among African Americans. *Journal of Black Psychology*, *32*, 335–348.
- Barratt, E. S. (1991). Measuring and predicting aggression within the context of personality theory. *Journal of Neuropsychiatry*, *3*, S35–S39.
- Beautrais, A. L., Joyce, P. R., & Mulder, R. T. (1999) Cannabis abuse and serious suicide attempts. *Addiction*, *94*, 1155–1164.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory-II*. San Antonio, TX: Psychological Corporation.
- Beck, A. T., Steer, R. A., Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: A 10-year prospective study of patients hospitalized with suicidal ideation. *American Journal of Psychiatry*, *142*, 559–563.
- Benda, B. B. (2003). Discriminators of suicide thoughts and attempts among homeless veterans who abuse substances. *Suicide and Life-Threatening Behavior*, *33*, 430–442.
- Benda, B. B. (2005). Gender differences in predictors of suicidal thoughts and attempts among homeless veterans that abuse substances. *Suicide and Life-Threatening Behavior*, *35*, 106–116.
- Berglund, M. (1984). Suicide in alcoholism: A prospective study of 88 suicides: The multidimensional diagnosis at first admission. *Archives of General Psychiatry*, *41*, 888–891.
- Beskow, J., Gottfries, C. G., Roos, B. E., & Winblad, B. (1976). Determination of monoamine and monoamine metabolites in the human brain: Post mortem studies in a group of suicides and in a control group. *Acta Pscyhiatrica Scandinavica*, *53*, 7–20.
- Borges, G., Walters, E. E., & Kessler, R. C. (2000). Associations of substance use, abuse, and dependence with subsequent suicidal behavior. *American Journal of Epidemiology*, *151*, 781–789.
- Brezo, J., Paris, J., & Turecki, G. (2006). Personality traits as correlates of suicidal ideation, suicide attempts, and suicide completion: A systematic review. *Acta Pscyhiatrica Scandinavica*, *113*, 180–206.
- Brown, G. K. (2002). A Review of Suicide Assessment Measures for Intervention Research With Adults and Older Adults. Technical report submitted to NIMH under Contract No.263-MH914950. Bethesda, MD: National Institute of Mental Health. Retrieved August 14, 2007, from <http://sbsirvntweb.uqac.ca/archivage/15290520.pdf>

- Brown, G. K., Ten Have T., Henriques, G. R., Xie, S. X., Hollander, J. E., & Beck, A. T. (2005). Cognitive therapy for the prevention of suicide attempts: A randomized controlled trial. *JAMA*, *294*, 563–570.
- Bruning, B. J., Clark, R., Gomez, M., & Grenier, D. (2007). 2007 IHS/SAMHSA National Behavioral Health Conference: “Weaving It All Together.” The Collection and Analysis of Suicide Data in Support of IHS Suicide Prevention Initiatives. June 11, 2007 Rockville, MD: Indian Health Service. Retrieved June 17, 2008, from [http://www.ihs.gov/cio/bh/documents/2007%20ihs%20samhsa%20bh%20conf%20rpms%20suicide%20data%20final%20060707.ppt#280,1,2007 IHS/SAMHSA National Behavioral Health Conference “Weaving It All Together”](http://www.ihs.gov/cio/bh/documents/2007%20ihs%20samhsa%20bh%20conf%20rpms%20suicide%20data%20final%20060707.ppt#280,1,2007%20IHS%20SAMHSA%20National%20Behavioral%20Health%20Conference%20Weaving%20It%20All%20Together)
- Cantor, C., McTaggart, P., & De Leo, D. (2001). Misclassification of suicide—The contribution of opiates. *Psychopathology*, *34*, 140–146.
- Castle, K., Duberstein, P. R., Conner, K. R., Meldrum, S., & Conwell, Y. (2004). Risk factors for suicide in blacks and whites: An analysis of data from the 1993 National Mortality Followback Survey. *American Journal of Psychiatry*, *161*, 452–458.
- Cavanagh, J. T. O., Carson, A. J., Sharpe, M., & Lawrie, S. M. (2003). Psychological autopsy studies of suicide: A systematic review. *Psychological Medicine*, *33*, 395–405.
- Centers for Disease Control and Prevention (CDC). (n.d.) Suicide Fact Sheets. Retrieved June 12, 2008, from <http://www.cdc.gov/ncipc/dvp/Suicide/Suicide-risk-p-factors.htm>.
- Centers for Disease Control and Prevention (2007). Unintentional Poisoning Deaths—United States, 1999–2004. *Morbidity and Mortality Weekly Report* *56*, 93–96. Retrieved March 19, 2008, from [http://alcoholism.about.com/gi/dynamic/offsite.htm?zi=1/XJ&sdn=alcoholism&cdn=health&tm=42&gps=252\\_1414\\_1020\\_570&f=00&su=p726.2.152.ip\\_p284.8.150.ip\\_&tt=2&bt=0&bts=0&zu=http%3A//http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5605a1.htm](http://alcoholism.about.com/gi/dynamic/offsite.htm?zi=1/XJ&sdn=alcoholism&cdn=health&tm=42&gps=252_1414_1020_570&f=00&su=p726.2.152.ip_p284.8.150.ip_&tt=2&bt=0&bts=0&zu=http%3A//http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5605a1.htm)
- Center for Substance Abuse Treatment. (2005). *Substance Abuse Treatment for Persons With Co-Occurring Disorders*. Treatment Improvement Protocol (TIP) Series 42. DHHS Publication No. (SMA) 05-3992. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Cheetham, S. C., Crompton, M. R., Czudek, C., Horton, R. W., Katona, C. L., & Reynolds, G. P. (1989). Serotonin concentrations and turnover in brains of depressed suicides. *Brain Research*, *502*, 332–340.
- Cherpitel, C. J., Borges, G. L., & Wilcox, H. C. (2004). Acute alcohol use and suicidal behavior: A review of the literature. *Alcoholism: Clinical & Experimental Research*, *28*, 18S–28S.
- Clark, S. E., & Goldney, R. D. (2002). The impact of suicide on relatives and friends. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide*. (pp. 467–484). Indianapolis, IN: Wiley Publishing Inc.
- Cleiren, M., Diekstra, R. F., Kerkhof, A. J., & van der, Wal, J. (1994). Mode of death and kinship in bereavement: Focusing on who rather than how. *Crisis*, *15*, 22–36.
- Coccaro, E. F. (1992). Impulsive aggression and central serotonergic system function in humans: An example of a dimensional brain-behavior relationship. *International Clinical Psychopharmacology*, *7*, 3–12.
- Comtois, K. A., Russo, J. E., Roy-Byrne, P., Ries, R. (2004). Clinician’s assessments of bipolar disorder and substance abuse as predictors of suicidal behavior in acutely hospitalized psychiatric inpatients. *Biological Psychiatry*, *56*, 757–763.
- Conner, K. R., Beautrais, A. L., & Conwell, Y. (2003a). Moderators of the relationship between alcohol dependence and suicide and medically serious suicide attempts: Analyses of Canterbury Suicide Project Data. *Alcoholism: Clinical and Experimental Research*, *27*, 1156–1161.

- Conner, K. R., Beautrais, A. L., & Conwell, Y. (2003b). Risk factors for suicide and medically serious suicide attempts among alcoholics: Analyses of Canterbury Suicide Project data. *Journal of Studies on Alcohol*, *64*, 551–554.
- Conner, K. R., Britton, P. C., Sworts, L. M., & Joiner, T. (2007a). Suicide attempts among individuals with opiate dependence: The role of belonging. *Addictive Behaviors*, *32*, 1395–1404.
- Conner, K. R., Duberstein, P. R., Conwell, Y., & Caine, E. D. (2003c). Reactive aggression and suicide: Theory and evidence. *Aggression and Violent Behavior*, *8*, 413–432.
- Conner, K. R., Duberstein, P. R., Conwell, T., Herrmann, J. H., Jr., Cox, C., Barrington, D. S., et al. (2000). After the drinking stops: Completed suicide in individuals with remitted alcohol use disorders. *Journal of Psychoactive Drugs*, *32*, 333–337.
- Conner, K. R., Duberstein, P. R., Conwell, Y., Seidlitz, L., & Caine, E. D. (2001). Psychological vulnerability to completed suicide: A review of empirical studies. *Suicide and Life-Threatening Behavior*, *31*, 367–385.
- Conner, K. R., Hesselbrock, V. M., Meldrum, S. C., Schuckit, M. A., Bucholz, K. K., Gamble, S. A., et al. (2007b). Transitions to, and correlates of, suicidal ideation, plans, and unplanned and planned suicide attempts among 3729 men and women with alcohol dependence. *Journal of Studies on Alcohol and Drugs*, *68*, 654–662.
- Conner, K. R., McCloskey, M. S., & Duberstein, P. R. (in press). Psychiatric risk factors for suicide in the alcohol-dependent patient. *Psychiatric Annals*.
- Cooper-Patrick, L., Crum, R. M., & Ford, D. E. (1994). Identifying suicidal ideation in general medical patients. *JAMA*, *272*, 1757–1762.
- Dalton, E. J., Cate-Carter, T. D., Mundo, E., Parikh, S. V., & Kennedy, J. L. (2003). Suicide risk in bipolar patients: The role of co-morbid substance use disorders. *Bipolar Disorders*, *5*, 58–61.
- Darke, S., Kaye, S., McKetin, R., & Dufrou, J. (2008). Major physical and psychological harms of methamphetamine use. *Drug and Alcohol Review*, *27*, 253–262.
- Darke, S., & Ross, J. (2001). The relationship between suicide and heroin overdose among methadone maintenance patients in Sydney, Australia. *Addiction*, *96*, 1443–1453.
- Darke, S., & Ross, J. (2002). Suicide among heroin users: Rates, risk factors and methods. *Addiction*, *97*, 1384–1394.
- Darke, S., Ross, J., & Hall, W. (1996). Overdose among heroin users in Sydney, Australia: I. Prevalence and correlates of non-fatal overdose. *Addiction*, *91*, 405–411.
- Darke, S., Ross, J., Williamson, A., Mills, K. L., Havard, A., & Teesson, M. (2007). Patterns and correlates of attempted suicide by heroin users over a 3-year period: Findings from the Australian treatment outcome study. *Drug and Alcohol Dependence*, *87*, 146–152.
- Darke, S., Williamson, A., Ross, J., & Teesson, M. (2005). Attempted suicide among heroin users: 12-month outcomes from the Australian Treatment Outcome Study (ATOS). *Drug and Alcohol Dependence*, *78*, 177–186.
- Davis, T., Gunderson, J. G., & Myers, M. (1999). Borderline personality disorder. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention*. (pp. 311–331). San Francisco : Jossey-Bass.
- DeAngelis, T. (2001). Surviving a patient's suicide. *Monitor on Psychology*, 1-6. Retrieved January 11, 2007, from <http://www.apa.org/monitor/nov01/suicide.html>

- Dhossche, D. M., Meloukheia, A. M., & Chakravorty, S. (2000). The association of suicide attempts and comorbid depression and substance abuse in psychiatric consultation patients. *General Hospital Psychiatry, 22*, 281–288.
- Duberstein, P. R., & Conwell, Y. (1997). Personality disorders and completed suicide: A methodological and conceptual review. *Clinical Psychology: Science and Practice, 4*, 359–376.
- Duberstein, P. R., Conwell, Y., & Caine, E. D. (1993). Interpersonal stressors, substance abuse, and suicide. *Journal of Nervous and Mental Disease, 181*, 80–85.
- Duberstein, P. R., Conwell, Y., & Caine, E. D. (1994). Age differences in the personality characteristics of suicide completers: Preliminary findings from a psychological autopsy study. *Psychiatry, 57*, 213–224.
- Falck, R. S., Wang, J., Carlson, R. G., Eddy, M., & Siegal, H. A. (2002). The prevalence and correlates of depressive symptomatology among a community sample of crack-cocaine smokers. *Journal of Psychoactive Drugs, 34*, 281–288.
- Farberow, N. L., Kang, H. K., & Bullman, T. A. (1990). Combat experience and postservice psychosocial status as predictors of suicide in Vietnam veterans. *Journal of Nervous and Mental Disease, 178*, 32–37.
- Farrell, M., Neelemen, J., Griffiths, P., & Strang, J. (1996). Suicide and overdose among opiate addicts. *Addiction, 91*, 321–323.
- Fergusson, D. M., Horwood, L. J., & Swain-Campbell, N. (2002). Cannabis use and psychosocial adjustment in adolescence and young adulthood. *Addiction, 97*, 1123–1135.
- Fisher, B. J., Haythornthwaite, J. A., Heinberg, L. J., Clark, M., & Reed, J. (2001). Suicidal intent in patients with chronic pain. *Pain, 89*, 199–206.
- Garlow, S. J., Purselle, D., & D'Orio, B. (2003). Cocaine use disorders and suicidal ideation. *Drug and Alcohol Dependence, 70*, 101–104.
- Glasner-Edwards, S., Mooney, L. J., Marinelli-Casey, P., Hillhouse, M., Ang, A., & Rawson, R. (2008). Risk factors for suicide attempts in methamphetamine-dependent patients. *American Journal of Addiction, 17*, 24–27.
- Gold, L. H. (2006). Suicide and gender. In R. I. Simon, R. E. Hales, & P. P. American (Eds.), *The American Psychiatric Publishing textbook of suicide assessment and management*. (pp. 77–106). Washington, DC: American Psychiatric Publishing.
- Goss, J. R., Peterson, K., Smith, L. W., Kalb, K., & Brodey, B. B. (2002). Characteristics of suicide attempts in a large urban jail system with an established suicide prevention program. *Psychiatric Services, 53*, 574–579.
- Gross-Isseroff, R., Israeli, M., & Biegon, A. (1989). Autoradiographic analysis of tritiated imipramine binding in the human brain post mortem: Effects of suicide. *Archives of General Psychiatry, 46*, 237–241.
- Gut-Fayand, A., Dervaux, A., Olié, J.-P., Lôo, H., Poirier, M.-F., & Krebs, M.-O. (2001). Substance abuse and suicidality in schizophrenia: A common risk factor linked to impulsivity. *Psychiatry Research, 102*, 65–72.
- Hamilton, M. A. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery, and Psychiatry, 23*, 56–62.
- Harned, M. S., Najavits, L. M., & Weiss, R. D. (2006). Self-harm and suicidal behavior in women with comorbid PTSD and substance dependence. *American Journal of Addictions, 15*, 392–395.
- Harris, E. C., & Barraclough, B. (1997). Suicide as an outcome for mental disorders. A meta-analysis. *British Journal of Psychiatry, 170*, 205–228.

- Havens, J. R., Ompad, D. C., Latkin, C. A., Fuller, C. M., Arria, A. M., Vlahov, D., & Strathdee, S. S. (2005). Suicidal ideation among African American non-injection drug users. *Ethnicity & Disease, 15*, 110–115.
- Hayes, L. M. (1994). Developing a written program for jail suicide prevention. *Corrections Today, 56*, 182–187.
- Hayes, L. M. (1995). *Prison suicide: An overview and guide to prevention*. Mansfield, MA: National Center for Institutions and Alternatives.
- Hawton, K., Sutton, L., Haw, C., Sinclair, J., & Harriss, L. (2005). Suicide and attempted suicide in bipolar disorder: A systematic review of risk factors. *Journal of Clinical Psychiatry, 66*, 693–704.
- Hawton, K & van Heeringen, K. (Eds.). (2002). *The international handbook of suicide and attempted suicide*. (pp. 467–484). Indianapolis, IN: Wiley Publishing Inc.
- Heale, P., Dietze, P., & Fry, C. (2003). Intentional overdose among heroin overdose survivors. *Journal of Urban Health, 80*, 230–237.
- Heikkinen, M. E., Aro, H. M., Henriksson, M. M., Isometsä, E. T., Sarna, S. J., Kuoppasalmi, K. I., et al. (1994). Differences in recent life events between alcoholic and depressive nonalcoholic suicides. *Alcoholism: Clinical and Experimental Research, 18*, 1143–1149.
- Hendin, H., Maltzberger, J. T., Lipschitz, A. P., Haas, P., & Kyle, J. (2001). Recognizing and responding to a suicide crisis. *Suicide and Life-Threatening Behavior, 31*, 115–128.
- Hill, E. M., Boyd, C. J., & Kortge, J. F. (2000). Variation in suicidality among substance-abusing women: The role of childhood adversity. *Journal of Substance Abuse Treatment, 19*, 339–345.
- Hufford, M. R. (2001). Alcohol and suicidal behavior. *Clinical Psychology Review, 21*, 797–811.
- Ilgen, M. A., Harris, A. H., Moos, R. H., & Tiet, Q. Q. (2007). Predictors of a suicide attempt one year after entry into substance use disorder treatment. *Alcoholism: Clinical & Experimental Research, 31*, 635–642.
- Ilgen, M. A., Tiet, Q., Finney, J. W., & Harris, A. H. (2005). Recent suicide attempt and the effectiveness of inpatient and outpatient substance use disorder treatment. *Alcoholism: Clinical & Experimental Research, 29*, 1664–1671.
- Institute of Medicine (2002). *Reducing suicide: A national imperative*. Washington, D.C.: The National Academies Press.
- Jacobs, D. G. (Ed.). (1999). *The Harvard Medical School guide to suicide assessment and intervention*. (1st ed.) San Francisco: Jossey-Bass.
- Jacobs, D. (2007). A Resource Guide for Implementing the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) 2007 Patient Safety Goals on Suicide. Wellesley Hills, MA: National Depression Screening Day. Retrieved 3-26-2007, from <http://www.mentalhealthscreening.org/downloads/sites/docs/ndsd/ResourceGuideJCAHOSafetyGoals2007final.pdf>
- Jacobs, D. & Brewer, M. (2004). APA Practice Guideline provides recommendations for assessing and treating patients with suicidal behaviors. *Psychiatric Annals, 24*, 373-380. [http://www.med.umich.edu/depression/suicide\\_assessment/Psych%20Annals%20Summary%20and%20Review%20APA%20Suicide%20Guidelines%20Review%20PDF.pdf](http://www.med.umich.edu/depression/suicide_assessment/Psych%20Annals%20Summary%20and%20Review%20APA%20Suicide%20Guidelines%20Review%20PDF.pdf)
- Jarvis, T.J., Copeland, J. (1997). Child sexual abuse as a predictor of psychiatric co-morbidity and its implications for drug and alcohol treatment. *Drug and Alcohol Dependence, 49*, 61–69.
- Jobes, D. A. (2006). *Managing suicidal risk: A collaborative approach*. New York, NY: Guilford Press.

- Jobes, D. A., Luoma, J. B., Husted, L. A. T., & Mann, R. E. (2000). In the wake of suicide: Survivorship and postvention. In R. W. Maris, A. L. Berman, & M. M. Silverman (Eds.), *Comprehensive textbook of suicidology*. (pp. 536–561). New York: The Guilford Press.
- Joe, S., Baser, R. E., Breeden, G., Neighbors, H. W., & Jackson, J. S. (2006). Prevalence of and risk factors for lifetime suicide attempts among blacks in the United States. *JAMA*, *296*, 2212–2213.
- Joiner, T. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.
- Kaslow, N. J., & Aronson, S. G. (2004). Recommendations for family interventions following a suicide. *Professional Psychology: Research and Practice*, *35*, 240–247.
- Kaslow, N. J., Jacobs, C. H., Young, S. L., & Cook, S. (2006). Suicidal behavior among low-income African American women: A comparison of first-time and repeat suicide attempters. *Journal of Black Psychology*, *32*, 349–365.
- Kelly, M. J., Mufson, M. J., & Rogers, M. P. (1999). Medical settings and suicide. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention*. (pp. 491–519). San Francisco: Jossey-Bass.
- Kessler, R. C., Berglund, P., Borges, G., Nock, M., Wang, P. S. (2005). Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990-1992 to 2001-2003. *JAMA*, *293*, 2487–2495.
- Kessler, R. C., Borges, G., & Walters, E. E. (1999). Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. *Archives of General Psychiatry*, *56*, 617–625.
- Kilbey, M. M., Breslau, N., & Andreski, P. (1992). Cocaine use and dependence in young adults: Associated psychiatric disorders and personality traits. *Drug and Alcohol Dependence*, *29*, 283–290.
- Knox, K. L., Litts, D. A., Talcott, G. W., Feig, J. C., & Caine, E. D. (2003). Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: Cohort study. *British Medical Journal*, *327*, 1376.
- Korpi, E. R., Kleinman, J. E., Goodman, S. I., Phillips, I., DeLisi, L. E., Linnoila, M., et al. (1986). Serotonin and 5-hydroxyindoleacetic acid in brains of suicide victims. Comparison in chronic schizophrenic patients with suicide as cause of death. *Archives of General Psychiatry*, *43*, 594–600.
- Kosten, T. R., & Rounsaville, B. J. (1988). Suicidality among opioid addicts: 2.5 year follow-up. *American Journal of Drug and Alcohol Abuse*, *14*, 357–369.
- Kung, H.-C., Pearson, J. L., & Wei, R. (2005). Substance use, firearm availability, depressive symptoms, and mental health service utilization among White and African American suicide decedents aged 15 to 64 years. *Annals of Epidemiology*, *15*, 614–621.
- Leikin, J. B., Morris, R. W., Warren, M., & Erickson, T. (2001). Trends in a decade of drug abuse presentation to an inner city ED. *American Journal of Emergency Medicine*, *19*, 37–39.
- Lewis, L. M. (2007). No-harm contracts: A review of what we know. *Suicide and Life-Threatening Behavior*, *37*, 50–57.
- Lichtenthal, W. G., Cruess, D. G., & Prigerson, H. G. (2004). A case for establishing complicated grief as a distinct mental disorder in DSM-V. *Clinical Psychology Review*, *24*, 637–662.
- Linehan, M. M. (1997). Behavioral treatments of suicidal behavior: Definitional obfuscation and treatment outcomes. In D. M. Stoff & J. J. Mann (Eds.), *The neurobiology of suicide: From the bench to the clinic*. (pp. 302–328). New York: New York Academy of Sciences.

- Linehan, M. M., Comtois, K. A., Brown, M. Z., Heard, H. L., & Wagner, A. (2006a). Suicide Attempt Self-Injury Interview (SASII): development, reliability, and validity of a scale to assess suicide attempts and intentional self-injury. *Psychological Assessment, 18*, 303–312.
- Linehan, M. M., Comtois, K. A., Murray, A. M., Brown, M. Z., Gallop, R. J., Heard, H. L. et al. (2006b). Two year-randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorders. *Archives of General Psychiatry, 63*, 757–766.
- Linehan, M. M., Rizvi, S. L., Shaw-Welch, S., & Page, B. (2000). Psychiatric aspects of suicidal behavior: Personality disorders. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide* (pp. 147–178). New York: Wiley and Sons.
- Mann, J. J. (2003). Neurobiology of suicidal behaviour. *Nature Reviews Neuroscience, 4*, 819–828.
- Mann, J. J., Brent, D. A., & Arango, V. (2001). The neurobiology and genetics of suicide and attempted suicide: A focus on the serotonergic system. *Neuropsychopharmacology, 24*, 467–477.
- Mann, J. J., Waternaux, C., Haas, G. L., & Malone, K. M. (1999). Toward a clinical model of suicidal behavior in psychiatric patients. *American Journal of Psychiatry, 156*, 181–189.
- Maris, R. W., Berman, A. L., & Silverman, M. M. (2000a). Biology of suicide. In R. W. Maris, A. L. Berman, & M. M. Silverman (Eds.). *Comprehensive textbook of suicidology* (pp. 376–406). New York: The Guilford Press.
- Maris, R. W., Berman, A. L., & Silverman, M. M. (Eds.). (2000b). *Comprehensive textbook of suicidology*. New York: The Guilford Press.
- Marshall, D., & Soule, S. (1998). Accidental deaths and suicides among Alaska Natives, 1979–1994. *Circumpolar Health, 96*, 497–502.
- Maxwell, J. C., Pullum, T. W., & Tanner, K. (2005). Deaths of clients in methadone treatment in Texas: 1994–2002. *Drug and Alcohol Dependence, 78*, 73–81.
- McAdams, C. R. & Foster, V. A. (2000). Client suicide: Its frequency and impact on counselors. *Journal of Mental Health Counseling, 22*, 107–121.
- McAdams, C. R., & Foster, V. A. (2002). An assessment of resources for counselor coping and recovery in the aftermath of client suicide. *Journal of Humanistic Counseling, Education and Development, 41*, 232–241.
- McCloud, A., Barnaby, B., Omu, N., Drummond, C., & Aboud, A. (2004). Relationship between alcohol use disorders and suicidality in a psychiatric population. *British Journal of Psychiatry, 184*, 439–446.
- McFarlane, J., Malecha, A., Gist, J., Watson, K., Batten, E., Hall, I., & Smith, S. (2005). Intimate partner sexual assault against women and associated victim substance use, suicidality, and risk factors for femicide. *Issues in Mental Health Nursing, 26*, 953–967.
- Modesto-Lowe, V., Brooks, D., & Ghani, M. (2006). Alcohol dependence and suicidal behavior: From research to clinical challenges. *Harvard Review of Psychiatry, 14*, 241–248.
- Moscicki, E. K. (2001). Epidemiology of completed and attempted suicide: Toward a framework for prevention. *Clinical Neuroscience Research, 1*, 310–323.
- Mumola, C. J. (2005). Suicide and Homicide in State Prisons and Local Jails. Bureau of Justice Statistics Special Report Washington, DC: Office of Justice Programs, U. S. Department of Justice. Retrieved March 19, 2007, from <http://www.ojp.usdoj.gov/bjs/pub/pdf/shsplj.pdf>
- Murphy, G. E., Armstrong, J. W., Hermele, S. L., Fischer, J. R., & Clendenin, W. W. (1979). Suicide and alco-

- holism: Interpersonal loss confirmed as a predictor. *Archives of General Psychiatry*, *36*, 65–69.
- National Center for Injury Prevention and Control (2007). WISQAR fatal injuries: Mortality reports. Atlanta, GA: Centers for Disease Control and Prevention. Retrieved May 30, 2007, from <http://webappa.cdc.gov/sasweb/ncipc/mortrate.html>
- Nawar, E. W., Niska, R. W., & Xu, J. (2007). National hospital ambulatory medical care survey: 2005 emergency department summary. Advance Data Volume Number 386 June 291-32. Retrieved June 18, 2008, from <http://www.cdc.gov/nchs/data/ad/ad386.pdf>
- Neale, J. (2000b). Suicidal intent in non-fatal illicit drug overdose. *Addiction*, *95*, 85–93.
- Neale, J. & Robertson, M. (2005). Recent life problems and nonfatal overdose among heroin users entering treatment. *Addiction*, *100*, 168–175.
- New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America. Final report*. DHHS Pub. No. SMA-03-3832. Rockville, MD: President's New Freedom Commission on Mental Health.
- Nock, M. K., & Kessler, R. C. (2006). Prevalence of and risk factors for suicide attempts versus suicide gestures: Analysis of the National Comorbidity Survey. *Journal of Abnormal Psychology*, *115*, 616–623.
- Office of Applied Studies (2006). Suicidal Thoughts, Suicide Attempts, Major Depressive Episode, and Substance Use Among Adults. The OAS Report Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved September 18, 2006, from <http://www.oas.samhsa.gov/2k6/suicide/suicide.pdf>
- Owen, F., Cross, A. J., Crow, T. J., Deakin, J. F., Ferrier, I. N., Lofthouse, R. et al. (1983). Brain 5-HT<sub>2</sub> receptors and suicide. *Lancet*, *2*, 1256.
- Owen, P. L. (2003). *Understanding suicide and addiction*. Center City, MN: Hazelden.
- Oyefeso, A., Ghodse, H., Clancy, C., & Corkery, J. M. (1999). Suicide among drug addicts in the UK. *British Journal of Psychiatry*, *175*, 277–282.
- Packman, W. L., Pennuto, T., Bongar, B., & Orthwein, J. (2004). Legal issues of professional negligence in suicide cases. *Behavioral Sciences and the Law*, *22*, 697–713.
- Palmer, B. A., Pankratz, V. S., & Bostwick, J. M. (2005). The lifetime risk of suicide in schizophrenia: A reexamination. *Archives of General Psychiatry*, *62*, 247–253.
- Paulozzi, L. J., Budnitz, D. S., & Xi, Y. (2006). Increasing deaths from opioid analgesics in the United States. *Pharmacoepidemiology and Drug Safety*, *15*, 618–627.
- Pfab, R., Eyer, F., Jetzinger, E., & Zilker, T. (2006). Cause and motivation in cases of non-fatal drug overdoses in opiate addicts. *Clinical Toxicology*, *44*, 255–259.
- Pokorny, A. D. (1983). Prediction of suicide in psychiatric patients. *Archives of General Psychiatry*, *40*, 249–257.
- Preuss, U. W., Koller, G., Barnow, S., Eikmeier, M., & Soyka, M. (2006). Suicidal behavior in alcohol-dependent subjects: The role of personality disorders. *Alcoholism: Clinical and Experimental Research*, *30*, 866–877.
- Preuss, U. W., Schuckit, M. A., Smith, T. L., Danko, G. P., Bucholz, K. K., Hesselbrock, M. N., et al. (2003). Predictors and correlates of suicide attempts over 5 years in 1,237 alcohol-dependent men and women. *American Journal of Psychiatry*, *160*, 56–63.
- Preuss, U. W., Schuckit, M. A., Smith, T. L., Danko, G. P., Buckman, K., Bierut, L., et al. (2002b). Comparison of 3190 alcohol-dependent individuals with and without suicide attempts. *Alcoholism: Clinical and*

*Experimental Research*, 26, 471–477.

- Preuss, U. W., Schuckit, M. A., Smith, T. L., Danko, G. P., Dasher, A. C., Hesselbrock, M. N., Hesselbrock, V. M., & Nurnberger, J. I. (2002a). A comparison of alcohol-induced and independent depression on alcoholics with histories of suicide attempts. *Journal of Studies on Alcohol*, 63, 498–502.
- Price, R. K., Risk, N. K., Haden, A. H., Lewis, C. E., & Spitznagel, E. L. (2004). Post-traumatic stress disorder, drug dependence, and suicidality among male Vietnam veterans with a history of heavy drug use. *Drug and Alcohol Dependence*, 76 Suppl, S31–S43.
- Rich, C. L., Fowler, R. C., Fogarty, L. A., & Young, D. (1988). San Diego suicide study III. Relationships between diagnoses and stressors. *Archives of General Psychiatry*, 45, 589–592.
- Rodell, D. E., Benda, B. B., Rodell, L. (2003). Suicidal thoughts among homeless alcohol and other drug abusers. *Alcoholism Treatment Quarterly*, 21, 57–74.
- Rossow, I. & Lauritzen, G. (1999). Balancing on the edge of death: Suicide attempts and life-threatening overdoses among drug addicts. *Addiction*, 94, 209–219.
- Rossow, I. & Lauritzen, G. (2001). Shattered childhood: A key issue in suicidal behavior among drug addicts? *Addiction*, 96, 227–240.
- Roy, A. (2001a). Characteristics of cocaine-dependent patients who attempt suicide. *American Journal of Psychiatry*, 158, 1215–1219.
- Roy, A. (2001b). Childhood trauma and suicidal behavior in male cocaine dependent patients. *Suicide and Life-Threatening Behavior*, 31, 194–196.
- Roy, A. (2002). Characteristics of opiate dependent patients who attempt suicide. *Journal of Clinical Psychiatry*, 63, 403–407.
- Roy, A. (2003a). African American and Caucasian attempters compared for suicide risk factors: A preliminary study. *Suicide and Life-Threatening Behavior*, 33, 443–447.
- Roy, A. (2003b). Characteristics of drug addicts who attempt suicide. *Psychiatry Research*, 121, 99–103.
- Roy, A. (2003c). Distal risk factors for suicidal behavior in alcoholics: Replications and new findings. *Journal of Affective Disorders*, 77, 267–271.
- Roy, A. (2004). Relationship of childhood trauma to age of first suicide attempt and number of attempts in substance dependent patients. *Acta Psychiatrica Scandinavica*, 109, 121–125.
- Roy, A. & Janal, M. N. (2007). Risk factors for suicide attempts among alcohol dependent patients. *Archives of Suicide Research*, 11, 211–217.
- Rudd, M. D. (2000). Integrating science into the practice of clinical suicidology: A review of the psychotherapy literature and a research agenda for the future. In R. W. Maris, S. S. Canetto, J. L. McIntosh, & M. M. Silverman (Eds.), *Review of Suicidology, 2000*. (pp. 47–83). New York: Guilford Press.
- Rudd, M. D. (2006). *The assessment and management of suicidality*. Sarasota, FL: Professional Resource Press.
- Rudd, M. D., Berman, A. L., Joiner, T. E., Nock, M.K., Silverman, M. M., Mandrusiak, M., et al. (2006a). Warning signs for suicide: Theory, research and clinical implications. *Suicide and Life-Threatening Behavior*, 36, 255–262.
- Rudd, M. D., Joiner, T., & Rajab, M. H. (2001). *Treating suicidal behavior: An effective, time-limited approach*. New York: The Guilford Press.

- Rudd, M. D., Mandrusiak, M., & Joiner Jr, T. E. (2006b). The case against no-suicide contracts: The commitment to treatment statement as a practice alternative. *Journal of Clinical Psychology, 62*, 243–251.
- Rudd, M. D., Williamson, B., & Trotter, D. (in press). The psychological and behavioral treatment of suicidal behavior: What are the common elements of treatments that work? *Oxford textbook of suicidology*.
- Shaffer, H. J., & Eber, G. B. (2002). Temporal progression of cocaine dependence symptoms in the US National Comorbidity Survey. *Addiction, 97*, 543–554.
- Shaikh, M. B., De Lanerolle, N. C., & Siegel, A. (1997). Brain Research. Serotonin 5-HT1a and 5-HT2/1c receptors in the midbrain periaqueductal gray differentially modulate defensive rage behavior elicited from the medial hypothalamus of the cat. *Brain Research, 765*, 198–207.
- Shaw, D. M., Camps, F. E., & Eccleston, E. G. (1967). 5-Hydroxytryptamine in the hindbrain of depressive suicides. *British Journal of Psychiatry, 113*, 1407–1411.
- Shea, S. C. (2002). *The practical art of suicide assessment: A guide for mental health professionals and substance abuse counselors*. New York: John Wiley.
- Shneidman, E. S. (1985). *Definition of suicide*. New York: Wiley.
- Silverman, M. M., Berman, A. L., Sanddal, N. D., O'Carroll, P. W., & Joiner, T. E. (2007). Rebuilding the Tower of Babel: A revised nomenclature for the study of suicide and suicidal behaviors part 2: suicide-related ideations, communications, and behaviors. *Suicide and Life-Threatening Behavior, 37*, 264–277.
- Simon, R. I. (2004). *Assessing and managing suicide risk: Guidelines for clinically based risk management*. Arlington, VA: American Psychiatric Publishing, Inc.
- Simon, R. I. (2006). Imminent suicide: The illusion of short-term prediction. *Suicide and Life-Threatening Behavior, 36*, 296–301.
- Suicide Prevention Resource Center and the American Association of Suicidology (2006). *Assessing and managing suicide risk: Core competencies for mental health professionals*.
- Tsuang, M. T., Fleming, J. A., & Simpson, J. C. (1999). Suicide and Schizophrenia. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention*. (pp. 287–299). San Francisco: Jossey-Bass.
- Turecki, G. (2005). Dissecting the suicide phenotype: The role of impulsive-aggressive behaviours. *Journal of Psychiatry and Neuroscience, 30*, 398–408.
- U.S. Air Force (2007). Air Force Suicide Prevention Program. Washington, DC: United States Air Force. Retrieved March 19, 2007, from [http://afspp.afms.mil/idc/groups/public/documents/webcontent/knowledge-junction.hcst?functionalarea=AFSuicidePreventionPrgm&doctype=subpage&docname=CTB\\_018094&incbanner=0](http://afspp.afms.mil/idc/groups/public/documents/webcontent/knowledge-junction.hcst?functionalarea=AFSuicidePreventionPrgm&doctype=subpage&docname=CTB_018094&incbanner=0)
- U.S. Public Health Service (2001). *National strategy for suicide prevention: Goals and objectives for action*. Washington, DC: Department of Health and Human Services. Retrieved January 17, 2008, from <http://mentalhealth.samhsa.gov/publications/allpubs/SMA01-3517/>
- van Hooff, A. J. L. (2000). A historical perspective on suicide. In R.W. Maris, A. L. Berman, & M. M. Silverman (Eds.), *Comprehensive textbook of suicidology*. (pp. 96–123). New York: The Guilford Press.
- Wenzel, A., Brown, G. K., & Beck, A. T. (in press). *Cognitive therapy for suicidal patients: Scientific and Clinical Applications*. Washington, DC: APA Books.
- Wilcox, H. C., Conner, K. R., & Caine, E. D. (2004). Association of alcohol and drug use disorders and completed suicide: An empirical review of cohort studies. *Drug and Alcohol Dependence, 76*, S11–S19.

- Wilke, D. J. (2004). Predicting suicide ideation for substance users: The role of self-esteem, abstinence, and attendance at 12-step meetings. *Addiction Research and Theory, 12*, 231–240.
- Willis, L. A., Coombs, D. W., Drentea, P., & Cockerham, W. C. (2003). Uncovering the mystery: Factors of African American suicide. *Suicide and Life-Threatening Behavior, 33*, 412–429.
- Windle, M. (1994). Characteristics of alcoholics who attempted suicide: Co-occurring disorders and personality differences with a sample of male Vietnam era veterans. *Journal of Studies on Alcohol, 55*, 571–577.
- Wines, J. D., Jr., Saitz, R., Horton, N. J., Lloyd-Travaglini, C., & Samet, J. H. (2004). Suicidal behavior, drug use and depressive symptoms after detoxification: A 2-year prospective study. *Drug and Alcohol Dependence, 76*, S21–S29.
- Yen, S., Shea, M. T., Pagano, M., Sanislow, C. A., Grilo, C. M., McGlashan, T. H., et al. (2003). Axis I and Axis II disorders as predictors of prospective suicide attempts: Findings from the collaborative longitudinal personality disorders study. *Ome, 375–381*.
- Young, M. A., Fogg, L. F., Scheftner, W. A., & Fawcett, J. A. (1994). Interactions of risk factors in predicting suicide. *American Journal of Psychiatry, 151*, 434–435.

# Appendix A—Methodology

To find the literature to support the development of this TIP, a search was conducted for the treatment information of primary interest to clinicians.

The clinical literature search began with the question, “How can providers most effectively address suicidal thoughts and behaviors in substance abuse treatment clients?” For this review, the following terms were used to search the National Library of Medicine’s (NLM) PubMed database and the American Psychological Association’s PsychINFO database:

- Suicide
- Suicidality
- Suicide ideation
- Screening or assessment

The search was conducted for literature published between 1998 and 2008 that was written in English. All fields (including title, abstract, and key terms) were searched.

Because the initial number of references retrieved in the PubMed and PsychINFO searches was so large (nearly 3,000 items in all), these searches were performed a second time limiting the literature to references that also addressed substance use disorders. To do this, a string of substance abuse-related terms was created that were added to the initial list of search terms; these were “drug abuse,” “drug dependence,” “substance abuse,” “substance dependence,” “addiction,” and “alcoholism.” Figure 1 shows the number of items found (or “hits”) for each search term in each database.

For each of the citations found, reference information and abstracts were printed and then reviewed by two reviewers (two reviewers were used to reduce any potential bias in the selection process). Reviewers eliminated any citations that focused on children, adolescents, or older adults specifically; they also eliminated any research concerning individuals with mental disorders that were not substance related.

In addition to the database search for journal articles, a search of books and monographs was also conducted in the Library of Congress catalog and on the Internet using the search term “suicide.” In total, 89 items were identified. This list of publications was also reviewed by two reviewers, who used information from the catalogs, publishers’ Web sites, and the <http://www.amazon.com> store catalog to determine if the publications located would be potentially useful for this TIP. These potentially useful books were then reviewed to determine whether they would be appropriate for the TIP.

Search Term	Citations Found	
	PubMed	PsychINFO
Suicidality and substance abuse string	67	65
Suicide and substance abuse string	571	175
Screening and suicidality	204	13
Screening and suicide	1645	36
Assessment and suicidality	111	44
Assessment and suicide	87	32
Suicide ideation and substance abuse	105	79

After references were selected using these search procedures, the bibliographies or citation lists from those references were reviewed to find older, seminal literature appropriate for this topic. Additionally, members of the TIP consensus panel and field reviewers suggested literature pertinent to the topic at hand.

An Internet search (using the Google search engine) was conducted to locate substance abuse treatment program materials (e.g., policies and procedures) to determine how programs were treating individuals with suicidal thoughts and behaviors. The list of terms used in the clinical literature search were also used to conduct this search. About 75 program Web sites were identified, but none were deemed appropriate to the TIP. Reviewers also looked specifically at Web sites of programs that were known for working with clients with co-occurring disorders and through lists of SAMHSA grantees.

These searches were performed again prior to submitting the TIP for clearance and will be performed every 6 months for a 5-year period after clearance has been received.

The final list of references to empirical studies selected by the reviewers as the most relevant and useful appears as an annotated bibliography at the end of this literature review. A complete bibliography of all relevant literature located during the search appears after the annotated bibliography. Not all references that appear in the TIP are abstracted in the annotated bibliography.

# Addressing Suicidal Thoughts and Behaviors in Substance Abuse Treatment

## Part 3—A Review of the Literature

### Section 2—Annotated Bibliography

#### Clinically Related Treatment and Intervention Studies

**Reference:** Brown, G. K., Ten Have, T., Henriques, G. R., Xie, S. X., Hollander, J. E., & Beck, A. T. (2005). Cognitive therapy for the prevention of suicide attempts: A randomized controlled trial. *JAMA*, *294*, 563–570.

**Purpose:** To evaluate a 10-session cognitive therapy intervention to prevent further suicide attempts by prior attempters.

**Conclusions:** The intervention was effective at preventing further suicide attempts by individuals who had recently attempted suicide.

**Methodology:** The authors approached 350 individuals consecutively admitted to the University of Pennsylvania hospital for suicide attempts over a 4-year period, 120 of whom were eligible and agreed to participate in the trial. Participants were randomly assigned to receive either the cognitive suicide prevention intervention or standard care. All participants were followed for 18 months after their initial assessment to evaluate further suicide attempts as well as other pertinent variables (e.g., level of depression, suicidal ideation, etc.). While the study was not limited to those with a substance use disorder, 73.3 percent of those who received the intervention and 61.7 percent of the control group had one or more substance use disorders.

**Summary of Results:** Participants in the cognitive therapy intervention were significantly more likely not to attempt suicide again during the followup period (approximately 50 percent less likely to do so). Those who received the intervention also had significantly lower levels of depression (as measured by the Beck Depression Inventory) at followup assessments than those in the control group. There were no significant differences with regard to suicidal ideation. Participants in the intervention attended a mean of 8.92 sessions of the intervention, but the number of sessions attended was not significantly related to further suicide attempts.

**Reference:** Cornelius, J. R., Salloum, I. M., Lynch, K., Clark, D. B., & Mann, J. J. (2001). Treating the substance-abusing suicidal patient. *Annals of the New York Academy of Sciences*, *932*, 78–90.

**Purpose:** To review previous research on treatment options for individuals with substance use disorders who are considered at high risk for suicide.

**Conclusions:** Research suggests that fluoxetine can reduce depressive symptoms (including suicidal ideation) in clients with co-occurring substance use disorders.

**Methodology:** The authors reviewed prior studies on the prevalence, presentation, and pharmacological treatment of clients with co-occurring depressive symptoms and substance use disorders who exhibit suicidal behavior.

**Summary of Results:** The authors reviewed research that finds that people with co-occurring depression and substance use disorders are at high risk for suicide and that depression screening and assessment instruments, such as the Beck Depression Inventory, can be used to screen those who are at greatest risk for suicide. They also review a number of earlier studies that have found fluoxetine beneficial for these clients in reducing depressive symptoms (including suicidal ideation) and alcohol consumption. Other research suggests that this medication may also help reduce other substance use.

**Reference:** Hendin, H., Lipschitz, A., Maltzberger, J. T., Haas, A. P., & Wynecoop, S. (2000). Therapists' reactions to patients' suicides. *American Journal of Psychiatry*, *157*, 2022–2027.

**Purpose:** To learn from therapists about their reactions to clients' suicides.

**Conclusions:** It will be helpful for clinicians after a client suicide to review the client's case with an independent group or person not connected to the therapist's treatment program.

**Methodology:** The authors administered a questionnaire to 26 counselors who had clients who committed suicide about their reactions to those events. Participants also wrote case studies about these clients and were involved in a workshop to discuss the cases.

**Summary of Results:** Therapists had strong emotional responses to client suicides (including guilt, shame, anger, betrayal, grief, and fear of being blamed). The majority of respondents (n=21) stated they would have made major changes in their treatment of these clients if they could go back and do so now (e.g., changing medication, hospitalizing clients, consulting with previous therapists, etc.). Some respondents expressed strong reservations about treating suicidal clients in the future. Most respondents did not find case reviews or their program's responses helpful, but did find participation in this study helpful.

**Reference:** Jobes, D. A. (2006). *Managing suicidal risk: A collaborative approach*. New York: Guilford Press.

**Purpose:** To provide tools that can effectively guide therapists in the assessment and treatment of suicidal clients.

**Conclusions:** The model described in the book can aid in the assessment and treatment of suicidal behavior and can be used to decrease malpractice liability.

**Methodology:** The author uses previous research and his own clinical experience to develop a model for clinicians to use in managing suicide risk.

**Summary of Results:** The author presents his model, Collaborative Assessment and Management of Suicidality (CAMS), for assessing and treating suicide risk in therapy and gives instructions and tools to help clinicians implement this model in their practices. This manual covers the development of the model, risk assessment, treatment planning, suicide status tracking, and improving outcomes for those at risk of suicide.

**Reference:** Linehan, M. M., Comtois, K. A., Brown, M. Z., Heard, H. L., & Wagner, A. (2006). Suicide attempt self-injury interview (SASII): Development, reliability, and validity of a scale to assess suicide attempts and intentional self-injury. *Psychological Assessment*, *18*, 303–312.

**Purpose:** To present information on the development, reliability, and validity of an instrument intended to assess suicide attempts and intentional self-injury.

**Conclusions:** This instrument, the Suicide Attempt Self-Injury Interview (SASII), has good interrater reliability and adequate validity to be used in clinical assessments.

**Methodology:** The authors administered the SASII to five groups of participants: the first made up of 75 inpatients at a psychiatric facility who were admitted for suicide attempts or intentional self-injury; the second made up of 75 patients admitted to an emergency room for suicide attempts or intentional self-injury; the third, fourth, and fifth groups made up of participants in one of four clinical trials for the treatment of women with borderline personality disorders. Participants were interviewed by teams of advanced undergraduate students and masters-level clinicians (all of whom were trained by the primary authors) and results were used to select items for the instrument and develop an appropriate scale. A randomly selected group of participants (n=39) were videotaped, and a second person used the instrument to assess their responses in order to evaluate interrater reliability. A number of comparisons were made between SASII findings and other data sources (e.g., therapist notes, physician/nurse assessments, medical records) to determine the validity of the items on this instrument.

**Summary of Results:** The final version of the SASII includes 6 screening items; 9 open-ended questions to assist with interviewer coding; and 22 items that assess frequency and timing of self-injury behaviors, methods and lethality for suicide attempts, suicidal and other intent in acts of self-harm, communication of intent, impulsivity of the act, likelihood of rescue, and physical condition and medical treatment after the act. The instrument asks interviewers to code each act as nonsuicidal self-injury, an ambivalent attempt at suicide, or a nonfatal suicide attempt. The authors found that interrater reliability was high for the nine assessor-rated items (with a median reliability of .956 and a range of .871–.978). The authors note that this scale allows for the assessment of the suicidality of an act independent of the consequences of the act. They conclude that it was, at the time of publication, the only available instrument that could assess both suicide attempts and intentional, nonsuicidal self-injury.

**Reference:** Linehan, M. M., Comtois, K. A., Murray, A. M., Brown, M. Z., Gallop, R. J., Heard, H. L., et al. (2006). Two year-randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorders. *Archives of General Psychiatry*, 63, 757–766.

**Purpose:** To evaluate dialectical behavior therapy (DBT) as an intervention to reduce suicidal behaviors among individuals with borderline personality disorder.

**Conclusions:** In accordance with prior research, the study found that DBT was effective in reducing suicide attempts among this population.

**Methodology:** The authors randomly assigned 101 women with borderline personality disorder and a history of suicide attempts (i.e., at least two attempted suicides or intentional self-injuries in the past 5 years and at least one in the past 8 weeks) to receive either DBT provided at a university outpatient clinic or to community-based therapy provided by expert clinicians. The community-based control treatment was matched to the DBT intervention according to therapist sex, availability, expertise, allegiance, training and experience, consultation availability, and institutional prestige. Participants received 1 year of treatment and were assessed again 1 year after treatment concluded. A large number of participants did have a co-occurring lifetime diagnosis of a substance use disorder (78.8 percent of those receiving DBT and 67.3 percent of the control group) and a substantial number had a current substance use disorder (23 percent of those receiving DBT and 36.7 percent of the control group).

**Summary of Results:** Participants who received the DBT intervention were about half as likely to make a suicide attempt over the course of both the treatment and followup. They also had significantly lower rates of hospitalization for suicidal ideation and a lower medical risk resulting from suicide attempts as well as self-injurious acts. Both groups made improvements with regard to suicidal ideation and having reasons for living, with no significant differences between the two groups. Participants in DBT were also half as likely to drop out of treatment and had fewer psychiatric hospitalizations and psychiatric-related emergency room visits.

**Reference:** McAdams, C. R., & Foster, V. A. (2002). An assessment of resources for counselor coping and recovery in the aftermath of client suicide. *Journal of Humanistic Counseling, Education and Development, 41*, 232–241.

**Purpose:** To evaluate the use of coping resources by counselors who have had clients commit suicide.

**Conclusions:** Counselors need professional assistance and proactive supervision when a client dies by suicide. More needs to be done in counselor education and development to prepare counselors for the potential impact of a client's suicide.

**Methodology:** The authors conducted telephone interviews with 66 counselors who had previously been identified as having a client who died by suicide (through a national survey of client suicide). Respondents were asked to rate the utility of different resources available to support them in the wake of these deaths. They were also asked questions to elicit their advice for other counselors and for the treatment system as a whole.

**Summary of Results:** Respondents considered the most useful resources (in order of most useful to least) to be having a personal therapist, meeting with their supervisor regarding the event, undergoing a “psychological autopsy” with their supervisor, attending the client's funeral, family support, and preservice or inservice instruction on how to deal with such a situation (which were both ranked the same). The authors state conclusions based on respondents advice to others.

**Reference:** Rudd, M. D., Mandrusiak, M., & Joiner Jr, T. E. (2006). The case against no-suicide contracts: The commitment to treatment statement as a practice alternative. *Journal of Clinical Psychology, 62*, 243–251.

**Purpose:** To review research on the use of “no-suicide” contracts with clients and determine if there is any support for their effectiveness.

**Conclusions:** There are a number of conceptual, practical, and empirical problems with the use of these contracts and no evidence that supports their effectiveness. Instead of their use, the authors propose a commitment to treatment statement in which a client expresses his or her commitment to a treatment plan, agrees to communicate openly with the counselor, and agrees to access emergency services during a crisis that threatens his or her treatment.

**Methodology:** The authors conducted a review of the literature on client contracts with counselors to not harm or kill themselves and to seek assistance when feeling suicidal (known also as no-suicide contracts, safety agreements, suicide prevention contracts).

**Summary of Results:** There are significant problems with the definition of these agreements in the literature as well as procedural questions, such as whether this practice should be considered a clinical intervention or an administrative procedure. Also, there are few studies that evaluate the effectiveness of such contracts, and most of those that do exist have some methodological problems. Based on the literature that does exist, however, the authors conclude that there is no empirical support for the use of these contracts and propose an alternative.

**Reference:** Weiss, R. D. & Hufford, M. R. (1999). Substance abuse and suicide. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention* (pp. 300–310). San Francisco: Jossey-Bass.

**Purpose:** To present information regarding the relationship of substance abuse and suicide and how to assess and treat suicidal behaviors in people who abuse substances.

**Conclusions:** Substance use disorders substantially increase the risk of suicide, and clinicians providing substance abuse treatment need to assess and manage suicide risk in this population.

**Methodology:** The authors reviewed prior research regarding the prevalence, evaluation, and treatment of suicidal behaviors among people who abuse substances.

**Summary of Results:** The authors explain some of the methodological problems involved in estimating suicide rates for people who abuse substances and give some estimates from prior research. They discuss a number of factors that may contribute to suicides in this population including the effects of acute intoxication and co-occurring disorders (especially depressive disorders and antisocial personality disorder). The authors also discuss how to evaluate suicide risk in this population and how to manage, in clinical settings, a client who abuses substances and is suicidal.

## Research Related Studies

**Reference:** Borges, G., Walters, E. E., & Kessler, R. C. (2000). Associations of substance use, abuse, and dependence with subsequent suicidal behavior. *American Journal of Epidemiology*, 151, 781-789.

**Purpose:** To determine the relationship between substance use and substance use disorders and subsequent suicidal behavior in a large general population sample.

**Conclusions:** Both substance use and substance use disorders have a significant impact on the number of suicide attempts, even after controlling for co-occurring mental disorders and sociodemographic factors.

**Methodology:** The authors applied discrete-time survival analysis to data from the U.S. National Comorbidity Survey (NCS) to determine the relationship between retrospective reports of prior substance use and substance use disorders and the onset of suicidal behaviors (including suicide attempts, suicidal ideation, and suicide planning).

**Summary of Results:** After controlling for co-occurring mental disorders that began before a first suicide attempt and sociodemographic factors, the authors found that current substance use (for all classes of substances in the study) were significantly related to higher rates of suicide attempts. Substance use disorders were also significantly associated with higher rates of suicide attempts, but, while all substance use disorders increased the odds of an attempt above that seen for substance use alone, the odds of an attempt following the development of a substance use disorder were significantly higher for only three of the substances evaluated: (1) alcohol use disorders, (2) heroin use disorders, and (3) inhalant use disorders. The authors found that the number of substances used increased the odds of a suicide attempt far more than did the type of substance used, as the odds were not significantly different for different types of substances. For most substances, current substance use (at the time of the suicide attempt) was what mattered, although there was a significant relationship between suicide attempts and past use of heroin and marijuana. The authors also found that substance use combined with suicidal ideation was associated with a greater risk of suicide attempt even when there was no suicide plan.

**Reference:** Cavanagh, J. T., Carson, A. J., Sharpe, M., & Lawrie, S. M. (2003). Psychological autopsy studies of suicide: A systematic review. *Psychological Medicine*, 33, 395-405.

**Purpose:** To examine the information that can be gained from psychological autopsies of individuals who have died by suicide.

**Conclusions:** There is a strong relationship between mental disorders and suicides according to the psychological autopsy literature. Given the high incidence of suicide among those with mental disorders, all disorders (including substance abuse) should be screened for in primary care settings.

**Methodology:** The authors used well-known databases to search for articles about suicide that employed a psychological autopsy method (a method that conducts interviews with those who best knew the deceased and

reviews corroborating resources such as hospital records and clinician case notes). These results were supplemented with reports identified through reference lists and through the authors' prior knowledge. Comparisons were made regarding findings across various studies.

**Summary of Results:** Of 154 articles originally identified, 76 met inclusion criteria, 22 of which were case-control studies. In the majority of the cases studied (with a median proportion of 91 percent for case studies and 90 percent for case-control studies), the individual had one or more mental disorders. Rates of co-occurring mental and substance use disorders were also high in the case studies. As expected, affective disorders were the most common type of disorder. There were not, however, sufficient data to draw conclusions about most specific disorders in relation to suicide deaths.

**Reference:** Cherpitel, C. J., Borges, G. L., & Wilcox, H. C. (2004). Acute alcohol use and suicidal behavior: A review of the literature. *Alcoholism: Clinical & Experimental Research*, 28, 18S–28S.

**Purpose:** To review previous research on the relationship between acute alcohol use or intoxication and suicidal behaviors.

**Conclusions:** In spite of methodological problems with the research, it appears that the risk of suicide is elevated during or soon after alcohol use. The use of a case-crossover method may improve data gathering regarding this relationship.

**Methodology:** The authors reviewed literature published between 1991 and 2001 on the relationship between alcohol use and suicidal behavior for adults (age 19 and older), including coroners' case studies, psychological autopsies, and research specifically on acute alcohol use and its relation to suicidal behaviors (both suicide attempts and suicide deaths).

**Summary of Results:** Although the authors found a good deal of literature on the relationship between drinking and suicidal behaviors, much of it had various methodological problems including selection bias, lack of control groups, and small sample sizes. Studies showed a wide range of cases involving both suicide attempts (ranging from 10 to 73 percent) and completed suicides (ranging from 10 to 69 percent). The authors propose the use of an epidemiological case-crossover method, in which an individual acts as his or her own control, to determine the effect of a transient factor (in this case, acute drinking) on the relative risk of acute events (in this case, suicide attempts or deaths). The authors conclude that the use of this method will help researchers find more accurate data concerning alcohol consumption patterns and suicidal behaviors.

**Reference:** Conner, K. R. & Duberstein, P. R. (2004). Predisposing and precipitating factors for suicide among alcoholics: Empirical review and conceptual integration. *Alcoholism, Clinical and Experimental Research*, 28, 6S–17S.

**Purpose:** To review literature regarding suicidal behaviors by people with alcohol use disorders and to propose a model to improve research, prevention, and treatment related to this problem.

**Conclusions:** Suicidal acts by individuals with alcohol use disorders appear to be affected by externalizing factors (i.e., aggression/impulsivity and severity of alcohol use disorder), internalizing factors (i.e., negative affect and hopelessness), as well as by major depressive episodes and stressful life events (especially those involving interpersonal conflict).

**Methodology:** The authors conducted a general review of literature regarding suicide by people with alcohol use disorders to determine those factors that had the greatest influence on suicidal behavior in this population.

**Summary of Results:** Based on their review of the literature, the authors developed a model that includes the most prominent factors involved in suicidal behaviors by people with alcohol use disorders. The model includes externalizing factors (i.e., aggression/impulsivity and severity of alcohol use disorder), internalizing factors (i.e.,

negative affect and hopelessness), and precipitating factors (i.e., major depressive episodes and stressful life events, especially ones involving interpersonal conflict). They review the research that supports this model as well as some of its limitation, such as the fact that it does not address gender-related patterns in suicidal behaviors, the role of acute alcohol use at the time of suicide, and the availability of lethal means of suicide. The authors believe that this model can help suicide prevention efforts, treatment of people with alcohol use disorders, and future research on this topic.

**Reference:** Conner, K. R., Duberstein, P. R., Conwell, Y., Herrmann, J. H., Jr., Cox, C., Barrington, D. S., et al. (2000). After the drinking stops: Completed suicide in individuals with remitted alcohol use disorders. *Journal of Psychoactive Drugs*, 32, 333–337.

**Purpose:** To evaluate the reasons for suicide by people who have remitted alcohol use disorders.

**Conclusions:** There are two distinct groups of individuals with alcohol use disorders in remission who commit suicide: older (age  $\geq 50$ ) individuals who have major depression and younger (age  $< 50$ ) ones who have psychotic disorders.

**Methodology:** The authors conducted a retrospective case study of a community sample of individuals who died by suicide. The sample covered deaths in one New York county over a 31-month period for whom informants were available who could accurately discuss the individual's state during the last week of his or her life. After locating cases through county records, the authors contacted next of kin of decedents and invited their participation. For those who agreed (N=141), in-person interviews were conducted. The average length of time between the suicide and interview was 8.7 weeks for individuals with active alcohol use disorders and 11.3 weeks for those whose disorders were in remission. The authors also conducted telephone interviews with others who might have knowledge about the decedent's final week, including physicians, coworkers, and friends. Medical, criminal justice, and educational records were also consulted.

**Summary of Results:** The authors found 38 suicide cases in which the individual met DSM-III-R criteria for a current alcohol use disorder and 17 in which the individual had a past but not current alcohol use disorder (i.e., had a disorder that was in remission according to DSM-III-R criteria). In comparing cases where the decedent had an active alcohol use disorder to ones in which he or she had a disorder in remission, the authors found significant differences according to the individual's age. Individuals with remitted alcohol use disorders who committed suicide tended to be either younger people (defined as under 50 years of age) who had psychotic disorders or older people (defined as 50 years or more in age) who had major depression.

**Reference:** Conner, K. R., Hesselbrock, V. M., Schuckit, M. A., Hirsch, J. K., Knox, K. L., Meldrum, S., et al. (2006). Precontemplated and impulsive suicide attempts among individuals with alcohol dependence. *Journal of Studies on Alcohol*, 67, 95–101.

**Purpose:** To compare characteristics and correlates of suicide attempts by individuals with alcohol use disorders according to whether the attempts were precontemplated or impulsive.

**Conclusions:** Suicide prevention for individuals with alcohol use disorders should take into account alcohol-related aggression and depressive symptoms in determining who is at high risk for suicide.

**Methodology:** The authors used data from a large, six-site family study of adults in treatment for alcohol use disorders, their families, and control families (The Collaborative Study on the Genetics of Alcoholism). The authors looked specifically at participants in the study who had current alcohol dependence diagnoses and who reported a history of one or more suicide attempts, including those who precontemplated their suicide attempt (n=330) and those who attempted suicide impulsively (n=343). A group of individuals with alcohol dependence who had no history of suicide attempts (n=3,114) were used for a controlled comparison.

**Summary of Results:** Individuals in the study who precontemplated their suicide attempts, in comparison with those who impulsively attempted suicide, committed the act with greater intent to die and were more likely to require medical treatment as a result of the attempt. Precontemplators, in comparison with noncontemplators, were more likely to be dependent on illicit drugs in addition to alcohol and were more likely to have a history of depression. Those who attempted suicide on impulse were more likely to be women and were more likely to demonstrate higher levels of alcohol-related aggression in general, in comparison with contemplators. The authors did not find that individuals who made impulsive suicide attempts were more likely to have antisocial personality disorder or to have been drinking before the attempt.

**Reference:** Darke, S., Ross, J., Williamson, A., Mills, K. L., Havard, A., & Teesson, M. (2007). Patterns and correlates of attempted suicide by heroin users over a 3-year period: Findings from the Australian treatment outcome study. *Drug and Alcohol Dependence*, 87, 146–152.

**Purpose:** To determine rates and correlates of suicide attempts among Australian heroin users.

**Conclusions:** Heroin users who report social isolation, suicidal ideation, and/or prior suicide attempts should be given regular, brief suicide screenings.

**Methodology:** The authors conducted 1-, 2-, and 3-year followup interviews with 387 heroin users who had participated in Australian Treatment Outcome Study (ATOS), a large study of treatment outcomes for individuals with heroin dependence. Participants were asked about suicide attempts, suicidal ideation, drug use, and treatment participation, and were also assessed regarding general mental health and major depression in particular.

**Summary of Results:** During the 3-year followup period, 11.6 percent of participants made a suicide attempt. The factors significantly associated with increased rates of suicide attempts included suicide attempts before the baseline assessment, suicidal ideation at baseline, having a suicide plan at baseline, being socially isolated at baseline, major depression at baseline, posttraumatic stress disorder at baseline, and using a greater number of different drugs in the month prior to the assessment. If an individual had made a prior suicide attempt, he or she was five times more likely to make another attempt during the 3-year followup. Attempts during the followup were also associated with further attempts during the followup period. Nearly 25 percent of those who reported suicidal ideation at the baseline assessment made an attempt during the followup period. Those who reported social isolation at baseline were more than three times as likely to attempt suicide during followup. The relationship of major depression at baseline to suicide attempts during followup reduced in significance over the course of followup, so that while major depression was strongly associated with suicide attempts before the 1-year followup, it was weakly associated with attempts during the next 2 years. There were declines in the number of suicide attempts by participants over the course of the study, although these declines were not apparent for men until the second year. Even after these declines, however, rates of suicide attempts remained higher than seen among the general Australian population. The reductions in suicide attempts during followup may reflect the effect of substance abuse treatment received at the beginning of the study.

**Reference:** Davis, T., Gunderson, J. G., & Myers, M. (1999). Borderline personality disorder. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention* (pp. 311–331). San Francisco: Jossey-Bass.

**Purpose:** To explain high rates of suicidal behaviors among individuals with borderline personality disorder (BPD) and suggest best practices for managing those behaviors in this population.

**Conclusions:** People with BPD are at high risk for suicide attempts, and the lethality of those attempts is increased if they have a co-occurring substance use disorder.

**Methodology:** The authors review prior research regarding suicidal behaviors by people with BPD.

**Summary of Results:** Individuals with BPD frequently attempt suicide, and the lethality of those attempts is increased among those who have a co-occurring substance use disorder. Co-occurring substance use disorders also appear to increase impulsivity, suicidal ideation, and nonlethal self-harm in this population. Rates of suicide are especially high among those who have co-occurring BPD, depression, and a substance use disorder. However, rates of suicide appear to be lower among those who have co-occurring BPD and an eating disorder. The authors also discuss research and their clinical experience regarding the assessment of suicide risk, the role of significant attachments, and the management of suicidality (including the use of hospitalization and medication) for this population.

**Reference:** Harned, M. S., Najavits, L. M., & Weiss, R. D. (2006). Self-harm and suicidal behavior in women with comorbid PTSD and substance dependence. *American Journal on Addictions, 15*, 392–395.

**Purpose:** To evaluate factors relating to self-harm and suicidal behaviors among women with co-occurring posttraumatic stress disorder (PTSD) and substance dependence.

**Conclusions:** Women with co-occurring PTSD and substance use disorders who attempt suicide and/or engage in self-harm behaviors typically see those disorders as contributing to their actions. Women with these co-occurring disorders who attempt suicide and/or engage in self-harm behaviors differ from those who do not engage in these behaviors by the types of substance dependence disorders they have and by their stated reasons for living.

**Methodology:** The authors evaluated histories of self-harm and suicidal behaviors among a group of 65 women who had PTSD and substance dependence. Participants were voluntarily in an outpatient treatment program that addressed both disorders and did not have a co-occurring psychotic disorder or mania. They were assessed using the Trauma History Questionnaire, the Suicidal Behaviors Questionnaire, and a revised version of the Reasons for Living Inventory.

**Summary of Results:** Of the 65 women in the study, 32.3 percent (n=21) had made a suicide attempt and/or engaged in deliberate self-harm in the 3-month period preceding the study. Of those women, 13 (61.9 percent) reported alcohol and/or drug use immediately before the self-harm or suicide attempt occurred. There were no significant differences in the number or types of trauma experiences, age at first trauma experience, or demographic variables. Those who had attempted suicide or engaged in self-harm behaviors, in comparison with those who had not, were significantly more likely to have a diagnosis of alcohol dependence and/or polysubstance dependence and significantly less likely to have a diagnosis of opioid dependence. There were, however, no significant differences in substance abuse diagnoses. Individuals who had not attempted suicide or engaged self-harm in the past 3 months were significantly more likely to state that their reasons for living included concerns about their children, a wish to survive, and a belief that they could cope with what was going on. Individuals who did attempt suicide or engage in self-harm behavior often indicated that their PTSD and/or substance use disorder was a contributing factor, and 61.9 percent stated that they drank alcohol or used drugs immediately before the suicide attempt/self-harm episode.

**Reference:** Harris, E. C., & Barraclough, B. (1997). Suicide as an outcome for mental disorders: A meta-analysis. *British Journal of Psychiatry, 170*, 205–228.

**Purpose:** To conduct a meta-analytic review of research regarding the relationship of mental disorders to suicide.

**Conclusions:** Many mental disorders (36 of the 44 analyzed) increase suicide rates significantly. Major exceptions included mental retardation and dementia.

**Methodology:** The authors searched for English language articles in Medline published between 1966 and 1993 that related to mortality and various mental disorders and added other references located through journal tables of contents and bibliographies. They located 249 studies that met all of their inclusion criteria. These were studies that described the mortality of a group with a clearly defined mental disorder, provided a mean or median, followed the cohort for 2 years or more, were published in a peer-reviewed journal, lost less than 10 percent of participants during followup, provided observed numbers for suicides, and provided expected numbers of suicides or provided sufficient information to estimate expected numbers using World Health Organization (WHO) data. The authors extracted data from these studies regarding deaths that were stated as suicides when available, and estimated suicides based on WHO reports in other cases. Meta-analytic statistical methods were used to compare data across studies.

**Summary of Results:** Most of the disorders considered (36 of 44) were related to significantly higher rates of suicide. Major exceptions were mental retardation and dementia. All substance use disorders were associated with increased suicide rates. The suicide risk associated with specific disorders varied widely. The authors also noted that a number of medical disorders appeared to increase suicide risk as well. In some cases, however, these results were based on as few as a single study. Studies were included from around the world, and results may not be generalizable to a particular locale. Subjects also were often drawn from hospitalized populations and therefore reflected people with severe disorders.

**Reference:** Ilgen, M. A., Harris, A. H., Moos, R. H., & Tiet, Q. Q. (2007). Predictors of a suicide attempt one year after entry into substance use disorder treatment. *Alcoholism, Clinical and Experimental Research*, *31*, 635–642.

**Purpose:** To determine which demographic and treatment-related factors are associated with increased risk for suicide among substance abuse treatment clients.

**Conclusions:** Substance abuse treatment may serve a protective function against suicide attempts, especially if the individual is more fully engaged in treatment.

**Methodology:** The authors used data from 8,807 clients who received treatment for substance use disorders through the Department of Veterans Affairs healthcare system. Participants were assessed at intake and again 1 year after treatment concluded. The authors use a particular model for analyzing data, the MacArthur Model, to determine the relative import of a variety of risk factors.

**Summary of Results:** At the 1-year followup, 4 percent of participants (n=314) reported a suicide attempt in the past 30 days. Individuals who had, at baseline, higher levels of psychiatric and/or suicidal symptoms, more recent problem drinking, and/or a longer duration of cocaine use also had higher rates of recent suicide attempts at the followup assessment. Individuals who were involved in the criminal justice system before their first assessment were less likely to have made a recent suicide attempt at the followup assessment. A greater number of days of substance abuse treatment before the baseline assessment was associated with significantly lower suicide attempt rates, but the number of days of psychiatric treatment was not. The authors also found that a greater engagement in substance abuse treatment during treatment episode following the baseline assessment was associated with lower suicide risk.

**Reference:** Joe, S., Baser, R. E., Breeden, G. K., Neighbors, H. W., & Jackson, J. S. (2006). Prevalence of and risk factors for lifetime suicide attempts among blacks in the United States. *JAMA*, *296*, 2112–2123.

**Purpose:** To determine the prevalence and correlates of suicidal behaviors (i.e., suicidal ideation, suicide planning, and suicide attempts) among Black Americans in the United States, both African-American and Afro-Caribbean.

**Conclusions:** Rates of suicidal behaviors are very high among Caribbean Black men, and healthcare professionals should do more to screen for suicidal behavior in this population. Providers should also be aware of the increased risk associated with mental and substance use disorders

**Methodology:** The authors used data from the National Survey of American Life (a general population survey of adults in the United States, which collected data in 2001–2003). The survey assessed respondents' mental health using a modified version of the Composite International Diagnostic Interview, and included 3,570 African-American respondents and 1,621 Black Americans of Caribbean descent.

**Summary of Results:** The authors found that 4.1 percent of all Black Americans reported a suicide attempt during their lifetime, a figure significantly higher than found in earlier surveys but in line with the figure of 4.6 percent for the general population found in a National Comorbidity Survey. However, Caribbean Black men had considerably higher rates of suicide attempts (7.5 percent) than African-American men (2.7 percent), African-American women (5 percent), or Caribbean Black women (2.7 percent), a finding that runs counter to findings of other general population surveys that show that women have higher rates of suicide attempts than men. Factors that related to suicidal behaviors among all Black Americans included education (individuals with less than 12 years of formal education were 3.64 times as likely to attempt suicide as those with 16 years or more of education), geographic location (respondents in the Midwest and Northeast had the highest rates of suicide attempts and ideation respectively, while those in the South had the lowest), and being born in a recent birth cohort (risk for attempted suicide was highest among individuals in the 15 to 24 year old group). Individuals with a psychiatric disorder were 8.2 times more likely to attempt suicide and about 5 times more likely to have suicidal ideation. Having 3 or more disorders made an individual 17 times more likely to have attempted suicide and about 10 times more likely to have suicidal ideation. All substance use disorders increased the odds of both suicidal ideation and making a suicide attempts. Alcohol dependence increased the odds of suicidal ideation the most (making it 3.97 times as likely) but drug dependence increased the odds of making a suicide attempt the most (making it 6.34 times as likely).

**Reference:** Kessler, R. C., Berglund, P., Borges, G., Nock, M., & Wang, P. S. (2005). Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990-1992 to 2001-2003. *JAMA*, 293, 2487–2495.

**Purpose:** To gain a clearer picture of suicidal behaviors (including ideation, plans, gestures, and attempts) among the United States population, as well as provide information on the treatment of such behaviors.

**Conclusions:** A greater effort should be made to reach untreated people who engage in suicidal behaviors. However, despite an increase in the percentage of people making a suicidal gesture or attempt who receive treatment, there have not been significant decreases in suicidal behaviors during the period covered by these surveys.

**Methodology:** The authors used data from both the National Comorbidity Survey (NCS) and the National Comorbidity Survey Replication (NCS-R) surveys, which asked the same set of questions to two different cohorts of adults, first in 1990–1992 and then in 2001–2003. Questions included ones concerning suicidal behaviors (i.e., ideation, planning, gestures, and attempts) and their treatment in the year prior to the survey.

**Summary of Results:** The general findings regarding suicidal ideation, planning, gestures, and attempts remained consistent across the NCS and the NCS-R. However, there were a few statistically significant differences in other matters: Between the two surveys, there was a significant increase in the percentage of people who had suicidal ideation who then made a plan and a significant decrease in the percentage of people who had made a plan who classified their activity as a gesture (or “cry for help”) and not an actual attempt. In both the NCS and the NCS-R, the majority of people who had suicidal ideation (80 and 82 percent, respectively), planned suicide (89 and 95 percent), made a suicidal gesture in order to get help (96 percent and 80 percent), and made a suicide attempt (89 and 88 percent) had one or more mental disorders (including substance-related

ones). The most common disorder among those with suicidal behaviors was major depression, but rates of substance use disorders were also high among those who had suicidal behaviors. The surveys also show a significant improvement in the percentage of people receiving treatment who had either made a suicidal gesture (going from 40.3 percent to 92.8 percent) or a suicide attempt (going from 49.6 percent to 79 percent).

**Reference:** Mumola, C. J. (2005). *Suicide and homicide in State prisons and local jails*. Bureau of Justice Statistics Special Report. Washington, DC: Office of Justice Programs, U. S. Department of Justice. Retrieved August 14, 2007, from <http://www.ojp.usdoj.gov/bjs/pub/pdf/shsplj.pdf>

**Purpose:** To determine rates of suicide and homicide for prisoners in State prisons and local jails.

**Conclusions:** Despite decreases, suicide remains a significant problem for those who are incarcerated.

**Methodology:** The author used data that the Department of Justice accumulated between 1980 and 2002 to determine rates of suicides in State prisons and local jails and correlates for those suicides.

**Summary of Results:** The rates of suicides in jails declined significantly from 1983 (when there were 129 suicides per 100,000 inmates) to 2002 (when there were 47 per 100,000). The rates of suicides in State prisons also declined from 1980 to 2002, although not quite as steeply (going from 34 to 16 per 100,000 in that period). Suicide rates in 2001 and 2002 varied a great deal by State or smaller jurisdiction but were fairly consistent across regions of the United States. Among jail inmates, the suicide rate was significantly lower for jails in the largest 50 jurisdictions than for others and highest in the smallest facilities (i.e., jails that held 50 or fewer inmates at a time). Suicide rates in jails were higher for males than for females, and for Whites than for African Americans or Latinos. Generally, the rate was higher for older inmates than younger, but the exception was inmates under the age of 18 (who had the highest rate of suicides of any age group). Violent offenders were more likely to commit suicide than nonviolent ones. These same demographic patterns were seen in suicide rates for State prisoners. Suicides among jail inmates were most likely to occur in the first 30 days of incarceration, but the majority (65 percent) of suicides in State prisons were committed by inmates who had served 3 or more years of their sentences.

**Reference:** Nock, M. K. & Kessler, R. C. (2006). Prevalence of and risk factors for suicide attempts versus suicide gestures: Analysis of the National Comorbidity Survey. *Journal of Abnormal Psychology, 115*, 616–623.

**Purpose:** To differentiate characteristics of people who make suicidal gestures (i.e., attempts that are self-identified as not serious and as cries for help) from those who make suicide attempts with the intent to die.

**Conclusions:** Since a large proportion of those who reported suicide attempts (42 percent) qualified the statement by saying it was a cry for help and not serious attempt to die, future research on suicide should inquire about intent to die.

**Methodology:** The authors used data from the National Comorbidity Survey, which asked respondents to state whether past suicide attempts were “cries for help,” which were not accompanied by a desire to die, or were serious attempts that failed or attempts in which the individual wanted to die but was unsure the method would work.

**Summary of Results:** Of respondents who initially reported a suicide attempt, 42 percent qualified that statement by saying the attempt was a cry for help and did not reflect a serious attempt to die. Respondents who stated their attempt was a cry for help not accompanied by a serious intent to die (identified as suicidal gesturers) were, in comparison with those who made suicide attempts (or attempters), more likely to be female; more likely to have graduated from high school or have some education after high school not resulting in a college degree; less likely to have a lifetime diagnosis of a drug use disorder, major depression, conduct disorder, anti-

social personality disorder, or three or more mental disorders; and less likely to have a history involving multiple episodes of sexual molestation.

**Reference:** Preuss, U. W., Schuckit, M. A., Smith, T. L., Danko, G. P., Bucholz, K. K., Hesselbrock, M. N. et al. (2003). Predictors and correlates of suicide attempts over 5 years in 1,237 alcohol-dependent men and women. *American Journal of Psychiatry*, *160*, 56–63.

**Purpose:** To determine factors related to suicide attempts by people with alcohol dependence.

**Conclusions:** Clinicians may be able to identify which clients with alcohol dependence will be more likely to make a suicide attempt using the profile presented here.

**Methodology:** The authors used data gathered through the Collaborative Study on the Genetics of Alcoholism, which administered semistructured interviews with people who had alcohol dependence at the start of the study in 1989. Respondents who were available (n=1,237) were interviewed again 5 years later. Both interviews included questions about suicide attempts, other psychiatric diagnoses, alcohol and drug use histories, and other factors.

**Summary of Results:** Approximately 4.5 percent of the sample (n=56) reported a suicide attempt during the 5-year followup period. More than half of those individuals (51.8 percent) had made previous suicide attempts. Individuals who made an attempt during followup were also significantly more likely, at the baseline assessment, to be younger, to be separated or divorced, to have a substance-induced psychiatric disorder, to have a drug dependence disorder, and to have received substance abuse treatment. Suicide attempters also appeared to have more severe alcohol use disorders at baseline according to a number of measures (e.g., age of onset for drinking, number of DSM-III-R criteria for alcohol dependence met, and number of withdrawal symptoms).

**Reference:** Roy, A. (2003). Characteristics of drug addicts who attempt suicide. *Psychiatry Research*, *121*, 99–103.

**Purpose:** To determine personal characteristics that may identify people with drug use disorders who have an elevated risk for suicide.

**Conclusions:** It is likely that a number of factors may contribute to suicidal behavior by individuals who have drug use disorders, including both distal factors (e.g., family history of suicidal behavior, childhood abuse and/or neglect) and proximal factors (e.g., major depression, alcohol dependence).

**Methodology:** The authors assessed 449 clients who were in treatment for opioid or cocaine dependence at a Department of Veterans Affairs program using the Childhood Trauma Questionnaire, the Eysenck Personality Questionnaire, and the Addiction Severity Index (ASI). Respondents were also asked about previous suicide attempts and suicidal behaviors in their families.

**Summary of Results:** Of the 449 assessed, 175 had made one or more suicide attempts. Those who had attempted suicide were significantly younger, more likely to be female, more likely to have a lifetime history of major depression, to have been prescribed antidepressants, to have a lifetime diagnosis of alcohol dependence, to have a family history of suicidal behaviors, and to have a history of childhood abuse and/or neglect. On the psychological tests that were administered, those who had attempted suicide had significantly higher Eysenck Personality Questionnaire scores on scales of psychoticism, neuroticism, and introversion and a higher mean psychiatric composite score on the ASI.

**Reference:** Rudd, M. D., Berman, A. L., Joiner, T. E., Jr., Nock, M. K., Silverman, M. M., Mandrusiak, M., et al. (2006). Warning signs for suicide: Theory, research, and clinical applications. *Suicide and Life-Threatening Behavior*, 36, 255–262.

**Purpose:** To explain warning signs for suicide based on research and consensus recommendations.

**Conclusions:** Research and clinical experience suggest that there are certain common warning signs for suicide of which clinicians should be aware.

**Methodology:** The authors review previous research and draw on their own clinical experience and expert consensus in order to describe warning signs for suicide.

**Summary of Results:** The authors explain the differences between “warning signs” and “risk factors.” Drawing on prior research and consensus recommendations from the American Association of Suicidology working group, they also provide a list of warning signs summarized in the acronym IS PATH WARM and recommendations for future research.

**Reference:** Rudd, M. D. (2000). Integrating science into the practice of clinical suicidology: A review of the psychotherapy literature and a research agenda for the future. In R. W. Maris, S. S. Canetto, J. L. McIntosh, & M. M. Silverman (Eds.), *Review of suicidology* (pp. 47-83). New York: Guilford Press.

**Purpose:** To review the best interventions available for reducing suicidality.

**Conclusions:** Some procedural changes show promise as ways to reduce client suicidality (i.e., intensive case management, improved access to 24-hour services, home visits by nursing staff). Among therapeutic interventions, cognitive–behavioral approaches are also promising.

**Methodology:** The author searched for empirical studies on treatment interventions and changes in program practice intended to reduce suicidality. He located 23 randomized or controlled studies that targeted suicidality, which are summarized in the article.

**Summary of Results:** Included in the 23 studies the author found that met his inclusion criteria are both intervention studies (i.e., ones that evaluate specific interventions) and procedural studies (i.e., ones that look at the effect specific program changes). The procedural studies suggest that adding intensive case management, home visits by community nurses, and increased ease of access to 24-hour emergency services may also improve suicide-related outcomes somewhat. However, followup letters and/or phone calls and befriending contracts with volunteers appeared not to have an effect, although the studies that evaluated both of these procedural changes had methodological problems. Among treatment interventions, the research generally suggested that various types of cognitive–behavioral therapy are useful for this purpose. The author does note that, in general, the studies included did have some potential problems, including the exclusion of highly suicidal participants, poor definitions of suicidal behaviors, and a lack of standardized outcome measures. He concludes with some recommendations for future research.

**Reference:** Wilcox, H. C., Conner, K. R., & Caine, E. D. (2004). Association of alcohol and drug use disorders and completed suicide: An empirical review of cohort studies. *Drug and Alcohol Dependence*, 76, S11–S19.

**Purpose:** To evaluate the association between substance use disorders and suicide.

**Conclusions:** There is a good deal of research showing that alcohol use disorder, opioid use disorders, intravenous drug use, and mixed drug use are all associated with higher rates of suicide. The data available concerning other substances of abuse is not sufficient to draw conclusions.

**Methodology:** The authors used previously identified research and the results of their own search to locate studies providing data on completed suicides by people with substance use disorders as well as people identified as “heavy drinkers.” Suicide rates from studies were compared with expected rates to produce an estimated standardized mortality ratio (SMR), and SMRs from multiple studies were combined to produce an overall estimate for different substances of abuse. The authors used World Health Organization data to estimate suicide rates when expected rates were not available in the study.

**Summary of Results:** The authors estimated that having an alcohol use disorder increased the odds of suicide by approximately 9.8 times; having an opioid use disorder increased it by 13.5 times, intravenous drug use increased it by 13.7 times, and mixed drug use increased it by 16.8 times. Heavy drinking that did not meet diagnostic criteria for an alcohol use disorder increased the odds of suicide by 3.5 times. The authors also provide separate estimated SMRs for men and women with each type of disorder when sufficient data were available.

**Reference:** Wilke, D. J. (2004). Predicting suicide ideation for substance users: The role of self-esteem, abstinence, and attendance at 12-Step meetings. *Addiction Research and Theory, 12*, 231–240.

**Purpose:** To evaluate the relationship of self-esteem, abstinence, and attendance at 12-Step meetings on suicidal ideation.

**Conclusions:** Self-esteem is an important factor in determining suicide risk for people with substance use disorders following treatment. Also, people in treatment for drug use disorders should be carefully assessed for suicidality before counselors recommend attendance at 12-Step groups.

**Methodology:** The author analyzed data from the Drug Abuse Treatment Outcome Study (DATOS). Participants attended one of four treatment modalities and a group of 2,966 individuals was reassessed either 12 or 24 months after treatment concluded.

**Summary of Results:** The author found that, regardless of gender, higher self-esteem (as determined by the Rosenberg Self-Esteem Scale at followup) was associated with higher rates of past-year abstinence (as indicated by self-report at followup) and that lower self-esteem was associated with higher rates of suicidal ideation regardless of the self-reported abstinence. A greater number of episodes of 2 or more weeks of depressive symptoms during the followup period was also associated with elevated suicidal ideation. Increased attendance at 12-Step meetings during followup was associated with higher level of suicidal ideation. Although each meeting attended increased the odds of having suicidal ideation by only .04 percent, the accumulated effect for a year of daily attendance was a 146 percent increase in the odds of having suicidal ideation. As the author notes, there is insufficient information to indicate whether individuals who have suicidal ideation are more likely to attend meetings or whether something about meeting attendance may increase ideation.

**Reference:** Willis, L. A., Coombs, D. W., Drentea, P., & Cockerham, W. C. (2003). Uncovering the mystery: Factors of African American suicide. *Suicide and Life-Threatening Behavior, 33*, 412–429.

**Purpose:** To determine factors associated with increased suicide risk among African Americans.

**Conclusions:** Certain personal factors can be used in evaluating suicide risk among African Americans.

**Methodology:** The authors used data from the 1993 National Mortality Follow-back Survey to analyze factors associated with suicide among African Americans, which includes data on 22,957 deaths for that year. The survey provided data on 153 suicides by African Americans and 1,185 by Whites.

**Summary of Results:** According to other research, suicide rates among African Americans have increased in the past 20 years. The authors analyzed those factors associated with higher suicide risk for this population,

namely female gender, residence in the southern or northeast United States, using cocaine, having a firearm in the home, and having a history involving threats of violence to others. A greater level of education and living in a rural area were both associated with lower suicide rates.

**Reference:** Wines, J. D., Jr., Saitz, R., Horton, N. J., Lloyd-Travaglini, C., & Samet, J. H. (2004). Suicidal behavior, drug use and depressive symptoms after detoxification: A 2-year prospective study. *Drug and Alcohol Dependence*, 76, S21–S29.

**Purpose:** To determine what factors are associated with greater risk for suicidal behaviors, drug use, and depressive symptoms among individuals who have completed a substance abuse detoxification program.

**Conclusions:** Following detoxification, people with substance use disorders should be screened for suicide risk with an understanding that certain demographic, mental health, and substance-related factors increase that risk.

**Methodology:** The authors followed 470 individuals who had attended a detoxification program. Participants were assessed at entry to the detoxification program and again 2 years later. Suicidal ideation and suicide attempts were both determined through a single response on the Addiction Severity Index (ASI). Odds ratios were created for demographic variables with regard to lifetime incidence of suicidal ideation and suicide attempts and hazard risk ratios for incidence following detoxification.

**Summary of Results:** In the 2 years following detoxification, 19.9 percent of participants reported some suicidal ideation and 6.9 percent reported one or more suicide attempts. Higher levels of recent depressive symptoms were associated with significantly greater risk for suicidal ideation and suicide attempts. Previous ideation or attempts also increased the risk of further ideation or attempts a great deal. Other factors associated with greater risk for ideation and/or attempts included being female, being Hispanic, and having a history of sexual abuse. There were small differences in risk according to primary substance of abuse; alcohol and benzodiazepine abuse were associated with increased risk, while heroin and cocaine abuse were associated with decreased risk.

## Section 3—General Bibliography

- Agarwal, M., & Gaskell, K. (1996). Clinical features of alcoholic suicide attempters/non-attempters. *Psychiatric Bulletin*, *20*, 656–659.
- Ager, C. R., Ferrer, H. P., Fillmore, K. M., Golding, J. M., Leino, E. V., & Motoyoshi, M. (1996). Aggregate-level predictors of the prevalence of selected drinking patterns in multiple studies: A research synthesis from the Collaborative Alcohol-Related Longitudinal Project. *Substance Use & Misuse*, *31*, 1503–1523.
- Agosti, V., & Levin, F. R. (2006). One-year follow-up study of suicide attempters treated for drug dependence. *American Journal of Addiction*, *15*, 293–296.
- Aharonovich, E., Liu, X., Nunes, E., & Hasin, D. S. (2002). Suicide attempts in substance abusers: Effects of major depression in relation to substance use disorders. *American Journal of Psychiatry*, *159*, 1600–1602.
- Albanese, M. J. (2005). Assessing and treating the bipolar patient with comorbid substance use disorder. *Directions in Psychiatry*, *25*, 281–290.
- Allebeck, P., Allgulander, C., & Fisher, L. D. (1988). Predictors of completed suicide in a cohort of 50,465 young men: Role of personality and deviant behaviour. *British Medical Journal*, *297*, 176–178.
- Allison, M., Hubbard, R. L., Ginzburg, H. M., & National Institute on Drug Abuse (1985). *Indicators of suicide and depression among drug abusers: 1979–1981 TOPS admission cohorts*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration.
- Altamura, A. C., Mundo, E., Bassetti, R., Green, A., Lindenmayer, J. P., Alphas, L., et al. (2007). Transcultural differences in suicide attempters: Analysis on a high-risk population of patients with schizophrenia or schizoaffective disorder. *Schizophrenia Research*, *89*, 140–146.
- American Association of Suicidology, Suicide Prevention Resource Center, & Education Development Center, Inc. (2006). *Assessment and management of suicide risk: Core competencies for mental health professionals. Participant manual*. Washington, DC: Education Development Center.
- American Association of Suicidology. (2006). Suicide in the U.S.A.: Based on current (2003) statistics. Washington, DC: American Association of Suicidology. Retrieved July 31, 2006, from <http://www.suicidology.org/associations/1045/files/SuicideInTheUS.pdf>
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*. (4th ed. Text Revision). Washington, DC: American Psychiatric Association.
- American Psychiatric Association. (2003a). American Psychiatric Association practice guidelines for the assessment and treatment of patients with suicidal behaviors. Arlington, VA: American Psychiatric Association. Retrieved February 18, 2009, from [http://www.psych.org/psych\\_pract/treatg/pg/SuicidalBehavior\\_05-15-06.pdf](http://www.psych.org/psych_pract/treatg/pg/SuicidalBehavior_05-15-06.pdf)
- American Psychiatric Association. (2003b). Assessing and treating suicidal behaviors: A quick reference guide. Arlington, VA: American Psychiatric Association. Retrieved July 31, 2006, from [http://www.psych.org/psych\\_pract/treatg/quick\\_ref\\_guide/Suibehavs\\_QRG.pdf](http://www.psych.org/psych_pract/treatg/quick_ref_guide/Suibehavs_QRG.pdf)
- American Psychiatric Association. (2006a). *American Psychiatric Association practice guidelines for the treatment of psychiatric disorders. Compendium 2006*. Arlington, VA: American Psychiatric Association.

- American Psychiatric Association. (2006b). Practice guideline for the treatment of patients with substance use disorders. Arlington, VA: American Psychiatric Association. Retrieved August 3, 2006, from [http://www.psych.org/psych\\_pract/treatg/pg/SUD2ePG\\_04-28-06.pdf](http://www.psych.org/psych_pract/treatg/pg/SUD2ePG_04-28-06.pdf)
- Angst, J., & Clayton, P. J. (1998). Personality, smoking and suicide: A prospective study. *Journal of Affective Disorders, 51*, 55–62.
- Anguelova, M., Benkelfat, C., & Turecki, G. (2003). A systematic review of association studies investigating genes coding for serotonin receptors and the serotonin transporter: II. Suicidal behavior. *Molecular Psychiatry, 8*, 646–653.
- Anwar, M. U., Majumder, S., Austin, O., & Phipps, A. (2005). Smoking, substance abuse, psychiatric history, and burns: Trends in adult patients. *Journal of Burn Care and Rehabilitation, 26*, 493–501.
- Arata, C. M., Langhinrichsen-Rohling, J., Bowers, D., & O’Farrill-Swails, L. (2005). Single versus multi-type maltreatment: An examination of the long-term effects of child abuse. *Journal of Aggression, Maltreatment & Trauma, 11*, 29–52.
- Arato, M., Tekes, K., Tothfalusi, L., Magyar, K., Palkovits, M., Demeter, E., et al. (1987). Serotonergic split brain and suicide. *Psychiatry Research, 21*, 355–356.
- Arsenault-Lapierre, G., Kim, C., & Turecki, G. (2004). Psychiatric diagnoses in 3275 suicides: A meta-analysis. *BMC Psychiatry, 4*, 371–11. London: BioMed Central Ltd. Retrieved February 4, 2005, from <http://www.biomedcentral.com/1471-244X/4/37>
- Auger, R. R. & Potash, J. B. (2005). Delirium from baclofen withdrawal after suicide attempt. *Psychosomatics, 46*, 151–152.
- Avery, J. K. (2003). Suicide—tragic and seldom preventable. *Tennessee Medicine, 96*, 127–128.
- Ayalon, L., Mackin, S., Arean, P. A., Chen, H., & Herr, E. C. M. (2007). The role of cognitive functioning and distress in suicidal ideation in older adults. *Journal of the American Geriatrics Society, 55*, 1090–1094.
- Balazs, J., Benazzi, F., Rihmer, Z., Rihmer, A., Akiskal, K. K., & Akiskal, H. S. (2006). The close link between suicide attempts and mixed (bipolar) depression: Implications for suicide prevention. *Journal of Affective Disorders, 91*, 133–138.
- Baldessarini, R. J., Tondo, L., Davis, P., Pompili, M., Goodwin, F. K., & Hennen, J. (2006). Decreased risk of suicides and attempts during long-term lithium treatment: A meta-analytic review. *Bipolar Disorders, 8*, 625–639.
- Barglow, P. (2004). Comparison of VA intentional and unintentional deaths. *American Journal of Addiction, 13*, 358–371.
- Barnes, D. H. (2006). The aftermath of suicide among African Americans. *Journal of Black Psychology, 32*, 335–348.
- Barratt, E. S. (1991). Measuring and predicting aggression within the context of a personality theory. *Journal of Neuropsychiatry and Clinical Neurosciences, 3*, S35–S39.
- Bartels, S. J., Coakley, E., Oxman, T. E., Constantino, G., Oslin, D., Chen, H., et al. (2002). Suicidal and death ideation in older primary care patients with depression, anxiety, and at-risk alcohol use. *American Journal of Geriatric Psychiatry, 10*, 417–427.
- Bartels, S. J., Miles, K. M., Van Citters, A. D., Forester, B. P., Cohen, M. J., & Xie, H. (2005). Improving mental health assessment and service planning practices for older adults: A controlled comparison study. *Mental Health Services Research, 7*, 213–223.

- Bartholomew, N. G., Rowan-Szal, G. A., Chatham, L. R., Nucatola, D. C., & Simpson, D. D. (2002). Sexual abuse among women entering methadone treatment. *Journal of Psychoactive Drugs, 34*, 347–354.
- Bateman, C. (2001). Doctor burnout: Silent and fatal. *South African Medical Journal, 91*, 98–100.
- Baugher, B., & Jordon, J. (2002). *After suicide loss: Coping with your grief*. New Castle, WA: R. Baugher.
- Beautrais, A. L. (2002). A case control study of suicide and attempted suicide in older adults. *Suicide and Life-Threatening Behavior, 32*, 1–9.
- Beautrais, A. L., Joyce, P. R., & Mulder, R. T. (1999). Cannabis abuse and serious suicide attempts. *Addiction, 94*, 1155–1164.
- Beck, A. T., Brown, G. K., Steer, R. A., Dahlsgaard, K. K., & Grisham, J. R. (1999). Suicide ideation at its worst point: A predictor of eventual suicide in psychiatric outpatients. *Suicide and Life-Threatening Behavior, 29*, 1–9.
- Beck, A. T., Schuyler, D., & Herman, I. (1974). Development of suicidal intent scales. In A. T. Beck, H. L. P. Resnik, & D. J. Lettieri, (Eds.), *The prediction of suicide* (pp. 45–56). Bowie, MD: Charles Press Publishers.
- Beck, A. T., Steer, R. A., Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: A 10-year prospective study of patients hospitalized with suicidal ideation. *American Journal of Psychiatry, 142*, 559–563.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561–571.
- Beck, A. T., & Weishaar, M. E. (1990). Suicide risk assessment and prediction. *Crisis, 11*, 22–30.
- Benda, B. B. (2003). Discriminators of suicide thoughts and attempts among homeless veterans who abuse substances. *Suicide and Life-Threatening Behavior, 33*, 430–442.
- Benda, B. B. (2005). Gender differences in predictors of suicidal thoughts and attempts among homeless veterans that abuse substances. *Suicide and Life-Threatening Behavior, 35*, 106–116.
- Bennewith, O., Peters, T. J., Hawton, K., House, A., & Gunnell, D. (2005). Factors associated with the non-assessment of self-harm patients attending an Accident and Emergency Department: Results of a national study. *Journal of Affective Disorders, 89*, 91–97.
- Berglund, M. (1984). Suicide in alcoholism: A prospective study of 88 suicides, I. The multidimensional diagnosis at first admission. *Archives of General Psychiatry, 41*, 888–891.
- Berman, A. L. (2006). Risk management with suicidal patients. *Journal of Clinical Psychology, 62*, 171–184.
- Berman, A., Bongar, B., Harris, E. A., Maris, R. W., Packman, W., & Silverman, M. (Eds.). (1998). *Risk management with suicidal patients*. New York: Guilford Press.
- Berman, M., Hull, T., & May, P. (2000). Alcohol control and injury death in Alaska native communities: Wet, damp and dry under Alaska's local option law. *Journal of Studies on Alcohol, 61*, 311–319.
- Bertera, E. M. (2007). The role of positive and negative social exchanges between adolescents, their peers and family as predictors of suicide ideation. *Child & Adolescent Social Work Journal, 24*, 523–538.
- Bertolote, J. M., Fleischmann, A., De Leo, D., Bolhari, J., Botega, N., De Silva, D., et al. (2005). Suicide attempts, plans, and ideation in culturally diverse sites: The WHO SUPRE-MISS community survey. *Psychological Medicine, 35*, 1457–1465.

- Beskow, J., Gottfries, C. G., Roos, B. E., & Winblad, B. (1976). Determination of monoamine and monoamine metabolites in the human brain: Post mortem studies in a group of suicides and in a control group. *Acta Psychiatrica Scandinavica*, *53*, 7–20.
- Blenkiron, P., House, A., & Milnes, D. (2000). The timing of acts of deliberate self-harm: Is there any relation with suicidal intent, mental disorder or psychiatric management? *Journal of Psychosomatic Research*, *49*, 3–6.
- Blum, R. W., Halcón, L., Beuhring, T., Pate, E., Campell-Forrester, S., & Venema, A. (2003). Adolescent health in the Caribbean: Risk and protective factors. *American Journal of Public Health*, *93*, 456–460.
- Bohn, D. K. (2003). Lifetime physical and sexual abuse, substance abuse, depression, and suicide attempts among Native American women. *Issues in Mental Health Nursing*, *24*, 333–352.
- Bohus, M., Haaf, B., Simms, T., Limberger, M. F., Schmahl, C., Unkel, C., et al. (2004). Effectiveness of inpatient dialectical behavioral therapy for borderline personality disorder: A controlled trial. *Behaviour Research and Therapy*, *42*, 487–499.
- Bongar, B. M. (2002). *The suicidal patient: Clinical and legal standards of care*. Washington, DC: American Psychological Association.
- Borger, S. C., Cox, B. J., & Asmundson, G. J. G. (2005). PTSD and other mental health problems in adults who report histories of severe physical abuse and neglect. In T. A. Corales (Ed.), *Trends in posttraumatic stress disorder research* (pp. 249–261). Hauppauge, NY: Nova Science Publishers.
- Borges, G., Angst, J., Nock, M. K., Ruscio, A. M., & Kessler, R. C. (2008). Risk factors for the incidence and persistence of suicide-related outcomes: A 10-year follow-up study using the National Comorbidity Surveys. *Journal of Affective Disorders*, *105*, 25–33.
- Borges, G., Angst, J., Nock, M. K., Ruscio, A. M., Walters, E. E., & Kessler, R. C. (2006). A risk index for 12-month suicide attempts in the National Comorbidity Survey Replication (NCS-R). *Psychological Medicine*, *36*, 1747–1757.
- Borges, G., & Rosovsky, H. (1996). Suicide attempts and alcohol consumption in an emergency room sample. *Journal of Studies on Alcohol*, *57*, 543–548.
- Borges, G., Walters, E. E., & Kessler, R. C. (2000). Associations of substance use, abuse, and dependence with subsequent suicidal behavior. *American Journal of Epidemiology*, *151*, 781–789.
- Botnick, M. R., Heath, K. V., Cornelisse, P. G., Strathdee, S. A., Martindale, S. L., & Hogg, R. S. (2002). Correlates of suicide attempts in an open cohort of young men who have sex with men. *Canadian Journal of Public Health*, *93*, 59–62.
- Bradvik, L. & Berglund, M. (2002). Seasonal distribution of suicide in alcoholism. *Acta Psychiatrica Scandinavica*, *106*, 299–302.
- Brady, K. T., Tolliver, B. K., & Verduin, M. L. (2007). Alcohol use and anxiety: Diagnostic and management issues. *American Journal of Psychiatry*, *164*, 217–221.
- Braitstein, P., Li, K., Tyndall, M., Spittal, P., O'Shaughnessy, M. V., Schilder, A., et al. (2003). Sexual violence among a cohort of injection drug users. *Social Science & Medicine*, *57*, 561–569.
- Breslau, N., Schultz, L. R., Johnson, E. O., Peterson, E. L., & Davis, G. C. (2005). Smoking and the risk of suicidal behavior: A prospective study of a community sample. *Archives of General Psychiatry*, *62*, 328–334.
- Brezo, J., Paris, J., & Turecki, G. (2006). Personality traits as correlates of suicidal ideation, suicide attempts, and suicide completions: A systematic review. *Acta Psychiatrica Scandinavica*, *113*, 180–206.

- Brismar, B., & Bergman, B. (1998). The significance of alcohol for violence and accidents. *Alcoholism, Clinical and Experimental Research*, *22*, 299S–306S.
- Britton, P. C., Williams, G. C., & Conner, K. R. (2008). Self-determination theory, motivational interviewing, and the treatment of clients with acute suicidal ideation. *Journal of Clinical Psychology*, *64*, 52–66.
- Brook, R., Klap, R., Liao, D., & Wells, K. B. (2006). Mental health care for adults with suicide ideation. *General Hospital Psychiatry*, *28*, 271–277.
- Brown, G. K. (2002). A review of suicide assessment measures for intervention research with adults and older adults. Technical report submitted to NIMH under Contract No.263-MH914950. Bethesda, MD: National Institute of Mental Health. Retrieved August 14, 2007, from <http://sbsirvntweb.uqac.ca/archivage/15290520.pdf>
- Brown, G. K., Henriques, G. R., Sosdjan, D., & Beck, A. T. (2004). Suicide intent and accurate expectations of lethality: Predictors of medical lethality of suicide attempts. *Journal of Consulting and Clinical Psychology*, *72*, 1170–1174.
- Brown, G. K., Ten Have, T., Henriques, G. R., Xie, S. X., Hollander, J. E., & Beck, A. T. (2005). Cognitive therapy for the prevention of suicide attempts: A randomized controlled trial. *JAMA*, *294*, 563–570.
- Brown, S. A., Inaba, R. K., Gillin, J. C., Schuckit, M. A., Stewart, M. A., & Irwin, M. R. (1995). Alcoholism and affective disorder: Clinical course of depressive symptoms. *American Journal of Psychiatry*, *152*, 45–52.
- Bruce, M. L., Ten Have, T. R., Reynolds, C. F., III, Katz, I. I., Schulberg, H. C., Mulsant, B. H., et al. (2004). Reducing suicidal ideation and depressive symptoms in depressed older primary care patients: A randomized controlled trial. *JAMA*, *291*, 1081–1091.
- Bucholz, K. K., Cadoret, R., Cloninger, C. R., Dinwiddie, S. H., Hesselbrock, V. M., Nurnberger, J. I., et al. (1994). A new, semi-structured psychiatric interview for use in genetic linkage studies: A report on the reliability of the SSAGA. *Journal of Studies on Alcohol*, *55*, 149–158.
- Cain, A. C. (2006). Parent suicide: Pathways of effects into the third generation. *Psychiatry: Interpersonal and Biological Processes*, *69*, 204–227.
- Canetto, S. S. (1994). Gender issues in the treatment of suicidal individuals. *Death Studies*, *18*, 513–527.
- Canetto, S. S. (1997). Gender and suicidal behavior: Theories and evidence. In R. W. Maris, M. M. Silverman, & S. S. Canetto (Eds.), *Review of Suicidology* (pp. 138–167). New York: Guilford Press.
- Canetto, S. S., & Sakinofsky, I. (1998). The gender paradox in suicide. *Suicide and Life-Threatening Behavior*, *28*, 1–23.
- Cantor, C., McTaggart, P., & DeLeo, D. (2001). Misclassification of suicide: The contribution of opiates. *Psychopathology*, *34*, 140–146.
- Carpenter, K. M., Brooks, A. C., Vosburg, S. K., & Nunes, E. V. (2004). The effect of sertraline and environmental context on treating depression and illicit substance use among methadone maintained opiate dependent patients: A controlled clinical trial. *Drug and Alcohol Dependence*, *74*, 123–134.
- Carroll, K. M. (2004). Behavioral therapies for co-occurring substance use and mood disorders. *Biological Psychiatry*, *56*, 778–784.
- Castle, K., Duberstein, P. R., Meldrum, S., Conner, K. R., & Conwell, Y. (2004). Risk factors for suicide in Blacks and Whites: An analysis of data from the 1993 National Mortality Followback Survey. *American Journal of Psychiatry*, *161*, 452–458.

- Cavanagh, J. T., Carson, A. J., Sharpe, M., & Lawrie, S. M. (2003). Psychological autopsy studies of suicide: A systematic review. *Psychological Medicine*, 33, 395–405.
- Center for Substance Abuse Treatment. (1993a). *Improving treatment for drug-exposed infants*. Treatment Improvement Protocol (TIP) Series 5. (HHS Publication No. (SMA) 95-3057). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1993b). *Pregnant, substance-using women*. Treatment Improvement Protocol (TIP) Series 2. (HHS Publication No. (SMA) 93-1998). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1993c). *Screening for infectious diseases among substance abusers*. Treatment Improvement Protocol (TIP) Series 6. (HHS Publication No. (SMA) 95-3060). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1994). *Simple screening instruments for outreach for alcohol and other drug abuse and infectious diseases*. Treatment Improvement Protocol (TIP) Series 11. (HHS Publication No. (SMA) 94-2094). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1995a). *Alcohol and other drug screening of hospitalized trauma patients*. Treatment Improvement Protocol (TIP) Series 16. (HHS Publication No. (SMA) 95-3041). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1995b). *Combining alcohol and other drug treatment with diversion for juveniles in the justice system*. Treatment Improvement Protocol (TIP) Series 21. (HHS Publication No. (SMA) 95-3051). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1995c). *Developing state outcomes monitoring systems for alcohol and other drug abuse treatment*. Treatment Improvement Protocol (TIP) Series 14. (HHS Publication No. (SMA) 95-3031). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1995d). *The role and current status of patient placement criteria in the treatment of substance use disorders*. Treatment Improvement Protocol (TIP) Series 13. (HHS Publication No. (SMA) 95-3021). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1995e). *The tuberculosis epidemic: Legal and ethical issues for alcohol and other drug abuse treatment providers*. Treatment Improvement Protocol (TIP) Series 18. (HHS Publication No. (SMA) 95-3047). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1996). *Treatment drug courts: Integrating substance abuse treatment with legal case processing*. Treatment Improvement Protocol (TIP) Series 23. (HHS Publication No. (SMA) 96-3113). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1997a). *A guide to substance abuse services for primary care clinicians*. Treatment Improvement Protocol (TIP) Series 24. (HHS Publication No. (SMA) 97-3139). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1997b). *Substance abuse treatment and domestic violence*. Treatment Improvement Protocol (TIP) Series 25. (HHS Publication No. (SMA) 97-3163). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1998a). *Comprehensive case management for substance abuse treatment*. Treatment Improvement Protocol (TIP) Series 27. (HHS Publication No. (SMA) 98-3222). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1998b). *Continuity of offender treatment for substance use disorders*

- from institution to community*. Treatment Improvement Protocol (TIP) Series 30. (HHS Publication No. (SMA) 98-3245). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1998c). *Naltrexone and alcoholism treatment*. Treatment Improvement Protocol (TIP) Series 28. (HHS Publication No. (SMA) 98-3206). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1998d). *Substance abuse among older adults*. Treatment Improvement Protocol (TIP) Series 26. (HHS Publication No. (SMA) 98-3179). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1998e). *Substance use disorder treatment for people with physical and cognitive disabilities*. Treatment Improvement Protocol (TIP) Series 29. (HHS Publication No. (SMA) 98-3249). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1999a). *Brief interventions and brief therapies for substance abuse*. Treatment Improvement Protocol (TIP) Series 34. (HHS Publication No. (SMA) 99-3353). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1999b). *Enhancing motivation for change in substance abuse treatment*. Treatment Improvement Protocol (TIP) Series 35. (HHS Publication No. (SMA) 99-3354). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1999c). *Screening and assessing adolescents for substance use disorders*. Treatment Improvement Protocol (TIP) Series 31. (HHS Publication No. (SMA) 99-3282). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1999d). *Treatment of adolescents with substance use disorders*. Treatment Improvement Protocol (TIP) Series 32. (HHS Publication No. (SMA) 99-3283). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (1999e). *Treatment for stimulant use disorders*. Treatment Improvement Protocol (TIP) Series 33. (HHS Publication No. (SMA) 99-3296). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (2000a). *Integrating substance abuse treatment and vocational services*. Treatment Improvement Protocol (TIP) Series 38. (HHS Publication No. (SMA) 00-3470). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (2000b). *Substance abuse treatment for persons with child abuse and neglect issues*. Treatment Improvement Protocol (TIP) Series 36. (HHS Publication No. (SMA) 00-3357). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (2000c). *Substance abuse treatment for persons with HIV/AIDS*. Treatment Improvement Protocol (TIP) Series 37. (HHS Publication No. (SMA) 00-3459). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (2004a). *Clinical guidelines for the use of buprenorphine in the treatment of opioid addiction*. Treatment Improvement Protocol (TIP) Series 40. (HHS Publication No. (SMA) 04-3939). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (2004b). *Substance abuse treatment and family therapy*. Treatment Improvement Protocol (TIP) Series 39. (HHS Publication No. (SMA) 04-3957). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (2005a). *Medication-assisted treatment for opioid addiction*. Treatment

Improvement Protocol (TIP) Series 43. (HHS Publication No. SMA 05-4048). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (2005b). *Substance abuse treatment for adults in the criminal justice system*. Treatment Improvement Protocol (TIP) Series 44. (HHS Publication No. (SMA) 05-4056). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (2005c). *Substance abuse treatment: Group therapy*. Treatment Improvement Protocol (TIP) Series 41. (HHS Publication No. SMA 05-4056). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (2005d). *Substance abuse treatment for persons with co-occurring disorders*. Treatment Improvement Protocol (TIP) Series 42. (HHS Publication No. SMA 05-3992). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (2006a). *Detoxification and substance abuse treatment*. Treatment Improvement Protocol (TIP) Series 45. (HHS Publication No. SMA 06-4131). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (2006b). *Substance abuse: Administrative issues in intensive outpatient treatment*. Treatment Improvement Protocol (TIP) Series 46. (HHS Publication No. SMA 06-4151). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (2006c). *Substance abuse: Clinical issues in intensive outpatient treatment*. Treatment Improvement Protocol (TIP) Series 47. (HHS Publication No. 06-4182). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (2008). *Managing depressive symptoms in substance abuse clients during early recovery*. Treatment Improvement Protocol (TIP) Series 48. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (2009). *Addressing suicidal thoughts and behaviors in substance abuse treatment*. Treatment Improvement Protocol (TIP) Series 50. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (2009). *Incorporating alcohol pharmacotherapies into medical practice*. Treatment Improvement Protocol (TIP) Series 49. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (In development b). *Addressing viral hepatitis in people with substance use disorders*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (In development c). *Clinical supervision and professional development of the substance abuse counselor*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (In development c). *Improving cultural competence in substance abuse treatment*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (In development d). *Management of chronic pain in people with or in recovery from substance use disorders*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Substance Abuse Treatment. (In development e). *Relapse prevention and recovery promotion*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services

Administration.

- Center for Substance Abuse Treatment. (In development *f*). *Substance abuse treatment: Addressing the specific needs of women*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (In development *g*). *Substance abuse treatment for Native Americans*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (In development *h*). *Substance abuse treatment: men's issues*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (In development *i*). *Substance abuse treatment for people who are homeless*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (In development *j*). *Substance abuse and trauma*. Treatment Improvement Protocol (TIP) Series. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Center for Substance Abuse Treatment. (in press). Improving cultural competence in substance abuse treatment. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Centers for Disease Control and Prevention. (2006). Understanding suicide fact sheet. Retrieved November 8, 2007, from <http://www.cdc.gov/ncipc/pub-res/Suicide%20Fact%20Sheet.pdf>
- Cerel, J., Currier, G. W., & Conwell, Y. (2006). Consumer and family experiences in the emergency department following a suicide attempt. *Journal of Psychiatric Practice, 12*, 341–347.
- Chambers, D. A., Pearson, J. L., Lubell, K., Brandon, S., O'Brien, K., & Zinn, J. (2005). The science of public messages for suicide prevention: A workshop summary. *Suicide and Life-Threatening Behavior, 35*, 134–145.
- Chapman, A. L., Specht, M. W., & Cellucci, T. (2005). Factors associated with suicide attempts in female inmates: The hegemony of hopelessness. *Suicide and Life-Threatening Behavior, 35*, 558–569.
- Cherpitel, C. J., Borges, G. L., & Wilcox, H. C. (2004). Acute alcohol use and suicidal behavior: A review of the literature. *Alcoholism, Clinical and Experimental Research, 28*, 18S–28S.
- Chester, B., Mahalish, P., & Davis, J. (1999). Mental health needs assessment of off-reservation American Indian people in Northern Arizona. *American Indian and Alaska Native Mental Health Research, 8*, 25–40.
- Chiles, J. A. & Strosahl, K. D. (2004). *Clinical manual for assessment and treatment of suicidal patients*. Washington, DC: American Psychiatric Publishing.
- Christoffersen, M. N. & Soothill, K. (2003). The long-term consequences of parental alcohol abuse: A cohort study of children in Denmark. *Journal of Substance Abuse Treatment, 25*, 107–116.
- Christophersen, O., Rooney, C., & Kelly, S. (1998). Drug-related mortality: Methods and trends. *Population Trends, 29–37*.
- Claassen, C. A., Trivedi, M. H., Rush, A. J., Husain, M. M., Zisook, S., Young, E., et al. (2007). Clinical differences among depressed patients with and without a history of suicide attempts: Findings from the STAR\*D trial. *Journal of Affective Disorders, 97*, 77–84.

- Clark, D. C., & Goebel-Fabbri, A. E. (1999). Lifetime risk of suicide in major affective disorders. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention* (pp. 270–286). San Francisco: Jossey-Bass.
- Clark, S. E., & Goldney, R. D. (2002). The impact of suicide on relatives and friends. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide* (pp. 467–484). Indianapolis, IN: Wiley Publishing Inc.
- Clatts, M. C., Goldsamt, L. A., & Yi, H. (2005). Club drug use among young men who have sex with men in NYC: A preliminary epidemiological profile. *Substance Use and Misuse, 40*, 1317–1330.
- Cleiren, M., Diekstra, R. F., Kerkhof, A. J., & van der Wal, J. (1994). Mode of death and kinship in bereavement: Focusing on who rather than how. *Crisis, 15*, 22–36.
- Clements-Nolle, K., Marx, R., Guzman, R., & Katz, M. (2001). HIV prevalence, risk behaviors, health care use, and mental health status of transgender persons: Implications for public health intervention. *American Journal of Public Health, 91*, 915–921.
- Cobain, B. (1998). *When nothing matters anymore: A survival guide for depressed teens*. Minneapolis, MN: Free Spirit Pub.
- Cobain, B., & Larch, J. (2006). *Dying to be free: A healing guide for families after a suicide*. Center City, MN: Hazelden.
- Coccaro, E. F. (1992). Impulsive aggression and central serotonergic system function in humans: An example of a dimensional brain-behavior relationship. *International Clinical Psychopharmacology, 7*, 3–12.
- Cohen, R. S. (1996). Adverse symptomatology and suicide associated with the use of methylenedioxymethamphetamine (MDMA; “Ecstasy”). *Biological Psychiatry, 39*, 819–820.
- Coll, X., Law, F., Tobias, A., & Hawton, K. (1998). Child sexual abuse in women who take overdoses, I: A study of prevalence and severity. *Archives of Suicide Research, 4*, 291–306.
- Comtois, K. A., Russo, J. E., Roy-Byrne, P., & Ries, R. K. (2004). Clinicians’ assessments of bipolar disorder and substance abuse as predictors of suicidal behavior in acutely hospitalized psychiatric inpatients. *Biological Psychiatry, 56*, 757–763.
- Conner, K. R., Beautrais, A. L., & Conwell, Y. (2003a). Moderators of the relationship between alcohol dependence and suicide and medically serious suicide attempts: Analyses of Canterbury Suicide Project data. *Alcoholism, Clinical and Experimental Research, 27*, 1156–1161.
- Conner, K. R., Beautrais, A. L., & Conwell, Y. (2003b). Risk factors for suicide and medically serious suicide attempts among alcoholics: Analyses of Canterbury Suicide Project data. *Journal of Studies on Alcohol, 64*, 551–554.
- Conner, K. R., Britton, P. C., Sworts, L. M., & Joiner, T. E., Jr. (2007). Suicide attempts among individuals with opiate dependence: The critical role of belonging. *Addictive Behaviors, 32*, 1395–1404.
- Conner, K. R., & Chiapella, P. (2004). Alcohol and suicidal behavior: Overview of a research workshop. *Alcoholism, Clinical and Experimental Research, 28*, 2S–5S.
- Conner, K. R., Cox, C., Duberstein, P. R., Tian, L., Nisbet, P. A., & Conwell, Y. (2001). Violence, alcohol, and completed suicide: A case-control study. *American Journal of Psychiatry, 158*, 1701–1705.
- Conner, K. R., & Duberstein, P. R. (2004). Predisposing and precipitating factors for suicide among alcoholics: Empirical review and conceptual integration. *Alcoholism, Clinical and Experimental Research, 28*, 6S–17S.
- Conner, K. R., Duberstein, P. R., & Conwell, Y. (1999). Age-related patterns of factors associated with completed suicide in men with alcohol dependence. *American Journal on Addictions, 8*, 312–318.

- Conner, K. R., Duberstein, P. R., & Conwell, Y. (2000). Domestic violence, separation, and suicide in young men with early onset alcoholism: Re-analyses of Murphy's data. *Suicide and Life-Threatening Behavior*, *30*, 354–359.
- Conner, K. R., Duberstein, P. R., & Conwell, Y. (2001). The validity of proxy-based data in suicide research: A study of patients 50 years of age and older who attempted suicide. *Acta Psychiatrica Scandinavica*, *104*, 204–209.
- Conner, K. R., Duberstein, P. R., Conwell, Y., & Caine, E. D. (2003). Reactive aggression and suicide: Theory and evidence. *Aggression and Violent Behavior*, *8*, 413–432.
- Conner, K. R., Duberstein, P. R., Conwell, Y., Herrmann, J. H., Jr., Cox, C., Barrington, D. S., et al. (2000). After the drinking stops: Completed suicide in individuals with remitted alcohol use disorders. *Journal of Psychoactive Drugs*, *32*, 333–337.
- Conner, K. R., Duberstein, P. R., Conwell, Y., Seidlitz, L., & Caine, E. D. (2001). Psychological vulnerability to completed suicide: A review of empirical studies. *Suicide and Life-Threatening Behavior*, *31*, 367–385.
- Conner, K. R., & Goldston, D. B. (2007). Rates of suicide among males increase steadily from age 11 to 21: Developmental framework and outline for prevention. *Aggression and Violent Behavior*, *12*, 193–207.
- Conner, K. R., Hesselbrock, V. M., Meldrum, S. C., Schuckit, M. A., Bucholz, K. K., Gamble, S. A., et al. (2007). Transitions to, and correlates of, suicidal ideation, plans, and unplanned and planned suicide attempts among 3,729 men and women with alcohol dependence. *Journal of Studies on Alcohol and Drugs*, *68*, 654–662.
- Conner, K. R., Hesselbrock, V. M., Schuckit, M. A., Hirsch, J. K., Knox, K. L., Meldrum, S., et al. (2006). Precontemplated and impulsive suicide attempts among individuals with alcohol dependence. *Journal of Studies on Alcohol*, *67*, 95–101.
- Conner, K. R., Li, Y., Meldrum, S., Duberstein, P. R., & Conwell, Y. (2003). The role of drinking in suicidal ideation: Analyses of Project MATCH data. *Journal of Studies on Alcohol*, *64*, 402–408.
- Conner, K. R., Sorensen, S., & Leonard, K. E. (2005). Initial depression and subsequent drinking during alcoholism treatment. *Journal of Studies on Alcohol*, *66*, 401–406.
- Conwell, Y., Duberstein, P. R., & Caine, E. D. (2002). Risk factors for suicide in later life. *Biological Psychiatry*, *52*, 193–204.
- Cooper-Patrick, L., Crum, R. M., & Ford, D. E. (1994). Identifying suicidal ideation in general medical patients. *JAMA*, *272*, 1757–1762.
- Copeland, L., Budd, J., Robertson, J. R., & Elton, R. A. (2004). Changing patterns in causes of death in a cohort of injecting drug users, 1980–2001. *Archives of Internal Medicine*, *164*, 1214–1220.
- Cornelius, J. R., Salloum, I. M., Day, N. L., Thase, M. E., & Mann, J. J. (1996). Patterns of suicidality and alcohol use in alcoholics with major depression. *Alcoholism, Clinical and Experimental Research*, *20*, 1451–1455.
- Cornelius, J. R., Salloum, I. M., Lynch, K., Clark, D. B., & Mann, J. J. (2001). Treating the substance-abusing suicidal patient. *Annals of the New York Academy of Sciences*, *932*, 78–90.
- Cornelius, J. R., Thase, M. E., Salloum, I. M., Cornelius, M. D., Black, A., & Mann, J. J. (1998). Cocaine use associated with increased suicidal behavior in depressed alcoholics. *Addictive Behaviors*, *23*, 119–121.
- Cottler, L. B., Campbell, W., Krishna, V. A., Cunningham-Williams, R. M., & Abdallah, A. B. (2005). Predictors of high rates of suicidal ideation among drug users. *Journal of Nervous and Mental Disease*, *193*, 431–437.

- Craig, R. J., & Bivens, A. (2000). MCMI-III scores on substance abusers with and without histories of suicide attempts. *Substance Abuse, 21*, 155–161.
- Dahlsgaard, K. K., Beck, A. T., & Brown, G. K. (1998). Inadequate response to therapy as a predictor of suicide. *Suicide and Life-Threatening Behavior, 28*, 197–204.
- Daley, D. C. (2003). *Understanding suicide and addiction (workbook)*. Center City, MN: Hazelden.
- Dalton, E. J., Cate-Carter, T. D., Mundo, E., Parikh, S. V., & Kennedy, J. L. (2003). Suicide risk in bipolar patients: The role of co-morbid substance use disorders. *Bipolar Disorders, 5*, 58–61.
- Daniel, A. E., & Fleming, J. (2006). Suicides in a State correctional system, 1992–2002: A review. *Journal of Correctional Health Care, 12*, 24–35.
- Darke, S., Kaye, S., McKetin, R., & Duflou, J. (2008). Major physical and psychological harms of methamphetamine use. *Drug and Alcohol Review, 27*, 253–262.
- Darke, S., & Ross, J. (2001). The relationship between suicide and heroin overdose among methadone maintenance patients in Sydney, Australia. *Addiction, 96*, 1443–1453.
- Darke, S., & Ross, J. (2002). Suicide among heroin users: Rates, risk factors and methods. *Addiction, 97*, 1383–1394.
- Darke, S., Ross, J., & Hall, W. (1996). Overdose among heroin users in Sydney, Australia, I: Prevalence and correlates of non-fatal overdose. *Addiction, 91*, 405–411.
- Darke, S., Ross, J., & Lynskey, M. (2003). The relationship of conduct disorder to attempted suicide and drug use history among methadone maintenance patients. *Drug and Alcohol Review, 22*, 21–25.
- Darke, S., Ross, J., Lynskey, M., & Teesson, M. (2004). Attempted suicide among entrants to three treatment modalities for heroin dependence in the Australian Treatment Outcome Study (ATOS): Prevalence and risk factors. *Drug and Alcohol Dependence, 73*, 1–10.
- Darke, S., Ross, J., Williamson, A., Mills, K. L., Havard, A., & Teesson, M. (2007). Patterns and correlates of attempted suicide by heroin users over a 3-year period: Findings from the Australian treatment outcome study. *Drug and Alcohol Dependence, 87*, 146–152.
- Darke, S., Williamson, A., Ross, J., & Teesson, M. (2005). Attempted suicide among heroin users: 12-month outcomes from the Australian Treatment Outcome Study (ATOS). *Drug and Alcohol Dependence, 78*, 177–186.
- Darke, S., Ross, J., Williamson, A., & Teesson, M. (2005b). The impact of borderline personality disorder on 12-month outcomes for the treatment of heroin dependence. *Addiction, 100*, 1121–1130.
- Davis, L. L., Frazier, E. C., Gaynes, B. N., Trivedi, M. H., Wisniewski, S. R., Fava, M., et al. (2007). Are depressed outpatients with and without a family history of substance use disorder different? A baseline analysis of the STAR\*D cohort. *Journal of Clinical Psychiatry, 68*, 1931–1938.
- Davis, L. L., Rush, J. A., Wisniewski, S. R., Rice, K., Cassano, P., Jewell, M. E., et al. (2005). Substance use disorder comorbidity in major depressive disorder: An exploratory analysis of the sequenced treatment alternatives to relieve depression cohort. *Comprehensive Psychiatry, 46*, 81–89.
- Davis, T., Gunderson, J. G., & Myers, M. (1999). Borderline personality disorder. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention* (pp. 311–331). San Francisco: Jossey-Bass.
- Dawson, D. A. (1997). Alcohol, drugs, fighting and suicide attempt/ideation. *Addiction Research, 5*, 451–472.

- De Bernardo, G. L., Newcomb, M., Toth, A., Richey, G., & Mendoza, R. (2002). Comorbid psychiatric and alcohol abuse/dependence disorders: Psychosocial stress, abuse, and personal history factors of those in treatment. *Journal of Addictive Diseases, 21*, 43–59.
- DeAngelis, T. (2001). Surviving a patient's suicide. *Monitor on Psychology, 321*. Retrieved August 14, 2007, from <http://www.apa.org/monitor/nov01/suicide.html>
- Degenhardt, L., Roxburgh, A., & Barker, B. (2005). Underlying causes of cocaine, amphetamine and opioid related deaths in Australia. *Journal of Clinical Forensic Medicine, 12*, 187–195.
- Deisenhammer, E. A., Lechner-Schoner, T., Kemmler, G., Ober, A., Braidt, E., & Hinterhuber, H. (2006). Serum lipids and risk factors for attempted suicide in patients with alcohol dependence. *Alcoholism, Clinical and Experimental Research, 30*, 460–465.
- Demirbas, H., Celik, S., Ilhan, I. O., & Dogan, Y. B. (2003). An examination of suicide probability in alcoholic in-patients. *Alcohol and Alcoholism, 38*, 67–70.
- Dhossche, D. M. (2000). Suicidal behavior in psychiatric emergency room patients. *Southern Medical Journal, 93*, 310–314.
- Dhossche, D. M., Meloukheia, A. M., & Chakravorty, S. (2000). The association of suicide attempts and comorbid depression and substance abuse in psychiatric consultation patients. *General Hospital Psychiatry, 22*, 281–288.
- Dhossche, D. M., Rich, C. L., Ghani, S. O., & Isacson, G. (2001). Patterns of psychoactive substance detection from routine toxicology of suicides in Mobile, Alabama, between 1990 and 1998. *Journal of Affective Disorders, 64*, 167–174.
- Dhossche, D. & Rubinstein, J. (1997). Homicidal behavior in drug abusing psychiatric patients. *American Journal of Psychiatry, 154*, 888–889.
- Dhossche, D., Snell, K. S., & Larder, S. (2000). A case-control study of tattoos in young suicide victims as a possible marker of risk. *Journal of Affective Disorders, 59*, 165–168.
- Dingfelder, S. (2006). Cognitive therapy shows promise for suicide prevention. *Monitor on Psychology, Vol. 37, No. 9*. Washington, DC: American Psychological Association. Retrieved March 19, 2007, from <http://www.apa.org/monitor/oct06/cognitive.html>
- Dinwiddie, S. H. (1997). Characteristics of injection drug users derived from a large family study of alcoholism. *Comprehensive Psychiatry, 38*, 218–229.
- Dlugacz, Y. D., Restifo, A., Scanlon, K. A., Nelson, K., Fried, A. M., Hirsch, B., et al. (2003). Safety strategies to prevent suicide in multiple health care environments. *Joint Commission Journal on Quality and Safety, 29*, 267–278.
- Doshi, A., Boudreaux, E. D., Wang, N., Pelletier, A. J., & Camargo, C. A., Jr. (2005). National study of US emergency department visits for attempted suicide and self-inflicted injury, 1997-2001. *Annals of Emergency Medicine, 46*, 369–75.
- Dougherty, D. M., Mathias, C. W., Marsh, D. M., Moeller, G., & Swann, A. C. (2004). Suicidal behaviors and drug abuse: Impulsivity and its assessment. *Drug and Alcohol Dependence, 76*, S93–S105.
- Driessen, M., Veltrup, C., Weber, J., John, U., Wetterling, T., & Dilling, H. (1998). Psychiatric co-morbidity, suicidal behaviour and suicidal ideation in alcoholics seeking treatment. *Addiction, 93*, 889–894.
- Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: Findings from the

- Adverse Childhood Experiences Study. *JAMA: Journal of the American Medical Association*, 286, 3089–3096.
- Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., Dong, M., et al. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine*, 28, 430–438.
- Duberstein, P. R., & Conwell, Y. (1997). Personality disorders and completed suicide: A methodological and conceptual review. *Clinical Psychology: Science and Practice*, 4, 359–376.
- Duberstein, P. R., Conwell, Y., & Caine, E. D. (1993). Interpersonal stressors, substance abuse, and suicide. *Journal of Nervous and Mental Disease*, 181, 80–85.
- Duberstein, P. R., Conwell, Y., & Caine, E. D. (1994). Age differences in the personality characteristics of suicide completers: Preliminary findings from a psychological autopsy study. *Psychiatry*, 57, 213–224.
- Duberstein, P. R., Conwell, Y., Conner, K. R., Eberly, S., Evinger, J. S., & Caine, E. D. (2004). Poor social integration and suicide: Fact or artifact? A case-control study. *Psychological Medicine*, 34, 1331–1337.
- Dumais, A., Lesage, A. D., Alda, M., Rouleau, G., Dumont, M., Chawky, N., et al. (2005). Risk factors for suicide completion in major depression: A case-control study of impulsive and aggressive behaviors in men. *American Journal of Psychiatry*, 162, 2116–2124.
- Dumais, A., Lesage, A. D., Lalovic, A., Seguin, M., Tousignant, M., Chawky, N., et al. (2005). Is violent method of suicide a behavioral marker of lifetime aggression? *American Journal of Psychiatry*, 162, 1375–1378.
- Duncan, A. E., Neuman, R. J., Kramer, J., Kuperman, S., Hesselbrock, V., Reich, T., et al. (2005). Are there subgroups of bulimia nervosa based on comorbid psychiatric disorders? *International Journal of Eating Disorders*, 37, 19–25.
- Dunkel, D., Froehlich, S., Antretter, E., & Haring, C. (2002). Replication of a two-factor model of the Beck Depression Inventory in alcohol dependents and suicide attempters. *Psychopathology*, 35, 228–233.
- Erinoff, L., Anthony, J. C., Brown, G. K., Caine, E. D., Conner, K. R., Dougherty, D. M., et al. (2004). Overview of workshop on drug abuse and suicidal behavior. *Drug and Alcohol Dependence*, 76, S3–S9.
- Evren, C., & Evren, B. (2005). Self-mutilation in substance-dependent patients and relationship with childhood abuse and neglect, alexithymia and temperament and character dimensions of personality. *Drug and Alcohol Dependence*, 80, 15–22.
- Falck, R. S., Wang, J., Carlson, R. G., Eddy, M., & Siegal, H. A. (2002). The prevalence and correlates of depressive symptomatology among a community sample of crack-cocaine smokers. *Journal of Psychoactive Drugs*, 34, 281–288.
- Farberow, N. L., Kang, H. K., & Bullman, T. A. (1990). Combat experience and postservice psychosocial status as predictors of suicide in Vietnam veterans. *Journal of Nervous and Mental Disease*, 178, 32–37.
- Farrell, M., Neeleman, J., Griffiths, P., & Strang, J. (1996). Suicide and overdose among opiate addicts. *Addiction*, 91, 321–323.
- Fazel, S., Grann, M., & Goodwin, G. M. (2006). Suicide trends in discharged patients with mood disorders: Associations with selective serotonin uptake inhibitors and comorbid substance misuse. *Int.Clin.Psychopharmacol*, 21, 111–115.
- Fergusson, D. M., Horwood, L. J., & Swain-Campbell, N. (2002). Cannabis use and psychosocial adjustment in adolescence and young adulthood. *Addiction*, 97, 1123–1135.

- Fernandez, W. G., Hartman, R., & Olshaker, J. (2006). Brief interventions to reduce harmful alcohol use among military personnel: Lessons learned from the civilian experience. *Military Medicine*, *171*, 538–543.
- Fombonne, E. (1998). Suicidal behaviors in vulnerable adolescents: Time trends and their correlates. *British Journal of Psychiatry*, *173*, 154–159.
- Foote, B., Smolin, Y., Neft, D. I., & Lipschitz, D. (2008). Dissociative disorders and suicidality in psychiatric outpatients. *Journal of Nervous and Mental Disease*, *196*, 29–36.
- Forman, S. G., & Kalafat, J. (1998). Substance abuse and suicide: Promoting resilience against self-destructive behavior in youth. *School Psychology Review*, *27*, 398–406.
- Forrest, G. G. (1994). *Chemical dependency and antisocial personality disorder: Psychotherapy and assessment strategies*. New York: Haworth Press.
- Fortuna, L. R., Perez, D. J., Canino, G., Sribney, W., & Alegria, M. (2007). Prevalence and correlates of lifetime suicidal ideation and suicide attempts among Latino subgroups in the United States. *Journal of Clinical Psychiatry*, *68*, 572–581.
- Foster, T. (2001). Dying for a drink. Global suicide prevention should focus more on alcohol use disorders. *British Medical Journal*, *323*, 817–818.
- Friedman, A. S., Terras, A., Zhu, W., & McCallum, J. (2004). Depression, negative self-image, and suicidal attempts as effects of substance use and substance dependence. *Journal of Addictive Diseases*, *23*, 55–71.
- Gagajewski, A., & Apple, F. S. (2003). Methadone-related deaths in Hennepin County, Minnesota: 1992–2002. *Journal of Forensic Sciences*, *48*, 668–671.
- Garcia, J., Adams, J., Friedman, L., & East, P. (2002). Links between past abuse, suicide ideation, and sexual orientation among San Diego college students. *Journal of American College Health*, *51*, 9–14.
- Garlow, S. J. (2002). Age, gender, and ethnicity differences in patterns of cocaine and ethanol use preceding suicide. *American Journal of Psychiatry*, *159*, 615–619.
- Garlow, S. J., Purselle, D., & D’Orion, B. (2003). Cocaine use disorders and suicidal ideation. *Drug and Alcohol Dependence*, *70*, 101–104.
- Garlow, S. J., Purselle, D. C., & Heninger, M. (2007). Cocaine and alcohol use preceding suicide in African American and White adolescents. *Journal of Psychiatric Research*, *41*, 530–536.
- Garno, J. L., Goldberg, J. F., Ramirez, P. M., & Ritzler, B. A. (2005). Bipolar disorder with comorbid cluster B personality disorder features
- Gil-Rivas, V., Fiorentine, R., Anglin, M. D., & Taylor, E. (1997). Sexual and physical abuse: Do they compromise drug treatment outcomes? *Journal of Substance Abuse Treatment*, *14*, 351–358.
- Glasner-Edwards, S., Mooney, L. J., Marinelli-Casey, P., Hillhouse, M., Ang, A., & Rawson, R. (2008). Risk factors for suicide attempts in methamphetamine-dependent patients. *American Journal of Addiction*, *17*, 24–27.
- Gliatto, M. F., & Rai, A. K. (1999). Evaluation and treatment of patients with suicidal ideation. *American Family Physician*, *59*, 1500–1506. Retrieved July 31, 2006, from <http://www.aafp.org/afp/990315ap/1500.html>
- Glowinski, A. L., Jacob, T., Bucholz, K. K., Scherrer, J. F., True, W., & Heath, A. C. (2004). Paternal alcohol dependence and offspring suicidal behaviors in a children-of-twins study. *Drug and Alcohol Dependence*, *76*, S69–S77.

- Gold, L. H. (2006). Suicide and gender. In R. I. Simon, R. E. Hales, & American Psychiatric Publishing (Eds.), *The American Psychiatric Publishing textbook of suicide assessment and management* (pp. 77–106). Washington, DC: American Psychiatric Publishing.
- Goldsmith, S. K., Pellmar, T. C., Kleinman, A. M., & Bunney, W. E. (Eds.). (2002). *Reducing suicide: A national imperative*. Washington, DC: National Academies Press.
- Goldstein, G., Haas, G. L., Pakrashi, M., Novero, A. M., & Luther, J. F. (2006). The cycle of schizoaffective disorder, cognitive ability, alcoholism, and suicidality. *Suicide and Life-Threatening Behavior, 36*, 35–43.
- Goldston, D. B. (2004). Conceptual issues in understanding the relationship between suicidal behavior and substance use during adolescence. *Drug and Alcohol Dependence, 76 Suppl*, S79–S91.
- Goldston, D. B., Molock, S. D., Whitbeck, L. B., Murakami, J. L., Zayas, L. H., & Hall, G. C. N. (2008). Cultural considerations in adolescent suicide prevention and psychosocial treatment. *American Psychologist, 63*, 14–31.
- Goodwin, R. D. & Hamilton, S. P. (2003). Lifetime comorbidity of antisocial personality disorder and anxiety disorders among adults in the community. *Psychiatry Research, 117*, 159–166.
- Goodwin, R. D., Kroenke, K., Hoven, C. W., & Spitzer, R. L. (2003). Major depression, physical illness, and suicidal ideation in primary care. *Psychosomatic Medicine, 65*, 501–505.
- Goodwin, R. D. & Roy-Byrne, P. (2006). Panic and suicidal ideation and suicide attempts: Results from the National Comorbidity Survey. *Depression and Anxiety, 23*, 124–132.
- Gorniak, J. M., Jenkins, A. J., Felo, J. A., & Balraj, E. (2005). Drug prevalence in drowning deaths in Cuyahoga County, Ohio: A ten-year retrospective study. *American Journal of Forensic Medicine and Pathology, 26*, 240–243.
- Goss, J. R., Peterson, K., Smith, L. W., Kalb, K., & Brodey, B. B. (2002). Characteristics of suicide attempts in a large urban jail system with an established suicide prevention program. *Psychiatric Services, 53*, 574–579.
- Gossop, M., Stewart, D., Treacy, S., & Marsden, J. (2002). A prospective study of mortality among drug misusers during a 4-year period after seeking treatment. *Addiction, 97*, 39–47.
- Gould, M. S., Kalafat, J., Munfakh, J. L. H., & Kleinman, M. (2007). An evaluation of crisis hotline outcomes, Part 2: Suicidal callers. *Suicide and Life-Threatening Behavior, 37*, 338–352.
- Gould, M. S., Marrocco, F. A., Kleinman, M., Thomas, J. G., Mostkoff, K., Cote, J., et al. (2005). Evaluating iatrogenic risk of youth suicide screening programs: A randomized controlled trial. *JAMA, 293*, 1635–1643.
- Grant, B. F., & Hasin, D. S. (1999). Suicidal ideation among the United States drinking population: Results from the National Longitudinal Alcohol Epidemiologic Survey. *Journal of Studies on Alcohol, 60*, 422–429.
- Grassi, L., Mondardini, D., Pavanati, M., Sighinolfi, L., Serra, A., & Ghinelli, F. (2001). Suicide probability and psychological morbidity secondary to HIV infection: A control study of HIV-seropositive, hepatitis C virus (HCV)-seropositive and HIV/HCV-seronegative injecting drug users. *Journal of Affective Disorders, 64*, 195–202.
- Gross-Isseroff, R., Israeli, M., & Biegon, A. (1989). Autoradiographic analysis of tritiated imipramine binding in the human brain post mortem: Effects of suicide. *Archives of General Psychiatry, 46*, 237–241.
- Gut-Fayand, A., Dervaux, A., Olie, J. P., Loo, H., Poirier, M. F., & Krebs, M. O. (2001). Substance abuse and suicidality in schizophrenia: A common risk factor linked to impulsivity. *Psychiatry Research, 102*, 65–72.
- Hakko, H., Koponen, P., Viilo, K., Sarkioja, T., Meyer-Rochow, V. B., Rasanen, P., et al. (2005). Alcohol-related suicides in victims with a history of hospital-treated depression. *American Journal on Addictions, 14*, 455–463.

- Hall, W. D., & Lucke, J. (2006). How have the selective serotonin reuptake inhibitor antidepressants affected suicide mortality? *Australian and New Zealand Journal of Psychiatry, 40*, 941–950.
- Haller, D. L., & Miles, D. R. (2003). Suicidal ideation among psychiatric patients with HIV: Psychiatric morbidity and quality of life. *AIDS and Behavior, 7*, 101–108.
- Hamilton, M. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery and Psychiatry, 23*, 56–62.
- Hamilton, M. A. (1960). Hamilton Rating Scale for Depression (HAM-D). The France Foundation. Retrieved August 22, 2007, from [http://www.measurecme.org/resources/MEASURE\\_HAMD.pdf](http://www.measurecme.org/resources/MEASURE_HAMD.pdf)
- Harned, M. S., Najavits, L. M., & Weiss, R. D. (2006). Self-harm and suicidal behavior in women with comorbid PTSD and substance dependence. *American Journal on Addictions, 15*, 392–395.
- Harris, E. C. & Barraclough, B. (1997). Suicide as an outcome for mental disorders. A meta-analysis. *British Journal of Psychiatry, 170*, 205–228.
- Harris, M. R., Holman, J., Bates, A. A., DeLima, Z., Howard, E. S., Ivanenko, A., et al. (2000). Completed suicides and emergency psychiatric evaluations: The Louisville experience. *Journal of the Kentucky Medical Association, 98*, 210–212.
- Harriss, L., Hawton, K., & Zahl, D. (2005). Value of measuring suicidal intent in the assessment of people attending hospital following self-poisoning or self-injury. *British Journal of Psychiatry, 186*, 60–66.
- Hartl, T. L., Rosen, C., Drescher, K., Lee, T. T., & Gusman, F. (2005). Predicting high-risk behaviors in veterans with posttraumatic stress disorder. *Journal of Nervous and Mental Disease, 193*, 464–472.
- Havens, J. R., Ompad, D. C., Latkin, C. A., Fuller, C. M., Arria, A. M., Vlahov, D., et al. (2005). Suicidal ideation among African-American non-injection drug users. *Ethnicity and Disease, 15*, 110–115.
- Havens, J. R., Sherman, S. G., Sapun, M., & Strathdee, S. A. (2006). Prevalence and correlates of suicidal ideation among young injection vs. noninjection drug users. *Substance Use and Misuse, 41*, 245–254.
- Havens, J. R., Strathdee, S. A., Fuller, C. M., Ikeda, R., Friedman, S. R., Des, J., et al. (2004). Correlates of attempted suicide among young injection drug users in a multi-site cohort. *Drug and Alcohol Dependence, 75*, 261–269.
- Haw, C., Hawton, K., Casey, D., Bale, E., & Shepherd, A. (2005). Alcohol dependence, excessive drinking and deliberate self-harm: Trends and patterns in Oxford, 1989–2002. *Social Psychiatry and Psychiatric Epidemiology, 40*, 964–971.
- Haw, C., Houston, K., Townsend, E., & Hawton, K. (2001). Deliberate self-harm in patients with alcohol disorders: Characteristics, treatment, and outcome. *Crisis, 22*, 93–101.
- Hawton, K., Simkin, S., & Fagg, J. (1997). Deliberate self-harm in alcohol and drug misusers: Patient characteristics and patterns of clinical care. *Drug and Alcohol Review, 16*, 123–129.
- Hawton, K., Sutton, L., Haw, C., Sinclair, J., & Harriss, L. (2005). Suicide and attempted suicide in bipolar disorder: A systematic review of risk factors. *Journal of Clinical Psychiatry, 66*, 693–704.
- Hawton, K. & van Heeringen, K. (Eds.). (2002). *The international handbook of suicide and attempted suicide*. Indianapolis, IN: Wiley Publishing Inc.
- Hayes, L. M. (1994). Developing a written program for jail suicide prevention. *Corrections Today, 56*, 182–187.
- Hayes, L. M. (1995). *Prison suicide: An overview and guide to prevention*. Mansfield, MA: National Center for Institutions and Alternatives.

- Hayes, L. M. (2005). Suicide prevention in correctional facilities. In C. L. Scott & J. B. Gerbasi (Eds.), *Handbook of correctional mental health* (pp. 69–88). Washington, DC: American Psychiatric Publishing.
- He, X. Y., Felthous, A. R., Holzer, C. E., III, Nathan, P., & Veasey, S. (2001). Factors in prison suicide: One year study in Texas. *Journal of Forensic Sciences*, *46*, 896–901.
- Heale, P., Dietze, P., & Fry, C. (2003). Intentional overdose among heroin overdose survivors. *Journal of Urban Health*, *80*, 230–237.
- Heard, H. L. (2002). Psychotherapeutic approaches to suicidal ideation and behaviour. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide* (pp. 503–518). Indianapolis, IN: Wiley Publishing Inc.
- Heikkinen, M. E., Aro, H. M., Henriksson, M. M., Isometsa, E. T., Sarna, S. J., Kuoppasalmi, K. I., et al. (1994). Differences in recent life events between alcoholic and depressive nonalcoholic suicides. *Alcoholism, Clinical and Experimental Research*, *18*, 1143–1149.
- Hemmingsson, T., & Kriebel, D. (2003). Smoking at age 18–20 and suicide during 26 years of follow-up: How can the association be explained? *International Journal of Epidemiology*, *32*, 1000–1004.
- Hendin, H., Lipschitz, A., Maltzberger, J. T., Haas, A. P., & Wynecoop, S. (2000). Therapists' reactions to patients' suicides. *American Journal of Psychiatry*, *157*, 2022–2027.
- Hendin, H., Maltzberger, J. T., Lipschitz, A., Haas, A. P., & Kyle, J. (2001). Recognizing and responding to a suicide crisis. *Suicide and Life-Threatening Behavior*, *31*, 115–128.
- Hennen, J., & Baldessarini, R. J. (2005). Suicidal risk during treatment with clozapine: A meta-analysis. *Schizophrenia Research*, *73*, 139–145.
- Henriques, G. R., Brown, G. K., Berk, M. S., & Beck, A. T. (2004). Marked increases in psychopathology found in a 30-year cohort comparison of suicide attempters. *Psychological Medicine*, *34*, 833–841.
- Henriques, G., Wenzel, A., Brown, G. K., & Beck, A. T. (2005). Suicide attempters' reaction to survival as a risk factor for eventual suicide. *American Journal of Psychiatry*, *162*, 2180–2182.
- Heru, A. M., Stuart, G. L., Rainey, S., Eyre, J., & Recupero, P. R. (2006). Prevalence and severity of intimate partner violence and associations with family functioning and alcohol abuse in psychiatric inpatients with suicidal intent. *Journal of Clinical Psychiatry*, *67*, 23–29.
- Hewitt, P. L., Norton, G. R., Flett, G. L., Callander, L., & Cowan, T. (1998). Dimensions of perfectionism, hopelessness, and attempted suicide in a sample of alcoholics. *Suicide and Life-Threatening Behavior*, *28*, 395–406.
- Hien, D. A., Cohen, L. R., Miele, G. M., Litt, L. C., & Capstick, C. (2004). Promising treatments for women with comorbid PTSD and substance use disorders. *American Journal of Psychiatry*, *161*, 1426–1432.
- Hill, E. M., Boyd, C. J., & Kortge, J. F. (2000). Variation in suicidality among substance-abusing women: The role of childhood adversity. *Journal of Substance Abuse Treatment*, *19*, 339–345.
- Hills, A. L., Cox, B. J., McWilliams, L. A., & Sareen, J. (2005). Suicide attempts and externalizing psychopathology in a nationally representative sample. *Comprehensive Psychiatry*, *46*, 334–339.
- Hodgins, D. C., Mansley, C., & Thygesen, K. (2006). Risk factors for suicide ideation and attempts among pathological gamblers. *The American Journal on Addictions*, *15*, 303–310.
- Horton, L. (2006). Social, cultural, and demographic factors in suicide. In R. I. Simon, R. E. Hales, & American Psychiatric Publishing (Eds.), *The American Psychiatric Publishing textbook of suicide assessment and management* (pp. 107–135). Washington, DC: American Psychiatric Publishing.

- Houston case-control study of nearly lethal suicide attempts. (2001). *Supplement to Suicide and Life-Threatening Behavior*, 32, 1–85. Retrieved January 5, 2007, from [http://www.cdc.gov/ncipc/pub-res/suicide\\_supplement/32\(1\)a-accessible.pdf](http://www.cdc.gov/ncipc/pub-res/suicide_supplement/32(1)a-accessible.pdf)
- Hufford, M. R. (2001). Alcohol and suicidal behavior. *Clinical Psychology Review*, 21, 797–811.
- Hunt, I. M., Kapur, N., Robinson, J., Shaw, J., Flynn, S., Bailey, H., et al. (2006). Suicide within 12 months of mental health service contact in different age and diagnostic groups: National clinical survey. *British Journal of Psychiatry*, 188, 135–142.
- Hunt, I. M., Kapur, N., Windfuhr, K., Robinson, J., Bickley, H., Flynn, S. et al. (2006). Suicide in schizophrenia: Findings from a National Clinical Survey. *Journal of Psychiatric Practice*, 12, 139–147.
- Husband, S. D., Marlowe, D. B., Lamb, R. J., Iguchi, M. Y., Bux, D. A., Kirby, K. C., et al. (1996). Decline in self-reported dysphoria after treatment entry in inner-city cocaine addicts. *Journal of Consulting & Clinical Psychology*, 64, 221–224.
- Igartua, K. J., Gill, K., & Montoro, R. (2003). Internalized homophobia: A factor in depression, anxiety, and suicide in the gay and lesbian population. *Canadian Journal of Community Mental Health*, 22, 15–30.
- Ilggen, M. A., Harris, A. H., Moos, R. H., & Tiet, Q. Q. (2007). Predictors of a suicide attempt one year after entry into substance use disorder treatment. *Alcoholism: Clinical and Experimental Research*, 31, 635–642.
- Ilggen, M. A., Jain, A., Lucas, E., & Moos, R. H. (2007). Substance use-disorder treatment and a decline in attempted suicide during and after treatment. *Journal of Studies on Alcohol and Drugs*, 68, 503–509.
- Ilggen, M. A., Tiet, Q., Finney, J. W., & Harris, A. H. (2005). Recent suicide attempt and the effectiveness of inpatient and outpatient substance use disorder treatment. *Alcoholism: Clinical & Experimental Research*, 29, 1664–1671.
- Ilggen, M. A., Tiet, Q., & Moos, R. (2004). Outcomes of substance use disorder treatment in suicidal and nonsuicidal male patients. *Journal of Studies on Alcohol*, 65, 643–650.
- Institute of Medicine (2002). *Reducing suicide: A national imperative*. Washington, D.C.: National Academies Press.
- Institute of Medicine (2006). *Improving the quality of health care for mental and substance-use conditions: Quality chasm series*. Washington, DC: National Academies Press. Retrieved on February 18, 2009, from <http://www.nap.edu/catalog/11470.html>
- Isbister, G. K., & Whyte, I. M. (2002). Atypical presentation of risperidone toxicity. *Veterinary and Human Toxicology*, 44, 118–119.
- Jacobs, D. (2007). A resource guide for implementing the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) 2007 patient safety goals on suicide featuring the suicide assessment five-step evaluation and triage (SAFE-T). Wellesley Hills, MA: Screening for Mental Health, Inc. Retrieved August 23, 2007, from [http://www.mentalhealthscreening.org/downloads/sites/docs/ndsd/JCAHO\\_FINAL.pdf](http://www.mentalhealthscreening.org/downloads/sites/docs/ndsd/JCAHO_FINAL.pdf)
- Jacobs, D., & Brewer, M. (2004). APA practice guideline provides recommendations for assessing and treating patients with suicidal behaviors. *Psychiatric Annals*, 24, 373–380. Retrieved July 2, 2008, from [http://www.med.umich.edu/depression/suicide\\_assessment/Psych%20Annals%20Summary%20and%20Review%20APA%20Suicide%20Guidelines%20Review%20PDF.pdf](http://www.med.umich.edu/depression/suicide_assessment/Psych%20Annals%20Summary%20and%20Review%20APA%20Suicide%20Guidelines%20Review%20PDF.pdf)
- Jacobs, D. G. (Ed.). (1999). *The Harvard Medical School guide to suicide assessment and intervention* (1st ed.). San Francisco: Jossey-Bass.
- Jarvis, T. J., & Copeland, J. (1997). Child sexual abuse as a predictor of psychiatric co-morbidity and its implications for drug and alcohol treatment. *Drug and Alcohol Dependence*, 49, 61–69.

- Jenkins, R., Bhugra, D., Meltzer, H., Singleton, N., Bebbington, P., Brugha, T., et al. (2005). Psychiatric and social aspects of suicidal behaviour in prisons. *Psychological Medicine*, *35*, 257–269.
- Jobes, D. A. (2006). *Managing suicidal risk: A collaborative approach*. New York: Guilford Press.
- Jobes, D. A., & Berman, A. L. (1993). Suicide and malpractice liability: Assessing and revising policies, procedures, and practice in outpatient settings. *Professional Psychology: Research and Practice*, *24*, 91–99.
- Jobes, D. A., Luoma, J. B., Husted, L. A. T., & Mann, R. E. (2000). In the wake of suicide: Survivorship and postvention. In R. W. Maris, A. L. Berman, & M. M. Silverman (Eds.), *Comprehensive textbook of suicidology* (pp. 536–561). New York: Guilford Press.
- Joe, S., Baser, R. E., Breeden, G. K., Neighbors, H. W., & Jackson, J. S. (2006). Prevalence of and risk factors for lifetime suicide attempts among blacks in the United States. *JAMA*, *296*, 2112–2123.
- Johnsson, E. & Fridell, M. (1997). Suicide attempts in a cohort of drug abusers: A 5-year follow-up study. *Acta Psychiatrica Scandinavica*, *96*, 362–366.
- Joiner, J., Sachs-Ericsson, N. J., Wingate, L. R., Brown, J. S., Anestis, M. D., & Selby, E. A. (2007). Childhood physical and sexual abuse and lifetime number of suicide attempts: A persistent and theoretically important relationship. *Behaviour Research and Therapy*, *45*, 539–547.
- Joiner, T. E. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.
- Joiner, T. E. (2006). Why people die by suicide. *JAMA: Journal of the American Medical Association*, *295*, 2082–2083.
- Kalafat, J., Gould, M. S., Munfakh, J. L. H., & Kleinman, M. (2007). An evaluation of crisis hotline outcomes, Part 1: Non-suicidal crisis callers. *Suicide and Life-Threatening Behavior*, *37*, 322–337.
- Kalechstein, A. D., Newton, T. F., Longshore, D., Anglin, M. D., van Gorp, W. G., & Gawin, F. H. (2000). Psychiatric comorbidity of methamphetamine dependence in a forensic sample. *Journal of Neuropsychiatry and Clinical Neurosciences*, *12*, 480–484.
- Kalyoncu, A., Mirsal, H., Pektas, O., Tan, D., & Beyazyurek, M. (2007). Heroin-dependent patients attempting and not attempting suicide: A comparison. *Acta Neuropsychiatrica*, *19*, 297–303.
- Kanayama, G., Cohane, G. H., Weiss, R. D., & Pope, H. G. (2003). Past anabolic-androgenic steroid use among men admitted for substance abuse treatment: An underrecognized problem? *Journal of Clinical Psychiatry*, *64*, 156–160.
- Kaneda, Y. (2006). Suicidality in schizophrenia as a separate symptom domain that may be independent of depression or psychosis. *Schizophrenia Research*, *81*, 113–114.
- Kapur, N., Cooper, J., King-Hele, S., Webb, R., Lawlor, M., Rodway, C., et al. (2006). The repetition of suicidal behavior: A multicenter cohort study. *Journal of Clinical Psychiatry*, *67*, 1599–1609.
- Karadag, F., Sar, V., Tamar-Gurol, D., Evren, C., Karagoz, M., & Erkiran, M. (2005). Dissociative disorders among inpatients with drug or alcohol dependency. *Journal of Clinical Psychiatry*, *66*, 1247–1253.
- Kaslow, N. J. & Aronson, S. G. (2004). Recommendations for family interventions following a suicide. *Professional Psychology: Research and Practice*, *35*, 240–247.
- Kaslow, N. J., Price, A. W., Wyckoff, S., Bender, G. M., Sherry, A., Young, S., et al. (2004). Person factors associated with suicidal behavior among African American women and men. *Cultural Diversity and Ethnic Minority Psychology*, *10*, 5–22.
- Kaslow, N., Thompson, M., Meadows, L., Chance, S., Puett, R., Hollins, L., et al. (2000). Risk factors for suicide attempts among African American women. *Depression and Anxiety*, *12*, 13–20.

- Kaslow, N. J., Thompson, M. P., Meadows, L. A., Jacobs, D., Chance, S., Gibb, B., et al. (1998). Factors that mediate and moderate the link between partner abuse and suicidal behavior in African American women. *Journal of Consulting and Clinical Psychology, 66*, 533–540.
- Kausch, O. (2003a). Patterns of substance abuse among treatment-seeking pathological gamblers. *Journal of Substance Abuse Treatment, 25*, 263–270.
- Kausch, O. (2003b). Suicide attempts among veterans seeking treatment for pathological gambling. *Journal of Clinical Psychiatry, 64*, 1031–1038.
- Kausch, O. & McCormick, R. A. (2002). Suicide prevalence in chemical dependency programs: Preliminary data from a national sample, and an examination of risk factors. *Journal of Substance Abuse Treatment, 22*, 97–102.
- Kaye, N. S. & Soreff, S. M. (1991). The psychiatrist's role, responses, and responsibilities when a patient commits suicide. *American Journal of Psychiatry, 148*, 739–743.
- Keeley, H. S., Corcoran, P., & Bille-Brahe, U. (2004). Addiction and suicidal behaviour: Questions and answers in the EPSIS. In D. De Leo, U. Bille-Brahe, A. Kerkhof, & A. Schmidtke (Eds.), *Suicidal behaviour: Theories and research findings* (pp. 165–184). Ashland, OH: Hogrefe & Huber Publishers.
- Kellner, C. H., Fink, M., Knapp, R., Petrides, G., Husain, M., Rummans, T., et al. (2005). Relief of expressed suicidal intent by ECT: A consortium for research in ECT study. *American Journal of Psychiatry, 162*, 977–982.
- Kelly, M. J., Mufson, M. J., & Rogers, M. P. (1999). Medical settings and suicide. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention* (pp. 491–519). San Francisco: Jossey-Bass.
- Kessler, R. C., Berglund, P. A., Borges, G., Castilla-Puentes, R. C., Glantz, M. D., Jaeger, S. A., et al. (2007). Smoking and suicidal behaviors in the National Comorbidity Survey: Replication. *Journal of Nervous and Mental Disease, 195*, 369–377.
- Kessler, R. C., Berglund, P., Borges, G., Nock, M., & Wang, P. S. (2005). Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990–1992 to 2001–2003. *JAMA, 293*, 2487–2495.
- Kessler, R. C., Borges, G., & Walters, E. E. (1999). Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. *Archives of General Psychiatry, 56*, 617–626.
- Kilbey, M. M., Breslau, N., & Andreski, P. (1992). Cocaine use and dependence in young adults: Associated psychiatric disorders and personality traits. *Drug and Alcohol Dependence, 29*, 283–290.
- Kim, C. D., Seguin, M., Therrien, N., Riopel, G., Chawky, N., Lesage, A. D., et al. (2005). Familial aggregation of suicidal behavior: A family study of male suicide completers from the general population. *American Journal of Psychiatry, 162*, 1017–1019.
- Kingree, J. B., Thompson, M. P., & Kaslow, N. J. (1999). Risk factors for suicide attempts among low-income women with a history of alcohol problems. *Addictive Behaviors, 24*, 583–587.
- Kleespies, Phillip M. (Ed.) *Emergencies in mental health practice: Evaluation and management* (1998). New York: Guilford Press.
- Klott, J. & Jongsma, A. E. (2004). *The suicide and homicide risk assessment and prevention treatment planner*. Hoboken, N.J.: J. Wiley.

- Knopik, V. S., Heath, A. C., Madden, P. A., Bucholz, K. K., Slutske, W. S., Nelson, E. C., et al. (2004). Genetic effects on alcohol dependence risk: Re-evaluating the importance of psychiatric and other heritable risk factors. *Psychological Medicine*, *34*, 1519–1530.
- Knox, K. L., Litts, D. A., Talcott, G. W., Feig, J. C., & Caine, E. D. (2003). Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: Cohort study. *British Medical Journal*, *327*, 1376. Retrieved July 2, 2008, from <http://www.bmj.com/cgi/reprint/327/7428/1376>
- Koller, G., Preuss, U. W., Bottlender, M., Wenzel, K., & Soyka, M. (2002). Impulsivity and aggression as predictors of suicide attempts in alcoholics. *European Archives of Psychiatry and Clinical Neuroscience*, *252*, 155–160.
- Korpi, E. R., Kleinman, J. E., Goodman, S. I., Phillips, I., DeLisi, L. E., Linnoila, M., et al. (1986). Serotonin and 5-hydroxyindoleacetic acid in brains of suicide victims. Comparison in chronic schizophrenic patients with suicide as cause of death. *Archives of General Psychiatry*, *43*, 594–600.
- Kosten, T. R., & Rounsaville, B. J. (1988). Suicidality among opioid addicts: 2.5 year follow-up. *American Journal of Drug and Alcohol Abuse*, *14*, 357–369.
- Krishnan, K. R. (2005). Psychiatric and medical comorbidities of bipolar disorder. *Psychosomatic Medicine*, *67*, 1–8.
- Krupitsky, E. M., Masalov, D. V., Didenko, T. Y., Burakov, A. M., Romanova, T. N., Zvartau, E. E., et al. (2001). Prevention of suicide by naltrexone in a recently detoxified heroin addict. *European Addiction Research*, *7*, 87–88.
- Kung, H. C., Pearson, J. L., & Liu, X. (2003). Risk factors for male and female suicide decedents ages 15–64 in the United States: Results from the 1993 National Mortality Followback Survey. *Social Psychiatry and Psychiatric Epidemiology*, *38*, 419–426.
- Kung, H. C., Pearson, J. L., & Wei, R. (2005). Substance use, firearm availability, depressive symptoms, and mental health service utilization among white and African American suicide decedents aged 15 to 64 years. *Annals of Epidemiology*, *15*, 614–621.
- Kuo, C. J., Tsai, S. Y., Lo, C. H., Wang, Y. P., & Chen, C. C. (2005). Risk factors for completed suicide in schizophrenia. *Journal of Clinical Psychiatry*, *66*, 579–585.
- Kuo, W. H., Gallo, J. J., & Eaton, W. W. (2004). Hopelessness, depression, substance disorder, and suicidality: A 13-year community-based study. *Social Psychiatry and Psychiatric Epidemiology*, *39*, 497–501.
- Kutcher, S., & Chehil, S. (2007). *Suicide risk management: A manual for health professionals*. Malden, MA: Blackwell Publishers.
- Lamprecht, H. C., Pakrasi, S., Gash, A., & Swann, A. G. (2005). Deliberate self-harm in older people revisited. *International Journal of Geriatric Psychiatry*, *20*, 1090–1096.
- Langeland, W., Draijer, N., & van den Brink, W. (2004). Psychiatric comorbidity in treatment-seeking alcoholics: The role of childhood trauma and perceived parental dysfunction. *Alcoholism, Clinical and Experimental Research*, *28*, 441–447.
- Langslow, A. (1999). Safety and physical restraint. *Australian Nursing Journal*, *7*, 34–35.
- Leach, M. M. (2006). *Cultural diversity and suicide: Ethnic, religious, gender and sexual orientation perspectives*. New York: Haworth Press.
- Leenaars, A., Cantero, C. H., Connolly, J., EchoHawk, M., Gailiene, D., Xiong He, Z. K. N., et al. (2000). Ethical and legal issues. In K. Hawton & K. van Heeringen (Eds.), *Suicide and attempted suicide* (pp. 421–435). Chichester, England: John Wiley & Sons.

- Leenaars, A. A., Maltzberger, John T., and Neimeyer, Robert A. (Eds.). (1994). *Treatment of suicidal people*. Washington, DC: Taylor & Francis.
- Leikin, J. B., Morris, R. W., Warren, M., & Erickson, T. (2001). Trends in a decade of drug abuse: Presentation to an inner city ED. *American Journal of Emergency Medicine, 19*, 37–39.
- Lejoyeux, M., Boulanguiez, S., Fichelle, A., McLoughlin, M., Claudon, M., & Ades, J. (2000). Alcohol dependence among patients admitted to psychiatric emergency services. *General Hospital Psychiatry, 22*, 206–212.
- LeMaster, P. L., Beals, J., Novins, D. K., & Manson, S. M. (2004). The prevalence of suicidal behaviors among Northern Plains American Indians. *Suicide and Life-Threatening Behavior, 34*, 242–254.
- Lequesne, E. R. & Hersh, R. G. (2004). Disclosure of a diagnosis of borderline personality disorder. *Journal of Psychiatric Practice, 10*, 170–176.
- Lesage, A. D. (2005). Can psychiatrists prevent suicide? Yes, in collaboration. *The Canadian Journal of Psychiatry/La Revue canadienne de psychiatrie, 50*, 507–508.
- Lester, D. (2000). Alcoholism, substance abuse, and suicide. In R. W. Maris, A. L. Berman, & M. M. Silverman (Eds.), *Comprehensive textbook of suicidology* (pp. 357–375). New York: Guilford Press.
- Lester, D. (2001a). Association of alcohol use and suicide in 27 nations of the world. *Psychological Reports, 88*, 1129.
- Lester, D. (Ed.). (2001b). *Suicide prevention: Resources for the millennium*. Philadelphia: Brunner-Routledge.
- Levenson, J. L., & Bostwick, J. M. (2005). Suicidality in the medically ill. *Primary Psychiatry, 12*, 16–18.
- Lewis, L. M. (2007). No-harm contracts: A review of what we know. *Suicide and Life-Threatening Behavior, 37*, 50–57.
- Lichtenthal, W. G., Cruess, D. G., & Prigerson, H. G. (2004). A case for establishing complicated grief as a distinct mental disorder in DSM-V. *Clinical Psychology Review, 24*, 637–662.
- Lillis, E. A. & Fruzzetti, A. E. (2005). Suicide and parasuicide management in the primary care setting. In W. T. O'Donohue, M. R. Byrd, N. A. Cummings, & D. A. Henderson (Eds.), *Behavioral integrative care: Treatments that work in the primary care setting* (pp. 109–128). New York: Brunner-Routledge.
- Linehan, M. M., Comtois, K. A., Brown, M. Z., Heard, H. L., & Wagner, A. (2006). Suicide attempt self-injury interview (SASII): Development, reliability, and validity of a scale to assess suicide attempts and intentional self-injury. *Psychological Assessment, 18*, 303–312.
- Linehan, M. M., Comtois, K. A., Murray, A. M., Brown, M. Z., Gallop, R. J., Heard, H. L., et al. (2006). Two year-randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorders. *Archives of General Psychiatry, 63*, 757–766.
- Linehan, M. M., Rizvi, S. L., Shaw-Welch, S., & Page, B. (2000). Psychiatric aspects of suicidal behaviour: Personality disorders. In K. Hawton & K. van Heeringen (Eds.), *International handbook of suicide and attempted suicide* (pp. 147–178). Sussex, England: John Wiley & Sons Inc.
- Linehan, M. M., Schmidt, H., III, Dimeff, L. A., Craft, J. C., Kanter, J., & Comtois, K. A. (1999). Dialectical behavior therapy for patients with borderline personality disorder and drug dependence. *American Journal on Addictions, 8*, 279–292.
- Links, P. S. & Kolla, N. (2005). Assessing and managing suicide risk. In J. M. Oldham, A. E. Skodol, & D. S. Bender (Eds.), *The American Psychiatric Publishing textbook of personality disorders* (pp. 449–462). Arlington, VA: American Psychiatric Publishing, Inc.

- Lish, J. D., Zimmerman, M., Farber, N. J., & Lush, D. T. (1996). Suicide screening in a primary care setting at a veterans affairs medical center. *Psychosomatics: Journal of Consultation Liaison Psychiatry*, *37*, 413–424.
- Lloyd, J. J., Ricketts, E. P., Havens, J. R., Cornelius, L. J., Bishai, D., Huettner, S., et al. (2007). The relationship between lifetime abuse and suicidal ideation in a sample of injection drug users. *Journal of Psychoactive Drugs*, *39*, 159–166.
- Loas, G., Guilbaud, O., Perez-Diaz, F., Verrier, A., Stephan, P., Lang, F., et al. (2005). Dependency and suicidality in addictive disorders. *Psychiatry Research*, *137*, 103–111.
- Lynskey, M. T., Glowinski, A. L., Todorov, A. A., Bucholz, K. K., Madden, P. A., Nelson, E. C., et al. (2004). Major depressive disorder, suicidal ideation, and suicide attempt in twins discordant for cannabis dependence and early-onset cannabis use. *Archives of General Psychiatry*, *61*, 1026–1032.
- Mack, A. H. & Lightdale, H. A. (2006). Substance related disorders. In R. I. Simon, R. E. Hales, & American Psychiatric Publishing (Eds.), *The American Psychiatric Publishing textbook of suicide assessment and management* (pp. 347-364). Washington, DC: American Psychiatric Publishing.
- Maloney, E., Degenhardt, L., Darke, S., Mattick, R. P., & Nelson, E. (2007). Suicidal behaviour and associated risk factors among opioid-dependent individuals: A case-control study. *Addiction*, *102*, 1933–1941.
- Maltsberger, J. T., & Goldblatt, M. J. (Eds.). (1996). *Essential papers on suicide*. New York: University Press.
- Mann, J. J. (2003). Neurobiology of suicidal behaviour. *Nature Reviews. Neuroscience*, *4*, 819–828.
- Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., et al. (2005). Suicide prevention strategies: A systematic review. *JAMA*, *294*, 2064–2074.
- Mann, J. J., Brent, D. A., & Arango, V. (2001). The neurobiology and genetics of suicide and attempted suicide: A focus on the serotonergic system. *Neuropsychopharmacology*, *24*, 467–477.
- Mann, J. J., Stanley, M., McBride, P. A., & McEwen, B. S. (1986). Increased serotonin<sub>2</sub> and beta-adrenergic receptor binding in the frontal cortices of suicide victims. *Archives of General Psychiatry*, *43*, 954–959.
- Mann, J. J., Waternaux, C., Haas, G. L., & Malone, K. M. (1999). Toward a clinical model of suicidal behavior in psychiatric patients. *American Journal of Psychiatry*, *156*, 181–189.
- Maris, R. W. (Ed.). (1992). *Assessment and prediction of suicide*. New York: Guilford Press.
- Maris, R. W., Berman, A. L., & Silverman, M. M. (2000a). Biology of suicide. In R. W. Maris, A. L. Berman, & M. M. Silverman (Eds.), *Comprehensive textbook of suicidology* (pp. 376–406). New York: Guilford Press.
- Maris, R. W., Berman, A. L., & Silverman, M. M. (2000b). *Comprehensive textbook of suicidology*. New York: Guilford Press.
- Maris, R. W., Berman, A. L., & Silverman, M. M. (2000c). Introduction to the study of suicide. In R. W. Maris, A. L. Berman, & M. M. Silverman (Eds.), *Comprehensive textbook of suicidology* (pp. 3–25). New York: Guilford Press.
- Maris, R. W., Berman, A. L., & Silverman, M. M. (2000d). Treatment and prevention of suicide. In R. W. Maris, A. L. Berman, & M. M. Silverman (Eds.), *Comprehensive textbook of suicidology* (pp. 509–535). New York: Guilford Press.
- Marlatt, G. A. (1996). Taxonomy of high-risk situations for alcohol relapse: Evolution and development of a cognitive-behavioral model. *Addiction*, *91*, S37–S49.
- Marshall, D., & Soule, S. (1998). Accidental deaths and suicides among Alaska Natives, 1979–1994. *International Journal of Circumpolar Health*, *57 Suppl 1*, 497–502.

- Matsumoto, T., Yamaguchi, A., Asami, T., Okada, T., Yoshikawa, K., & Hirayasu, Y. (2005). Characteristics of self-cutters among male inmates: Association with bulimia and dissociation. *Psychiatry and Clinical Neurosciences*, *59*, 319–326.
- Maxwell, J. C., Pullum, T. W., & Tannert, K. (2005). Deaths of clients in methadone treatment in Texas: 1994–2002. *Drug and Alcohol Dependence*, *78*, 73–81.
- May, P. A., Serna, P., Hurt, L., & DeBruyn, L. M. (2005). Outcome evaluation of a public health approach to suicide prevention in an American Indian tribal nation. *American Journal of Public Health*, *95*, 1238–1244.
- McAdams, C. R., III, & Foster, V. A. (2000). Client suicide: Its frequency and impact on counselors. *Journal of Mental Health Counseling*, *22*, 107–121.
- McAdams, C. R., & Foster, V. A. (2002). An assessment of resources for counselor coping and recovery in the aftermath of client suicide. *Journal of Humanistic Counseling, Education and Development*, *41*, 232–241.
- McCloud, A., Barnaby, B., Omu, N., Drummond, C., & Aboud, A. (2004). Relationship between alcohol use disorders and suicidality in a psychiatric population: In-patient prevalence study. *British Journal of Psychiatry*, *184*, 439–445.
- McFarlane, J., Malecha, A., Gist, J., Watson, K., Batten, E., Hall, I., et al. (2005). Intimate partner sexual assault against women and associated victim substance use, suicidality, and risk factors for femicide. *Issues in Mental Health Nursing*, *26*, 953–967.
- McGlothlin, J. M., Rainey, S., & Kindsvatter, A. (2005). Suicidal clients and supervisees: A model for considering supervisor roles. *Counselor Education and Supervision*, *45*, 135–146.
- McGuffin, P., Marusic, A., & Farmer, A. (2001). What can psychiatric genetics offer suicidology? *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *22*, 61–65.
- McLellan, A. T., Kushner, H., Metzger, D., Peters, R., Smith, I., Grissom, G., et al. (1992). The fifth edition of the Addiction Severity Index. *Journal of Substance Abuse Treatment*, *9*, 199–213.
- Mendonca, J. D., & Holden, R. R. (1996). Are all suicidal ideas closely linked to hopelessness? *Acta Psychiatrica Scandinavica*, *93*, 246–251.
- Meyers, L. (2006). World Mental Health Day emphasizes the link between suicide and mental illness. *Monitor on Psychology*, *37*. Washington, DC: American Psychological Association. Retrieved March 19, 2007, from <http://www.apa.org/monitor/dec06/healthday.html>
- Mezzich, A. C., Giancola, P. R., Tarter, R. E., Lu, S., Parks, S. M., & Barrett, C. M. (1997). Violence, suicidality, and alcohol/drug use involvement in adolescent females with a psychoactive substance use disorder and controls. *Alcoholism, Clinical and Experimental Research*, *21*, 1300–1307.
- Miklowitz, D. J., & Taylor, D. O. (2006). Family-focused treatment of the suicidal bipolar patient. *Bipolar Disorders*, *8*, 640–651.
- Miller, P. G. (2006). Dancing with death: The grey area between suicide related behavior, indifference and risk behaviors of heroin users. *Contemporary Drug Problems*, *33*, 427–450.
- Miller, P. M., Johnstone, E. C., Lang, F. H., & Thomson, L. D. (2000). Differences between patients with schizophrenia within and without a high security psychiatric hospital. *Acta Psychiatrica Scandinavica*, *102*, 12–18.
- Mills, K. L., Teesson, M., Ross, J., & Peters, L. (2006). Trauma, PTSD, and substance use disorders: Findings from the Australian National Survey of Mental Health and Well-Being. *American Journal of Psychiatry*, *163*, 652–658.

- Mino, A., Bousquet, A., & Broers, B. (1999). Substance abuse and drug-related death, suicidal ideation, and suicide: A review. *Crisis, 20*, 28–35.
- Miotto, K., McCann, M. J., Rawson, R. A., Frosch, D., & Ling, W. (1997). Overdose, suicide attempts and death among a cohort of naltrexone-treated opioid addicts. *Drug and Alcohol Dependence, 45*, 131–134.
- Mishara, B. L., Chagnon, F., Daigle, M., Balan, B., Raymond, S., Marcoux, I. et al. (2007a). Comparing models of helper behavior to actual practice in telephone crisis intervention: A silent monitoring study of calls to the U.S. 1-800-SUICIDE network. *Suicide and Life-Threatening Behavior, 37*, 291–307.
- Mishara, B. L., Chagnon, F., Daigle, M., Balan, B., Raymond, S., Marcoux, I., et al. (2007b). Which helper behaviors and intervention styles are related to better short term outcomes in telephone crisis intervention? Results from a silent monitoring study of calls to the U.S. 1-800-SUICIDE network. *Suicide and Life-Threatening Behavior, 37*, 308–321.
- Mishna, F., Antle, B. J., & Regehr, C. (2002). Social work with clients contemplating suicide: Complexity and ambiguity in the clinical, ethical, and legal considerations. *Clinical Social Work Journal, 30*, 265–280.
- Mitchell, A. M., Kim, Y., Prigerson, H. G., & Mortimer-Stephens, M. (2004). Complicated grief in survivors of suicide. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 25*, 12–18.
- Modesto-Lowe, V., Brooks, D., & Ghani, M. (2006). Alcohol dependence and suicidal behavior: From research to clinical challenges. *Harvard Review of Psychiatry, 14*, 241–248.
- Moen, C., & Ohlund, L. S. (2003). Negative memories of childhood and current drug use. *Nordic Journal of Psychiatry, 57*, 303–308.
- Mojtabai, R., Olfson, M., & Mechanic, D. (2002). Perceived need and help-seeking in adults with mood, anxiety, or substance use disorders. *Archives of General Psychiatry, 59*, 77–84.
- Moscicki, E. K. (1997). Identification of suicide risk factors using epidemiologic studies. *Psychiatric Clinics of North America, 20*, 499–517.
- Moscicki, E. K. (2001). Epidemiology of completed and attempted suicide: Toward a framework for prevention. *Clinical Neuroscience Research, 1*, 310–323.
- Moselhy, H. F., & Conlon, W. (2001). Natural history of affective disorders: Comorbidity as a predictor of suicide attempts. *International Journal of Psychiatry in Clinical Practice, 5*, 203–206.
- Moylan, P. L., Jones, H. E., Haug, N. A., Kissin, W. B., & Svikis, D. S. (2001). Clinical and psychosocial characteristics of substance-dependent pregnant women with and without PTSD. *Addictive Behaviors, 26*, 469–474.
- Mumola, C. J. (2005). *Suicide and homicide in state prisons and local jails*. Bureau of Justice Statistics Special Report. Washington, DC: Office of Justice Programs, U. S. Department of Justice. Retrieved August 14, 2007, from <http://www.ojp.usdoj.gov/bjs/pub/pdf/shsplj.pdf>
- Muñoz, M., Crespo, M., & Perez-Santos, E. (2005). Homelessness effects on men's and women's health. *International Journal of Mental Health, 34*, 47–61.
- Murphy, G. E. (1992). *Suicide in alcoholism*. New York: Oxford University Press.
- Murphy, G. E. (2002a). Alcoholism, drug abuse, and suicide in the elderly. In A. M. Gurnack, R. Atkinson, & N. J. Osgood (Eds.), *Treating alcohol and drug abuse in the elderly* (pp. 72–82). New York: Springer Publishing Co.

- Murphy, G. E. (2002b). Psychiatric aspects of suicidal behaviour: Substance abuse. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide* (pp. 135–146). Indianapolis, IN: Wiley Publishing Inc.
- Murphy, G. E., Armstrong, J. W., Jr., Hermele, S. L., Fischer, J. R., & Clendenin, W. W. (1979). Suicide and alcoholism: Interpersonal loss confirmed as a predictor. *Archives of General Psychiatry*, *36*, 65–69.
- Murphy, G. E., Wetzel, R. D., Robins, E., & McEvoy, L. (1992). Multiple risk factors predict suicide in alcoholism. *Archives of General Psychiatry*, *49*, 459–463.
- Myers, M. F., & Fine, C. (2006). *Touched by suicide: Hope and healing after loss*. New York: Gotham Books.
- Najavits, L. M., Schmitz, M., Gotthardt, S., & Weiss, R. D. (2005). Seeking Safety plus exposure therapy: An outcome study on dual diagnosis men. *Journal of Psychoactive Drugs*, *37*, 425–435.
- Najavits, L. M., Weiss, R. D., Shaw, S. R., & Muenz, L. R. (1998). “Seeking Safety”: Outcome of a new cognitive-behavioral psychotherapy for women with posttraumatic stress disorder and substance dependence. *Journal of Traumatic Stress*, *11*, 437–456.
- National Center for Health Statistics (2005). Health, United States, 2005: With chartbook on trends in the health of Americans. Hyattsville, MD: Author. Retrieved August 14, 2007, from [http://www.cdc.gov/nchs/data/05.pdf](http://www.cdc.gov/nchs/data/hus/05.pdf)
- National Center for Health Statistics (2006). Self-inflicted injury/suicide. Fast stats A to Z. Hyattsville, MD: Author. Retrieved July 2, 2008, from <http://www.cdc.gov/nchs/fastats/suicide.htm>
- National Center for Injury Prevention and Control (2006a). *Preventing suicide: Program activities guide*. Atlanta, GA: Centers for Disease Control and Prevention.
- National Center for Injury Prevention and Control (2006b). Suicide: CDC Activities. Atlanta, GA: National Center for Injury Prevention and Control; Centers for Disease Control and Prevention. Retrieved July 31, 2006, from <http://www.cdc.gov/ncipc/factsheets/suicide-activities.htm>
- National Center for Injury Prevention and Control (2007a). WISQAR fatal injuries: Mortality reports. Atlanta, GA: Centers for Disease Control and Prevention. Retrieved May 30, 2007, from <http://webappa.cdc.gov/sasweb/ncipc/mortrate.html>
- National Center for Injury Prevention and Control (2007b). WISQARS fatal injuries: Leading causes of death reports. Atlanta, GA: Centers for Disease Control and Prevention. Retrieved May 30, 2007, from <http://webappa.cdc.gov/sasweb/ncipc/leadcaus.html>
- National Institute of Justice (2005). American Indian suicides in jail: Can risk screening be culturally sensitive? Research for Practice. Washington, DC: U. S. Department of Justice. Retrieved September 18, 2006, from <http://www.ncjrs.gov/pdffiles1/nij/207326.pdf#search=%22american%20indian%20suicides%20in%20jail%22>
- National Institute of Mental Health (2004). “Care managers” help depressed elderly reduce suicidal thoughts. Press Release Bethesda, MD: National Institute of Mental Health. Retrieved February 16, 2007, from <http://www.nimh.nih.gov/press/prprospect.cfm>
- National Institute of Mental Health (2006a). Suicide in the U.S.: Statistics and prevention. Bethesda, MD: National Institute of Mental Health. Retrieved January 26, 2007, from <http://www.nimh.nih.gov/publicat/harmsway.cfm>
- National Institute of Mental Health (2006b). Targeted therapy halves suicide attempts in borderline personality disorder. Science Update. Bethesda, MD: National Institute of Mental Health <http://www.nimh.nih.gov/press/targeteddbt.cfm>

- National Institute of Mental Health (2006c). The numbers count: Mental disorders in America. Bethesda, MD: National Institute of Mental Health. Retrieved July 31, 2006, from <http://www.nimh.nih.gov/publicat/numbers.cfm>
- Neale, J. (2000a). Methadone, methadone treatment and non-fatal overdose. *Drug and Alcohol Dependence*, *58*, 117–124.
- Neale, J. (2000b). Suicidal intent in non-fatal illicit drug overdose. *Addiction*, *95*, 85–93.
- Neale, J., & Robertson, M. (2005). Recent life problems and non-fatal overdose among heroin users entering treatment. *Addiction*, *100*, 168–175.
- New Freedom Commission on Mental Health (2003). *Achieving the promise: Transforming mental health care in America. Final report*. (Rep. No. DHHS Publication No. SMA-03-3832). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Nock, M.K. & Kessler, R. C. (2006). Prevalence of and risk factors for suicide attempts versus suicide gestures: Analysis of the National Comorbidity Survey. *Journal of Abnormal Psychology*, *115*, 616–623.
- Nock, M. K. & Marzuk, P. M. (2002). Suicide and violence. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide* (pp.437–456). Indianapolis, IN: Wiley Publishing Inc.
- Nunes, E. V. & Levin, F. R. (2004). Treatment of depression in patients with alcohol or other drug dependence: A meta-analysis. *JAMA: Journal of the American Medical Association*, *291*, 1887–1896.
- O'Carroll, P. W., Berman, A. L., Maris, R. W., Moscicki, E. K., Tanney, B. L., & Silverman, M. M. (1996). Beyond the Tower of Babel: A nomenclature for suicidology. *Suicide and Life-Threatening Behavior*, *26*, 237–252.
- Oei, T. P. S., Foong, T., & Casey, L. M. (2006). Number and type of substances in alcohol and drug-related completed suicides in an Australian sample. *Crisis*, *27*, 72–76.
- Office of Applied Studies (2006). Suicidal thoughts, suicide attempts, major depressive episode, and substance use among adults. *The OAS Report. Issue 34*, Rockville, MD :Substance Abuse and Mental Health Services Administration.
- Olson, L. M. & Wahab, S. (2006). American Indians and suicide: A neglected area of research. *Trauma, Violence, & Abuse*, *7*, 19–33.
- O'Malley, K., & Huggins, J. (2005). Suicidality in adolescents and adults with fetal alcohol spectrum disorders. *Canadian Journal of Psychiatry*, *50*, 125.
- Onarheim, H., & Vindenes, H. A. (2005). High risk for accidental death in previously burn-injured adults. *Burns*, *31*, 297–301.
- Oquendo, M. A., Bongiovi-Garcia, M. E., Galfalvy, H., Goldberg, P. H., Grunebaum, M. F., Burke, A. K., et al. (2007). Sex differences in clinical predictors of suicidal acts after major depression: A prospective study. *American Journal of Psychiatry*, *164*, 134–141.
- Ostacher, M. J., Nierenberg, A. A., Perlis, R. H., Eidelman, P., Borrelli, D. J., Tran, T. B., et al. (2006). The relationship between smoking and suicidal behavior, comorbidity, and course of illness in bipolar disorder. *Journal of Clinical Psychiatry*, *67*, 1907–1911.
- Ostacher, M. J., & Sachs, G. S. (2006). Update on bipolar disorder and substance abuse: Recent findings and treatment strategies. *Journal of Clinical Psychiatry*, *67*, e10. Retrieved June 19, 2008, from <http://www.medfair.com/content/cme/classes/pubweb/bipolarreports8/ostacher.htm>

- Overholser, J. C., Freiheit, S. R., & DiFilippo, J. M. (1997). Emotional distress and substance abuse as risk factors for suicide attempts. *Canadian Journal of Psychiatry, 42*, 402–408.
- Owen, F., Cross, A. J., Crow, T. J., Deakin, J. F., Ferrier, I. N., Lofthouse, R., et al. (1983). Brain 5-HT-2 receptors and suicide. *Lancet, 2*, 1256.
- Owen, P. (2003). *Understanding suicide and addiction* (Rev. ed.). Center City, MN: Hazelden.
- Oyefeso, A., Ghodse, H., Clancy, C., & Corkery, J. M. (1999). Suicide among drug addicts in the UK. *British Journal of Psychiatry, 175*, 277–282.
- Oyefeso, A., Schifano, F., Ghodse, H., Cobain, K., Dryden, R., & Corkery, J. (2006). Fatal injuries while under the influence of psychoactive drugs: A cross-sectional exploratory study in England. *BMC Public Health, 6*, 148.
- Packman, W. L., Pennuto, T. O., Bongar, B., & Orthwein, J. (2004). Legal issues of professional negligence in suicide cases. *Behavioral Sciences & the Law, 22*, 697–713.
- Pages, K. P., Russo, J. E., Roy-Byrne, P. P., Ries, R. K., & Cowley, D. S. (1997). Determinants of suicidal ideation: The role of substance use disorders. *Journal of Clinical Psychiatry, 58*, 510–515.
- Palmer, B. A., Pankratz, V. S., & Bostwick, J. M. (2005). The lifetime risk of suicide in schizophrenia: A reexamination. *Archives of General Psychiatry, 62*, 247–253.
- Paris, J. (2002). Chronic suicidality among patients with borderline personality disorder. *Psychiatric Services, 53*, 738–742.
- Parker, G., Malhi, G., Mitchell, P., Kotze, B., Wilhelm, K., & Parker, K. (2005). Self-harming in depressed patients: Pattern analysis. *Australian and New Zealand Journal of Psychiatry, 39*, 899–906.
- Patel, M., Patel, S., Hardy, D. W., Benzies, B. J., & Tare, V. (2006). Should electroconvulsive therapy be an early consideration for suicidal patients? *Journal of ECT, 22*, 113–115.
- Patten, C. A., Hurt, R. D., Offord, K. P., Croghan, I. T., Gomez-Dahl, L. C., Kottke, T. E., et al. (2003). Relationship of tobacco use to depressive disorders and suicidality among patients treated for alcohol dependence. *American Journal on Addictions, 12*, 71–83.
- Paulozzi, L. J., Budnitz, D. S., & Xi, Y. (2006). Increasing deaths from opioid analgesics in the United States. *Pharmacoepidemiology and Drug Safety, 15*, 618–627.
- Pearson, J. L., Stanley, B., King, C. A., & Fisher, C. B. (2001). Intervention research with persons at high risk for suicidality: Safety and ethical considerations. *Journal of Clinical Psychiatry, 62 Suppl 25*, 17–26.
- Petersson, A., Garle, M., Holmgren, P., Druid, H., Krantz, P., & Thiblin, I. (2006). Toxicological findings and manner of death in autopsied users of anabolic androgenic steroids. *Drug and Alcohol Dependence, 81*, 241–249.
- Pfab, R., Eyer, F., Jetzinger, E., & Zilker, T. (2006). Cause and motivation in cases of non-fatal drug overdoses in opiate addicts. *Clinical Toxicology, 44*, 255–259.
- Phillips, J., Carpenter, K. M., & Nunes, E. V. (2004). Suicide risk in depressed methadone-maintained patients: Associations with clinical and demographic characteristics. *American Journal on Addictions, 13*, 327–332.
- Pillay, A. L., van der Veen, M. B., & Wassenaar, D. R. (2001). Non-fatal suicidal behaviour in women: The role of spousal substance abuse and marital violence. *South African Medical Journal, 91*, 429–432.

- Pirkola, S. (1999). Alcohol and other substance misuse in suicide: A review. *Psychiatria Fennica*, *30*, 80–92.
- Pirkola, S. P., Isometsa, E. T., Heikkinen, M. E., Henriksson, M. M., Marttunen, M. J., & Lonnqvist, J. K. (1999). Female psychoactive substance-dependent suicide victims differ from male: Results from a nationwide psychological autopsy study. *Comprehensive Psychiatry*, *40*, 101–107.
- Pirkola, S. P., Isometsa, E. T., Heikkinen, M. E., & Lonnqvist, J. K. (2000). Suicides of alcohol misusers and non-misusers in a nationwide population. *Alcohol and Alcoholism*, *35*, 70–75.
- Pirkola, S., Sohlman, B., Heila, H., & Wahlbeck, K. (2007). Reductions in postdischarge suicide after deinstitutionalization and decentralization: A nationwide register study in Finland. *Psychiatric Services*, *58*, 221–226.
- Pokorny, A. D. (1983). Prediction of suicide in psychiatric patients: Report of a prospective study. *Archives of General Psychiatry*, *40*, 249–257.
- Pompili, M., Ehrlich, S., De Pisa, E., Mann, J. J., Innamorati, M., Cittadini, A., et al. (2007). White matter hyperintensities and their associations with suicidality in patients with major affective disorders. *European Archives of Psychiatry and Clinical Neuroscience*, *257*, 494–499.
- Pompili, M., Lester, D., Girardi, P., & Tatarelli, R. (2007). High suicide risk after the development of cognitive and working memory deficits caused by cannabis, cocaine and ecstasy use. *Substance Abuse*, *28*, 25–30.
- Poole, G. V., Lewis, J. L., Devidas, M., Hauser, C. J., Martin, R. W., & Thomae, K. R. (1997). Psychopathologic risk factors for intentional and nonintentional injury. *Journal of Trauma*, *42*, 711–715.
- Porsteinsson, A., Duberstein, P. R., Conwell, Y., Cox, C., Forbes, N., & Caine, E. D. (1997). Suicide and alcoholism: Distinguishing alcoholic patients with and without comorbid drug abuse. *American Journal on Addictions*, *6*, 304–310.
- Poser, W., Poser, S., & Eva-Condemarin, P. (1992). Mortality in patients with dependence on prescription drugs. *Drug and Alcohol Dependence*, *30*, 49–57.
- Posner, K., Melvin, G. A., Stanley, B., Oquendo, M. A., & Gould, M. (2007). Factors in the assessment of suicidality in youth. *CNS Spectrums*, *12*, 156–162.
- Posner, K., Oquendo, M. A., Gould, M., Stanley, B., & Davies, M. (2007). Columbia Classification Algorithm of Suicide Assessment (C-CASA): Classification of suicidal events in the FDA's pediatric suicidal risk analysis of antidepressants. *American Journal of Psychiatry*, *164*, 1035–1043.
- Powell, K. E., Kresnow, M. J., Mercy, J. A., Potter, L. B., Swann, A. C., Frankowski, R. F., et al. (2001). Alcohol consumption and nearly lethal suicide attempts. *Suicide and Life-Threatening Behavior*, *32*, 30–41.
- Preuss, U. W., Koller, G., Barnow, S., Eikmeier, M., & Soyka, M. (2006). Suicidal behavior in alcohol-dependent subjects: The role of personality disorders. *Alcoholism, Clinical and Experimental Research*, *30*, 866–877.
- Preuss, U. W., Schuckit, M. A., Smith, T. L., Danko, G. P., Bucholz, K. K., Hesselbrock, M. N., et al. (2003). Predictors and correlates of suicide attempts over 5 years in 1,237 alcohol-dependent men and women. *American Journal of Psychiatry*, *160*, 56–63.
- Preuss, U. W., Schuckit, M. A., Smith, T. L., Danko, G. P., Buckman, K., Bierut, L., et al. (2002). Comparison of 3,190 alcohol-dependent individuals with and without suicide attempts. *Alcoholism, Clinical and Experimental Research*, *26*, 471–477.
- Preuss, U. W., Schuckit, M. A., Smith, T. L., Danko, G. R., Dasher, A. C., Hesselbrock, M. N., et al. (2002). A comparison of alcohol-induced and independent depression in alcoholics with histories of suicide attempts. *Journal of Studies on Alcohol*, *63*, 498–502.

- Price, R. K., Risk, N. K., Haden, A. H., Lewis, C. E., & Spitznagel, E. L. (2004). Post-traumatic stress disorder, drug dependence, and suicidality among male Vietnam veterans with a history of heavy drug use. *Drug and Alcohol Dependence, 76 Suppl*, S31–S43.
- Priest, D. (2008). Soldier suicides at record level. Washington Post AO1. Retrieved January 31, 2008, from <http://www.washingtonpost.com/wp-dyn/content/article/2008/01/30/AR2008013003106.html?referrer=emailarticle>
- Prigerson, H. G., Desai, R. A., Liu-Mares, W., & Rosenheck, R. A. (2003). Suicidal ideation and suicide attempts in homeless mentally ill persons: Age-specific risks of substance abuse. *Social Psychiatry and Psychiatric Epidemiology, 38*, 213–219.
- Quinnett, P. & Bratcher, K. (1996). *Question, persuade, refer, treat: Suicide risk management inventory user's manual*. Spokane, WA: Greentree Behavioral Health.
- Ramstedt, M. (2006). Alcohol and suicide in 14 European countries. Stockholm, Sweden: Swedish Institute for Social Research. Retrieved July 28, 2006, from <http://www.sofi.su.se/suicideecas1.PDF>
- Raphael, B., Wooding, S., Stevens, G., & Connor, J. (2005). Comorbidity: Cannabis and complexity. *Journal of Psychiatric Practice, 11*, 161–176.
- Ravndal, E. & Vaglum, P. (1999). Overdoses and suicide attempts: Different relations to psychopathology and substance abuse? A 5-year prospective study of drug abusers. *European Addiction Research, 5*, 63–70.
- Report: Deaths related to drug poisoning: England and Wales, 1998-2002 (2004). *Health Statistics Quarterly, 59–66*.
- Reviere, S. L., Farber, E. W., Twomey, H., Okun, A., Jackson, E., Zanzville, H., et al. (2007). Intimate partner violence and suicidality in low-income African American women: A multimethod assessment of coping factors. *Violence Against Women, 13*, 1113–1129.
- Rich, C. L., Dhossche, D. M., Ghani, S., & Isacson, G. (1998). Suicide methods and presence of intoxicating abusable substances: Some clinical and public health implications. *Annals of Clinical Psychiatry, 10*, 169–175.
- Rich, C. L., Fowler, R. C., Fogarty, L. A., & Young, D. (1988). San Diego Suicide Study, III: Relationships between diagnoses and stressors. *Archives of General Psychiatry, 45*, 589–592.
- Ries, R. K., Yuodelis-Flores, C., Comtois, K. A., Roy-Byrne, P. P., & Russo, J. E. (2008). Substance-induced suicidal admissions to an acute psychiatric service: Characteristics and outcomes. *Journal of Substance Abuse Treatment, 34*, 72–79.
- Rivara, F. P., Mueller, B. A., Somes, G., Mendoza, C. T., Rushforth, N. B., & Kellermann, A. L. (1997). Alcohol and illicit drug abuse and the risk of violent death in the home. *JAMA: Journal of the American Medical Association, 278*, 569–575.
- Roberts, A. R., Yeager, K., & Seigel, A. (2003). Obsessive-compulsive disorder, comorbid depression, substance abuse, and suicide attempts: Clinical presentations, assessments, and treatment. *Brief Treatment and Crisis Intervention, 3*, 145–167.
- Rodell, D. E., Benda, B. B., & Rodell, L. (2003). Suicidal thoughts among homeless alcohol and other drug abusers. *Alcoholism Treatment Quarterly, 21*, 57–74.
- Rodgers, P. L., Sudak, H. S., Silverman, M. M., & Litts, D. A. (2007). Evidence-Based Practices Project for suicide prevention. *Suicide and Life-Threatening Behavior, 37*, 154–164.

- Rosenberg, P. B., & Rosse, R. (2003). Impulsive suicide attempts by a patient with alcoholic dementia. *Psychosomatics*, *44*, 415–416.
- Rosenthal, H. (2003). Twelve must-know myths about suicidal clients. *Counselor, The Magazine for Addiction Professionals*, *4*, 522–523. Retrieved January 8, 2007, from <http://www.counselormagazine.com/pfv.asp?aid=oct03ProfessionalDevelopment.htm>
- Ross, J., Teesson, M., Darke, S., Lynskey, M., Ali, R., Ritter, A., et al. (2005). The characteristics of heroin users entering treatment: Findings from the Australian treatment outcome study (ATOS). *Drug and Alcohol Review*, *24*, 411–418.
- Rossow, I., & Lauritzen, G. (1999). Balancing on the edge of death: Suicide attempts and life-threatening overdoses among drug addicts. *Addiction*, *94*, 209–219.
- Rossow, I., & Lauritzen, G. (2001). Shattered childhood: A key issue in suicidal behavior among drug addicts? *Addiction*, *96*, 227–240.
- Rossow, I., Romelsjo, A., & Leifman, H. (1999). Alcohol abuse and suicidal behaviour in young and middle aged men: Differentiating between attempted and completed suicide. *Addiction*, *94*, 1199–1207.
- Roy, A. (2001a). Characteristics of cocaine-dependent patients who attempt suicide. *American Journal of Psychiatry*, *158*, 1215–1219.
- Roy, A. (2001b). Childhood trauma and suicidal behavior in male cocaine dependent patients. *Suicide and Life-Threatening Behavior*, *31*, 194–196.
- Roy, A. (2002). Characteristics of opiate dependent patients who attempt suicide. *Journal of Clinical Psychiatry*, *63*, 403–407.
- Roy, A. (2003a). African American and Caucasian attempters compared for suicide risk factors: A preliminary study. *Suicide and Life-Threatening Behavior*, *33*, 443–447.
- Roy, A. (2003b). Characteristics of drug addicts who attempt suicide. *Psychiatry Research*, *121*, 99–103.
- Roy, A. (2003c). Characteristics of HIV patients who attempt suicide. *Acta Psychiatrica Scandinavica*, *107*, 41–44.
- Roy, A. (2003d). Distal risk factors for suicidal behavior in alcoholics: Replications and new findings. *Journal of Affective Disorders*, *77*, 267–271.
- Roy, A. (2004a). Family history of suicidal behavior and earlier onset of suicidal behavior. *Psychiatry Research*, *129*, 217–219.
- Roy, A. (2004b). Relationship of childhood trauma to age of first suicide attempt and number of attempts in substance dependent patients. *Acta Psychiatrica Scandinavica*, *109*, 121–125.
- Roy, A. (2006). Family history of suicide and impulsivity. *Archives of Suicide Research*, *10*, 347–352.
- Roy, A. & Janal, M. (2006). Gender in suicide attempt rates and childhood sexual abuse rates: Is there an interaction? *Suicide and Life-Threatening Behavior*, *36*, 329–335.
- Roy, A., & Janal, M. N. (2007). Risk factors for suicide attempts among alcohol dependent patients. *Archives of Suicide Research*, *11*, 211–217.
- Rudd, M. D. (2000). Integrating science into the practice of clinical suicidology: A review of the psychotherapy literature and a research agenda for the future. In R. W. Maris, S. S. Canetto, J. L. McIntosh, & M. M. Silverman (Eds.), *Review of suicidology, 2000* (pp. 47–83). New York: Guilford Press.
- Rudd, M. D. (2006). *The assessment and management of suicidality*. Sarasota, FL: Professional Resource Press.

- Rudd, M. D., Berman, A. L., Joiner, T. E., Jr., Nock, M. K., Silverman, M. M., Mandrusiak, M., et al. (2006). Warning signs for suicide: Theory, research, and clinical applications. *Suicide and Life-Threatening Behavior, 36*, 255–262.
- Rudd, M. D., Joiner, T., & Rajab, M. H. (2001). *Treating suicidal behavior: An effective, time-limited approach*. New York: Guilford Press.
- Rudd, M. D., Mandrusiak, M., & Joiner Jr, T. E. (2006). The case against no-suicide contracts: The commitment to treatment statement as a practice alternative. *Journal of Clinical Psychology, 62*, 243–251.
- Sabo, A. N., Gunderson, J. G., Najavits, L. M., Chauncey, D., & Kisiel, C. (1995). Changes in self-destructiveness of borderline patients in psychotherapy: A prospective follow-up. *Journal of Nervous and Mental Disease, 183*, 370–376.
- Salloum, I. M., Daley, D. C., Cornelius, J. R., & Kirisci, L. (1996). Disproportionate lethality in psychiatric patients with concurrent alcohol and cocaine abuse. *American Journal of Psychiatry, 153*, 953–955.
- Salvatore, A. (2000). Professional ethics and suicide: Toward an ethical typology. In M. B. Kapp (Ed.), *Ethics, Law, and Aging Review. Volume 6: Focus on Consumer-Directed Care and the Older Person* (pp. 257–269). New York: Springer Publishing Company.
- Sareen, J., Cox, B. J., Stein, M. B., Afifi, T. O., Fleet, C., & Asmundson, G. J. G. (2007). Physical and mental comorbidity, disability, and suicidal behavior associated with posttraumatic stress disorder in a large community sample. *Psychosomatic Medicine, 69*, 242–248.
- Sareen, J., Houlahan, T., Cox, B. J., & Asmundson, G. J. G. (2005). Anxiety disorders associated with suicidal ideation and suicide attempts in the National Comorbidity Survey. *Journal of Nervous and Mental Disease, 193*, 450–454.
- Schaar, I., & Ojehagen, A. (2001). Severely mentally ill substance abusers: An 18-month follow-up study. *Social Psychiatry and Psychiatric Epidemiology, 36*, 70–78.
- Schildhaus, S., Gerstein, D., Brittingham, A., Cerbone, F., & Dugoni, B. (2000). Services research outcomes study: Overview of drug treatment population and outcomes. *Substance Use and Misuse, 35*, 1849–1877.
- Schulberg, H. C. (2006). An editorial on “Mental health care for adults with suicide ideation.” *General Hospital Psychiatry, 28*, 269–270.
- Seedat, S., Stein, M. B., & Forde, D. R. (2005). Association between physical partner violence, posttraumatic stress, childhood trauma, and suicide attempts in a community sample of women. *Violence and Victims, 20*, 87–98.
- Seguin, M., Lesage, A., Chawky, N., Guy, A., Daigle, F., Girard, G. et al., (2006). Suicide cases in New Brunswick from April 2002 to May 2003: The importance of better recognizing substance and mood disorder comorbidity. *Canadian Journal of Psychiatry, 51*, 581–586.
- Selakovic-Bursic, S. (2001). Reaching out to survivors of suicide: A column from Befrienders International. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 22*, 47–48.
- Sethi, S., & Bhargava, S. C. (2003). Child and adolescent survivors of suicide. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 24*, 4–6.
- Severson, M., & Duclos, C. W. (2003). Assessing Suicide and Risk Behaviors in an Incarcerated American Indian Population: Investigating Culturally Sensitive Risk Assessment Instruments and Procedures in a Border Jail, Final Report. Unpublished.

- Shaffer, H. J., & Eber, G. B. (2002). Temporal progression of cocaine dependence symptoms in the US National Comorbidity Survey. *Addiction, 97*, 543–554.
- Shaikh, M. B., De Lanerolle, N. C., & Siegel, A. (1997). Serotonin 5-HT<sub>1A</sub> and 5-HT<sub>2/1C</sub> receptors in the mid-brain periaqueductal gray differentially modulate defensive rage behavior elicited from the medial hypothalamus of the cat. *Brain Research, 765*, 198–207.
- Shaw, D. M., Camps, F. E., & Eccleston, E. G. (1967). 5-Hydroxytryptamine in the hind-brain of depressive suicides. *British Journal of Psychiatry, 113*, 1407–1411.
- Shea, S. C. (2002). *The practical art of suicide assessment: A guide for mental health professionals and substance abuse counselors*. New York: John Wiley.
- Shea, S. C. (2007). *The CASE approach*. Chapel Hill, NC: Clinical Tools, Inc. Retrieved March 19, 2007, from <http://www1.endingsuicide.com/PageReq?id=1913:9616>
- Shenassa, E. D., Catlin, S. N., & Buka, S. L. (2003). Lethality of firearms relative to other suicide methods: A population-based study. *Journal of Epidemiology & Community Health, 57*, 120–124.
- Sher, L. (2006a). Alcoholism and suicidal behavior: A clinical overview. *Acta Psychiatrica Scandinavica, 113*, 13–22.
- Sher, L. (2006b). Serotonin and suicidal behavior in patients with comorbid depression and alcoholism. *American Journal of Addiction, 15*, 198.
- Sher, L., Oquendo, M. A., Conason, A. H., Brent, D. A., Grunebaum, M. F., Zalsman, G., et al. (2005). Clinical features of depressed patients with or without a family history of alcoholism. *Acta Psychiatrica Scandinavica, 112*, 266–271.
- Sher, L., Oquendo, M. A., Galfalvy, H. C., Grunebaum, M. F., Burke, A. K., Zalsman, G., et al. (2005). The relationship of aggression to suicidal behavior in depressed patients with a history of alcoholism. *Addictive Behaviors, 30*, 1144–1153.
- Sher, L., Oquendo, M. A., Grunebaum, M. F., Burke, A. K., Huang, Y.-Y., & Mann, J. J. (2007). CSF monoamine metabolites and lethality of suicide attempts in depressed patients with alcohol dependence. *European Neuropsychopharmacology, 17*, 12–15.
- Sherman, L. G., & Morschauser, P. C. (1989). Screening for suicide risk in inmates. *Psychiatric Quarterly, 60*, 119–138.
- Shneidman, E. S. (1985). *Definition of suicide*. New York: Wiley.
- Shneidman, E. S., Farberow, N. L., & Litman, R. E. (Eds.). (1994). *The psychology of suicide: A clinician's guide to evaluation and treatment* (Rev. ed.). Northvale, NJ: Aronson.
- Silverman, M. M., Berman, A. L., Sanddal, N. D., O'Carroll, P. W., & Joiner, T. E. (2007). Rebuilding the Tower of Babel: A revised nomenclature for the study of suicide and suicidal behaviors, Part II. Suicide-related ideations, communications and behaviors. *Suicide and Life-Threatening Behavior, 37*, 264–277.
- Simon, R. I. (2004). *Assessing and managing suicide risk: Guidelines for clinically based risk management*. Arlington, VA: American Psychiatric Publishing, Inc.
- Simon, R. I. (2006). Imminent suicide: The illusion of short-term prediction. *Suicide and Life-Threatening Behavior, 36*, 296–301.
- Simon, R. I. (2007). Gun safety management with patients at risk for suicide. *Suicide and Life-Threatening Behavior, 37*, 518–526.

- Simon, R. I., Hales, R. E., and American Psychiatric Publishing (Eds.). (2006). *The American Psychiatric Publishing textbook of suicide assessment and management* (1st ed.) Washington, DC: American Psychiatric Publishing.
- Simpson, G., & Tate, R. (2005). Clinical features of suicide attempts after traumatic brain injury. *Journal of Nervous and Mental Disease, 193*, 680–685.
- Sjogren, H., Eriksson, A., & Ahlm, K. (2000). Role of alcohol in unnatural deaths: A study of all deaths in Sweden. *Alcoholism, Clinical and Experimental Research, 24*, 1050–1056.
- Sofuoglu, M., Dudish-Poulsen, S., Brown, S. B., & Hatsukami, D. K. (2003). Association of cocaine withdrawal symptoms with more severe dependence and enhanced subjective response to cocaine. *Drug and Alcohol Dependence, 69*, 273–282.
- Soloff, P. H., Fabio, A., Kelly, T. M., Malone, K. M., & Mann, J. J. (2005). High-lethality status in patients with borderline personality disorder. *Journal of Personality Disorders, 19*, 386–399.
- Sorock, G. S., Chen, L. H., Gonzalgo, S. R., & Baker, S. P. (2006). Alcohol-drinking history and fatal injury in older adults. *Alcohol, 40*, 193–199.
- Spitzer, R. L., Kroenke, K., & Williams, J. B. (1999). Validation and utility of a self-report version of PRIME-MD: The PHQ primary care study. Primary Care Evaluation of Mental Disorders. Patient Health Questionnaire. *JAMA, 282*, 1737–1744.
- Stein, D., Lilenfeld, L. R., Wildman, P. C., & Marcus, M. D. (2004). Attempted suicide and self-injury in patients diagnosed with eating disorders. *Comprehensive Psychiatry, 45*, 447–451.
- Suicide Prevention Action Network USA (2006). *Strategies to improve non-fatal suicide attempt surveillance: Recommendations from an expert roundtable*. Washington, DC: Suicide Prevention Action Network USA. Retrieved April 4, 2007, from [http://www.spanusa.org/files/General\\_Documents//SPAN\\_USA\\_Attempt\\_Surveillance\\_\\_2006.pdf](http://www.spanusa.org/files/General_Documents//SPAN_USA_Attempt_Surveillance__2006.pdf)
- Suokas, J., Suominen, K., & Lonnqvist, J. (2005). Chronic alcohol problems among suicide attempters: Post-mortem findings of a 14-year follow-up. *Nordic Journal of Psychiatry, 59*, 45–50.
- Suominen, K., Isometsa, E., Henriksson, M., Ostamo, A., & Lonnqvist, J. (1997). Hopelessness, impulsiveness and intent among suicide attempters with major depression, alcohol dependence, or both. *Acta Psychiatrica Scandinavica, 96*, 142–149.
- Suppapitiporn, S. (2005). Comorbidity of alcohol dependence in suicidal depressed patients. *Journal of the Medical Association of Thailand, 88 Suppl 4*, S195–S199.
- Sutor, B., Tinsley, J. A., & Morse, R. M. (1999). Management of patients with bipolar mood disorder and substance dependence. *Journal of Addictive Diseases, 18*, 83–93.
- Swann, A. C., Dougherty, D. M., Pazzaglia, P. J., Pham, M., Steinberg, J. L., & Moeller, F. G. (2005). Increased impulsivity associated with severity of suicide attempt history in patients with bipolar disorder. *American Journal of Psychiatry, 162*, 1680–1687.
- Tanney, B. L. (2000). Psychiatric diagnoses and suicidal acts. In R. W. Maris, A. L. Berman, & M. M. Silverman (Eds.), *Comprehensive textbook of suicidology* (pp. 311–341). New York: Guilford Press.
- Tanskanen, A., Tuomilehto, J., Viinamaki, H., Vartiainen, E., Lehtonen, J., & Puska, P. (2000). Joint heavy use of alcohol, cigarettes and coffee and the risk of suicide. *Addiction, 95*, 1699–1704.
- Tarter, R. E., Kirisci, L., Reynolds, M., & Mezzich, A. (2004). Neurobehavior disinhibition in childhood predicts suicide potential and substance use disorder by young adulthood. *Drug and Alcohol Dependence, 76*, S45–S52.

- Taylor, C., Cooper, J., & Appleby, L. (1999). Is suicide risk taken seriously in heavy drinkers who harm themselves? *Acta Psychiatrica Scandinavica*, *100*, 309–311.
- Teesson, M., Havard, A., Fairbairn, S., Ross, J., Lynskey, M., & Darke, S. (2005). Depression among entrants to treatment for heroin dependence in the Australian Treatment Outcome Study (ATOS): Prevalence, correlates and treatment seeking. *Drug and Alcohol Dependence*, *78*, 309–315.
- Thompson, M. P., Kaslow, N. J., & Kingree, J. B. (2002). Risk factors for suicide attempts among African American women experiencing recent intimate partner violence. *Violence and Victims*, *17*, 283–295.
- Thompson, M. P., Kaslow, N. J., Short, L. M., & Wyckoff, S. (2002). The mediating roles of perceived social support and resources in the self-efficacy-suicide attempts relation among African American abused women. *Journal of Consulting and Clinical Psychology*, *70*, 942–949.
- Thompson, R., Kane, V., Cook, J. M., Greenstein, R., Walker, P., & Woody, G. (2006). Suicidal ideation in veterans receiving treatment for opiate dependence. *Journal of Psychoactive Drugs*, *38*, 149–156.
- Tiet, Q. Q., Finney, J. W., & Moos, R. H. (2006). Recent sexual abuse, physical abuse, and suicide attempts among male veterans seeking psychiatric treatment. *Psychiatric Services*, *57*, 107–113.
- Tiet, Q. Q., Ilgen, M. A., Byrnes, H. F., & Moos, R. H. (2006). Suicide attempts among substance use disorder patients: An initial step toward a decision tree for suicide management. *Alcoholism, Clinical and Experimental Research*, *30*, 998–1005.
- Tiet, Q. Q. & Mausbach, B. (2007). Treatments for patients with dual diagnosis: A review. *Alcoholism, Clinical and Experimental Research*, *31*, 513–536.
- Ting, L., Sanders, S., Jacobson, J. M., & Power, J. R. (2006). Dealing with the aftermath: A qualitative analysis of mental health social workers' reactions after a client suicide. *Social Work*, *51*, 329–341.
- Tondo, L., Baldessarini, R. J., Hennen, J., Minnai, G. P., Salis, P., Scamonatti, L., et al. (1999). Suicide attempts in major affective disorder patients with comorbid substance use disorders. *Journal of Clinical Psychiatry*, *60 Supplement 2*, 63–69.
- Tournier, M., Molimard, M., Abouelfath, A., Cougnard, A., Begaud, B., Gbikpi-Benissan, G., et al. (2005). Prognostic impact of psychoactive substances use during hospitalization for intentional drug overdose. *Acta Psychiatrica Scandinavica*, *112*, 134–140.
- Tournier, M., Molimard, M., Abouelfath, A., Cougnard, A., Fourrier, A., Haramburu, F., et al. (2003). Accuracy of self-report and toxicological assays to detect substance misuse disorders in parasuicide patients. *Acta Psychiatrica Scandinavica*, *108*, 410–418.
- Trammel, R. L., Kurpius, S. E. R., & Metha, A. (1998). Suicide and substance abuse among student teachers. *Journal of Alcohol and Drug Education*, *43*, 64–74.
- Trent, L. K. (1999). Parasuicides in the Navy and Marine Corps: Hospital Admissions, 1989–1995. *U.S. Naval Health Research Center Report, Rpt No.99-4D*, 1–36.
- Trepal, H. C., Wester, K. L., & MacDonald, C. A. (2006). Self-injury and postvention: Responding to the family in crisis. *Family Journal: Counseling and Therapy for Couples and Families*, *14*, 342–348.
- Trezza, G. R., & Popp, S. M. (2000). The substance user at risk of harm to self or others: Assessment and treatment issues. *Journal of Clinical Psychology*, *56*, 1193–1205.
- Tsuang, M. T., Fleming, J. A., & Simpson, J. C. (1999). Suicide and Schizophrenia. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention* (pp. 287–299). San Francisco: Jossey-Bass.

- Turecki, G. (2005). Dissecting the suicide phenotype: The role of impulsive-aggressive behaviours. *Journal of Psychiatry and Neuroscience, 30*, 398–408.
- U.S. Air Force (2007). Air Force Suicide Prevention Program. Washington, DC: United States Air Force. Retrieved August 14, 2007, from [http://afsp.afms.mil/idc/groups/public/documents/webcontent/knowledge-junction.hcst?functionalarea=AFSuicidePreventionPrgm&doctype=subpage&docname=CTB\\_018094&incbanner=0](http://afsp. afms.mil/idc/groups/public/documents/webcontent/knowledge-junction.hcst?functionalarea=AFSuicidePreventionPrgm&doctype=subpage&docname=CTB_018094&incbanner=0)
- U. S. Air Force Medical Service (2002). Air Force Suicide Prevention Program. A Population-based, Community Approach. Best Practice Initiative from the Assistant Secretary for Health. U.S. Department of Health and Human Services. Washington, DC: Office of Surgeon General. Retrieved March 16, 2007, from <http://www.osophs.dhhs.gov/ophs/BestPractice/usaf.htm>
- U.S. Department of Health and Human Services. (2006). National Suicide Prevention Lifeline: After an attempt. A guide for medical providers in the emergency department taking care of suicide attempt survivors. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration. Retrieved March 19, 2007, from [http://www.suicidepreventionlifeline.org/media/pdf/NSPL-After-\\_an\\_attempt-provider\(3\)-08-14-06LOWRES.pdf](http://www.suicidepreventionlifeline.org/media/pdf/NSPL-After-_an_attempt-provider(3)-08-14-06LOWRES.pdf)
- U.S. Public Health Service (1999). *The Surgeon General's call to action to prevent suicide*. Washington, DC: U.S. Public Health Service. Retrieved May 30, 2007, from <http://www.surgeongeneral.gov/library/calltoaction/calltoaction.htm>
- U.S. Public Health Service (2001). *National strategy for suicide prevention: Goals and objectives for action*. Washington, D.C.: U. S. Department of Health and Human Services.
- Understanding suicide and addiction. (2003). Center City, MN, Hazeldon. Co-Occurring Disorders Series. Video Recording.
- Underwood, M. D., Mann, J. J., & Arango, V. (2004). Serotonergic and noradrenergic neurobiology of alcoholic suicide. *Alcoholism, Clinical and Experimental Research, 28*, 57S–69S.
- Valente, S. M. (2006). Correlates of suicide attempts and completions and the clinician's response to a patient's suicide. In M. E. Abelian (Ed.), *Trends in psychotherapy research*. New York: Nova Science Publishers.
- van Ameijden, E. J., Krol, A., Vlahov, D., Flynn, C., van Haastrecht, H. J., & Coutinho, R. A. (1999). Pre-AIDS mortality and morbidity among injection drug users in Amsterdam and Baltimore: An ecological comparison. *Substance Use and Misuse, 34*, 845-865.
- Vanderwerker, L. C., Chen, J. H., Charpentier, P., Paulk, M. E., Michalski, M., & Prigerson, H. G. (2007). Differences in risk factors for suicidality between African American and White patients vulnerable to suicide. *Suicide and Life-Threatening Behavior, 37*, 1–9.
- van Heeringen, K. (2002). Multidisciplinary approaches to the management of suicidal behaviour. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide* (pp. 571–581). Indianapolis, IN: Wiley Publishing Inc.
- van Hooff, A. J. L. (2000). A historical perspective on suicide. In R. W. Maris, A. L. Berman, & M. M. Silverman (Eds.), *Comprehensive textbook of suicidology* (pp. 96–123). New York: Guilford Press.
- Veterans Health Administration & Department of Defense (2000). *VHA/DOD clinical practice guideline for the management of major depressive disorder in adults*. Washington, DC: Veterans Health Administration. Retrieved July 25, 2006, from [http://www.oqp.med.va.gov/cpg/MDD/G/B\\_Pock.pdf](http://www.oqp.med.va.gov/cpg/MDD/G/B_Pock.pdf)
- Violanti, J. M. (2004). Predictors of police suicide ideation. *Suicide and Life-Threatening Behavior, 34*, 277–283.
- Waern, M. (2003). Alcohol dependence and misuse in elderly suicides. *Alcohol and Alcoholism, 38*, 249–254.

- Waern, M., Rubenowitz, E., & Wilhelmson, K. (2003). Predictors of suicide in the old elderly. *Gerontology, 49*, 328–334.
- Wagner, B. M. (1997). Family risk factors for child and adolescent suicidal behavior. *Psychological Bulletin, 121*, 246–298.
- Walker, R. D., Loudon, L., Walker, P. S., & Frizzell, L. (2006). A guide to suicide prevention for American Indian and Alaska Native communities. Portland, OR: One Sky Center. Retrieved March 26, 2007, from <http://www.oneskycenter.org/documents/AGuidetoSuicidePreventionDRAFT.pdf>
- Waller, S. J., Lyons, J. S., & Costantini-Ferrando, M. F. (1999). Impact of comorbid affective and alcohol use disorders on suicidal ideation and attempts. *Journal of Clinical Psychology, 55*, 585–595.
- Warshaw, M. G., Dolan, R. T., & Keller, M. B. (2000). Suicidal behavior in patients with current or past panic disorder: Five years of prospective data from the Harvard/Brown Anxiety Research Program. *American Journal of Psychiatry, 157*, 1876–1878.
- Washington, G., & Teague, K. (2005). Young African-American male suicide prevention and spirituality. *Stress, Trauma and Crisis: An International Journal, 8*, 93–105.
- Weiner, K. (2005). *Therapeutic and legal issues for therapists who have survived a client suicide breaking the silence*. Binghamton, NY: Haworth Press.
- Weiss, R. D., & Hufford, M. R. (1999). Substance abuse and suicide. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention* (pp. 300–310). San Francisco: Jossey-Bass.
- Weiss, R. D., Ostacher, M. J., Otto, M. W., Calabrese, J. R., Fossey, M., Wisniewski, S. R., et al. (2005). Does recovery from substance use disorder matter in patients with bipolar disorder? *Journal of Clinical Psychiatry, 66*, 730–735.
- Welch, S. S., & Linehan, M. M. (2002). High-risk situations associated with parasuicide and drug use in borderline personality disorder. *Journal of Personality Disorders, 16*, 561–569.
- Wester, K. L. (2006). Review of Will's Choice: A suicidal teen, a desperate mother, and a chronicle of recovery. *Family Journal: Counseling and Therapy for Couples and Families, 14*, 455.
- Wilcox, H. C., & Anthony, J. C. (2004). The development of suicide ideation and attempts: An epidemiologic study of first graders followed into young adulthood. *Drug and Alcohol Dependence, 76*, S53–S67.
- Wilcox, H. C., Conner, K. R., & Caine, E. D. (2004). Association of alcohol and drug use disorders and completed suicide: An empirical review of cohort studies. *Drug and Alcohol Dependence, 76*, S11–S19.
- Wilke, D. J. (2004). Predicting suicide ideation for substance users: The role of self-esteem, abstinence, and attendance at 12-Step meetings. *Addiction Research and Theory, 12*, 231–240.
- Willis, L. A., Coombs, D. W., Drentea, P., & Cockerham, W. C. (2003). Uncovering the mystery: Factors of African American suicide. *Suicide and Life-Threatening Behavior, 33*, 412–429.
- Wilson, S. T., Fertuck, E. A., Kwitel, A., Stanley, M. C., & Stanley, B. (2006). Impulsivity, suicidality and alcohol use disorders in adolescents and young adults with borderline personality disorder. *International Journal of Adolescent Medicine and Health, 18*, 189–196.
- Windle, M. (1994). Characteristics of alcoholics who attempted suicide: Co-occurring disorders and personality differences with a sample of male Vietnam era veterans. *Journal of Studies on Alcohol, 55*, 571–577.
- Wines, J. D., Jr., Saitz, R., Horton, N. J., Lloyd-Travaglini, C., & Samet, J. H. (2004). Suicidal behavior, drug use and depressive symptoms after detoxification: A 2-year prospective study. *Drug and Alcohol Dependence, 76*, S21–S29.

- Wines, J. D., Jr., Saitz, R., Horton, N. J., Lloyd-Travaglini, C., & Samet, J. H. (2007). Overdose after detoxification: A prospective study. *Drug and Alcohol Dependence, 89*, 161–169.
- Wingate, L. R., Bobadilla, L., Burns, A. B., Cukrowicz, K. C., Hernandez, A., Ketterman, R. L., et al. (2005). Suicidality in African American men: The roles of southern residence, religiosity, and social support. *Suicide and Life-Threatening Behavior, 35*, 615–629.
- Woods, R. T. (1996). Mental health problems in late life. In R. T. Woods (Ed.), *Handbook of the clinical psychology of ageing* (pp. 197-218). Oxford, England: John Wiley & Sons.
- Yen, S., Shea, T., Pagano, M., Sanislow, C. A., Grilo, C. M., McGlashan, T. H., et al. (2003). Axis I and Axis II disorders as predictors of prospective suicide attempts: Findings from the Collaborative Longitudinal Personality Disorders Study. *Journal of Abnormal Psychology, 112*, 375–381.
- Young, M. A., Fogg, L. F., Scheftner, W. A., & Fawcett, J. A. (1994). Interactions of risk factors in predicting suicide. *American Journal of Psychiatry, 151*, 434–435.
- Yufit, R. I., & Lester, D. (Eds.). (2005). *Assessment, treatment, and prevention of suicidal behavior*. Hoboken, NJ: John Wiley & Sons.
- Zautcke, J. L., Coker, S. B., Jr., Morris, R. W., & Stein-Spencer, L. (2002). Geriatric trauma in the State of Illinois: Substance use and injury patterns. *American Journal of Emergency Medicine, 20*, 14–17.
- Zayas, L. H., Lester, R. J., Cabassa, L. J., & Fortuna, L. R. (2005). Why do so many Latina teens attempt suicide? A conceptual model for research. *American Journal of Orthopsychiatry, 75*, 275–287.
- Zerler, H. (2008). Motivational interviewing and suicidality. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing in the treatment of psychological problems* (pp. 173–193). New York: Guilford Press.
- Zweben, J. E., Cohen, J. B., Christian, D., Galloway, G. P., Salinardi, M., Parent, D., et al. (2004). Psychiatric symptoms in methamphetamine users. *American Journal on Addictions, 13*, 181–190.