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Risk Factor Model for Suicide Assessment and Intervention

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Psychologists are faced with the challenge of how to apply the growing knowledge about suicide in their clinical practice. A practical and easy-to-use model for integrating this knowledge is proposed, one which psychologists can use to guide their suicide risk assessments and clinical decision making. This model is based on known risk factors for suicide that are categorized as historical, personal, psychosocial–environmental, and clinical and are dichotomized into acute and chronic states. The model includes protective factors that are categorized as temporary and permanent. An example of how to use this model in clinical practice is provided.

Assessing, treating, and managing suicidal patients are perhaps the most stressful clinical situations psychologists encounter in their practice (Jobes, 1995). Psychologists can reduce the stress if they are knowledgeable about the research on suicide risk factors and have a model that organizes this information in a comprehensive manner. The model discussed below integrates current knowledge about suicidal behaviors and provides a conceptual framework for understanding suicide. The model is based on research with general adult populations but could be applied to other groups (e.g., adolescents, homosexuals) or to particular settings (e.g., prisons). Being sensitive to the client population (including gender and cultural diversity issues) will help psychologists identify specific risk and protective factors for their individual clients.

A Model for Understanding Suicide on the Basis of Risk Factors

Several models have been developed for understanding suicide that are based on risk factors (Clark & Fawcett, 1992; Hirschfeld & Russell, 1997; Mann, Waternaux, Haas, & Malone, 1999; Rosenberg, 1999; Stelmachers, 1995) and protective factors (Hawton & Vislisel, 1999; Joiner, Walker, Rudd, & Jobes, 1999; Mann et al., 1999; Stelmachers, 1995). A review of this work suggests that the various risk factors can be categorized as historical, personal, psychosocial–environmental, and clinical. The protective factors can be viewed as shields against committing suicide. What has been missing in the literature is a model that combines all of these components. Such a model would be useful for two reasons. First, it would allow for easy integration of future research findings into one of the risk or protective factor categories. Second, it could provide practitioners with an easy-to-remember outline to use in their clinical work.

Appendix A provides a checklist of risk and protective factors that psychologists may want to consider in assessing suicide risk. This is not a complete list but does include the more critical factors that are discussed below. Each case will determine the relevance and significance of the risk and protective factors. Psychologists can use the checklist as a general guide to identify specific areas that they may need to examine further. In addition, by identifying risk factors unique to the particular patients, psychologists can enhance the reliability of their assessments. Psychologists may find that having the checklist readily available helps them conduct suicide assessments in a systematic and consistent manner, thus reducing the likelihood of missing important risk factors.

Risk Factors

Historical factors include demographic data that statistically place individuals at higher risk than individuals in other groups (Clark & Fawcett, 1992; Dahlsgaard, Beck, & Brown, 1998; Garrison, 1992; McIntosh, 1992; Roy, 1992; Tanney, 1992). Historical factors are also unchangeable conditions that could be biological, psychosocial, mental, or medical or single events that occurred in the past and thus are part of an individual's unique history. A key historical risk factor is major mental illness, the strongest risk factor for suicide. The more lethal mental illnesses are depression and schizophrenia (Clark & Fawcett, 1992; Roy, 1992, 1994; Tanney, 1992). Alcoholics and substance abusers are also at high risk for suicide (Berglund, 1984; Klatsky & Armstrong, 1993; Lester, 1992; Weiss & Stephens, 1992). Combat-related posttraumatic stress disorder has been associated with suicidal behavior, that is, suicidal ideation, suicide attempts, and suicide (Kleespies, Deleppo, Gallagher, & Niles, 1999). Other examples of historical risk factors include head injury (Mann et al., 1999), childhood physical or sexual abuse (Mann et al., 1999; Yang & Clum, 1996), family history of suicide (Brent, Bridge, Johnson, & Connolly, 1996; Dahlsgaard et al., 1998; Mann et al., 1999; Roy, 1992), prior suicidal behavior (Maris, 1992b), and history of violence (Plutchik & van Praag, 1995). Historical risk factors are chronic and contribute to long-term suicide risk. The more chronic the presenting risk factors are (e.g., a combination of schizophrenia and depression), the greater the concern for suicide

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becomes. Proper management of these chronic risk factors (e.g., treatment for mental illness) can reduce their influence.

Personal factors refer to characteristics that define the individual's personality, including cognitive style, emotional stability across time, and personality traits. Characteristics that increase suicide risk include patterns of self-destructive behaviors, inadequate impulse control, and impaired judgment (Plutchik & van Praag, 1995). Other personal risk factors are low stress tolerance and poor coping skills (Kotler et al., 1993). Weishaar and Beck (1992) have also discussed the relationship between distorted cognitions and suicide. Rigid thinking or irrational beliefs (Ellis & Ratliff, 1986) may contribute to a view that suicide is a rational alternative to a situation that appears hopeless. Researchers have also found a relationship between problem-solving deficits and suicide (Pollock & Williams, 1998).

In addition to the personality characteristics noted above, specific personality disorders may be contributing factors in suicides (Mann et al., 1999; Tanney, 1992). Duberstein and Conwell (1997) completed a thorough review of this area and estimated that between 30% and 40% of suicides are completed by individuals with personality disorders, the more lethal being borderline and antisocial personality disorders. These reviewers suggested that avoidant and schizoid personality disorders may also increase suicide risk. Personal risk factors are considered chronic, but the role they play can be lessened with psychotherapeutic interventions (e.g., learning coping skills and undergoing relapse prevention).

Psychosocial–environmental factors refer to events that may create stress or contribute to the breakdown of support systems (Heikkinen, Aro, & Lonnqvist, 1993; Joiner et al., 1999; Kotler et al., 1993; Veiel, Brill, Hafner, & Welz, 1988). These are similar to the Axis IV problems listed in the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1994). These events can be precipitated by people or natural occurrences. Even events that cause mild stress can be sufficient triggers for suicide, particularly in individuals with mental disorders (Clark & Fawcett, 1992). Psychosocial–environmental risk factors can be viewed as either acute or chronic risk factors. For example, recent relationship problems or sexual identity issues can result in acute anxiety, depression, and suicide risk. In contrast, imprisonment can lead to constant stress, a gradual breakdown of personal resources, and increased suicidality.

Clinical factors refer to specific behaviors suggestive of suicide planning and changes in mental status, behavior, mood, or attitude (Beck, Steer, Beck, & Newman, 1993; Clark & Fawcett, 1992; Maris, 1992a; Strakowski, McElroy, Keck, & West, 1996). These are typically acute changes but could also be chronic conditions related to mental illness or psychological problems. An individual could exhibit acute clinical risk factors as a result of a psychosocial–environmental stressor (e.g., an automobile accident that leaves the individual paralyzed). Patients with major mental illnesses often have acute relapses that increase suicide risk in a short time. These relapses could be the result of stress, medication noncompliance, or both. By comparison, a patient may struggle with depression and chronic suicidal ideation for years before committing suicide.

Protective Factors

Protective factors are those factors that lower the risk for suicide (Mann et al., 1999; Stelmachers, 1995). For example, family and nonfamily support systems, significant relationships, a satisfying social life, and constructive use of leisure time may act as protective factors (Stack, 1992; Veevers, 1973). Studies have found that marriage may protect against suicide (Gove, 1973; Lester, 1987). Veevers (1973) and others (Fawcett et al., 1987; Smith, Mercy, & Conn, 1988) have discussed the protection provided to parents by having children under the age of 18 years living at home. Another protective factor is employment (Stack, 2000). Dahlsgaard et al. (1998) compared a group of individuals who committed suicide with a matched control group and found higher unemployment in the suicide group. Psychologists should also consider the role of religion, culture, and ethnicity as protective factors (Gibbs, 1997; Hovey & King, 1997; Lester, 1997; Stack, 1992). Religious beliefs about suicide and fear of death may be sufficient reasons for someone not to consider suicide as an option. A purpose for living, as demonstrated by having future plans and participating in enjoyable activities, may protect suicidal patients from committing suicide (Jobes & Mann, 1999). For individuals facing personal problems, being in treatment may serve as a protective factor (Dahlsgaard et al., 1998). Protective factors may sometimes only be temporary, as in the case in which a patient states that he or she will not commit suicide as long as his or her significant other is alive.

Integrated Model for Understanding Suicide

The challenge for psychologists is how to apply the above risk–protective factor model in their daily work. Suicidal behaviors are typically the result of the cumulative and interactive effects of risk factors and breakdown of protective factors that vary across time, situations, and most importantly individuals (Cornelius, Salloum, Mezzich, & Cornelius, 1995; Fenton, 2000; Kleespies et al., 1999). In addition, suicide can be viewed as a process in which individuals become increasingly suicidal before attempting or committing suicide. This process typically begins with a precipitant environmental–psychosocial stressor (or stressors). The effect of the stressor (or stressors) is influenced by the historical experiences, personal coping abilities, and the availability and adequacy of protective factors. If the individual is unable to cope with the stressor (or stressors), this could result in a change in mental functioning that may include suicidal ideation, suicide intent, and ultimately suicide.

The process of becoming suicidal could take months or years, such as in the case of a patient suffering from alcoholism and medical problems. In contrast, suicide could be an impulsive reaction to a perceived or actual intolerable situation, such as the fear or threat of divorce. Suicide could also be the result of a grossly disturbed mental state, such as in a schizophrenic patient who believes his or her death will save the world. Categorizing the risk factors listed in Appendix A as acute or chronic and the protective factors as temporary or permanent may enhance the assessment process by focusing the evaluation on immediate, short-term, or long-term risk.

Appendix B provides comprehensive guidelines for completing a suicide risk–protective factor assessment. The guidelines provide a detailed method for collecting important information from various sources. The actual order in which psychologists obtain information and the amount needed will depend on the specific case and time constraints. In most cases, psychologists will not have to complete such a detailed assessment. However, psychologists

working in outpatient settings with high-risk groups (e.g., depressed patients) or with patients hospitalized for suicidal behavior may find these thorough guidelines useful.

Using the guidelines in Appendix B, the information gathered from the initial evaluation, subsequent interviews with collateral sources, psychological testing, and review of prior health records can be categorized into historical, personal, psychosocial–environmental, and clinical risk factors and protective factors (i.e., incorporate the findings into the guidelines in Appendix A). As the suicide assessment process evolves, the psychologist will be able to integrate new information and adjust the risk level and treatment plan accordingly (Rudd, 1998). Although suicide assessment can provide an accurate picture of current risk, the reliability of these findings may diminish with time. Changes in risk will vary primarily with changes in psychosocial–environmental and clinical risk factors, as well as changes associated with protective factors. Treatment will also affect the risk profile, and psychologists should routinely assess treatment effectiveness by using rating scales, clinical observations, and patient reports (Clark, 1998; Rudd, 1998). Psychologists will have to update their assessments and treatment plans as clinically indicated by each case. In all cases, psychologists should document the risk–protective factors they considered and the corresponding risk–benefit analysis used in making treatment decisions.

Application of the Model to Clinical Practice

Rudd (1998) developed a treatment matrix commensurate with crisis intervention and short-term and long-term treatment. The following clinical case demonstrates how the risk–protective factor model (i.e., Appendix A) can be integrated with Rudd's treatment matrix and used for suicide assessment and treatment planning. The completed flow chart for this case is provided in Appendix C. The treatment recommendations are based on whether these risk factors are (a) acute and represent imminent or short-term risk or (b) chronic and thus represent long-term risk. The flow chart also includes use of temporary and permanent protective factors. This case illustrates the value of using the risk–protective factor model to identify and target specific suicide risk factors for treatment while using protective factors advantageously.

A 45-year-old White man seeks therapy because he is depressed about the recent breakup with his girlfriend. The psychologist uses the checklist (Appendix A) and follows the protocol for suicide assessment (Appendix B). The psychologist notices that the patient looks older than his stated age and has a scar on his neck. Demographic risk factors include his race, gender, age, and lack of a significant relationship at this time. The psychologist conducts a clinical interview and learns about two prior suicide attempts (overdosing on pain medication and cutting), a pattern of alcohol abuse, and a spotty work history. Through further questioning, the psychologist learns that the patient's most recent suicide attempt occurred approximately 6 months earlier and was precipitated by the breakup with a woman he had hoped to marry. The woman broke off the relationship because of the patient's excessive drinking and his inability to hold a job. At the time he took the overdose, the patient believed it would be enough to cause his death. He left a will and two letters to his girlfriend. The patient's roommate came home early from work on that particular day, discovered him, and called paramedics. The patient was hospitalized for 2 days; however, he refused mental health treatment during his stay. The patient states that this suicide attempt occurred "when I was young and stupid" (although this occurred 6 months ago) and that he would not consider suicide now. When questioned about the scar on his neck, the patient hesitates but eventually admits that when he was a teenager he cut himself because his parents "took away the car keys for running with the wrong crowd." He lost considerable blood and was hospitalized for 3 days and received counseling as an outpatient.

The mental status examination reveals signs of depression and the patient's feelings of intense anger at himself for "messing up a good thing with my stupid drinking. I lost my girlfriend and my good job." He denies suicidal thoughts and any recent suicidal behavior but angrily states, "no one would care if I were dead." He also states that he is not sure why he did not die the last time he took an overdose. He expresses concern about his ability to control himself and gives this as the primary reason for seeking help. The psychologist assesses for thoughts of violence toward others, particularly his ex-girlfriend, and the patient states that he loves his ex-girlfriend and has never been violent toward women. The psychologist inquires about support systems, and the patient states his family and most of his friends abandoned him years ago because of his drinking problem. He states that the only ones who seem to care about him are his 3-month-old English mastiff puppy and his old army friend, Joe. The psychologist asks permission to request the records of his hospitalizations for suicidal behavior, and the patient gives consent.

The psychologist completes a suicide risk profile (see Table A1 in Appendix C, under the "Risk factors" heading). The patient's chronic historical risk factors include alcohol abuse and prior history of suicidal behavior. Chronic personal risk factors are poor stress tolerance, inadequate coping skills, and poor impulse control (and perhaps a personality disorder that psychological testing could identify). His comment about his recent suicide attempt suggests a lack of insight into the seriousness of his problems. Acute psychosocial–environmental risk factors include the breakup with his girlfriend and the recent job loss. Acute clinical risk factors are depression, passive suicidal thoughts, anger, and questionable impulse control. Permanent protective factors are his English mastiff puppy and his old army friend.

The patient is not at imminent risk for suicide but does appear to be in crisis. Therefore, the initial treatment must address the acute clinical and psychosocial–environmental risk factors (see Table A1 in Appendix C, under the "Crisis intervention" heading). The treatment goals are to reduce depression, passive suicide thoughts, and anger and to improve decision making and impulse control. The patient will also need to gain acceptance of the relationship breakup. A referral to Alcoholics Anonymous (AA) is also indicated. Once the crisis is resolved, therapy can focus on the chronic historical risk factors, such as the origins of the drinking problem and suicidal behavior (see Table A1 in Appendix C, under the "Long-term risk management" heading). Interventions to address the personal chronic risk factors include skill building to improve stress management, coping, and impulse control (which appears to be both an acute and chronic problem for this patient). The psychologist uses a cognitive–behavioral approach to address the suicidal thinking patterns (e.g., "no one would care if I were dead"), the interrelation between anger and suicidal thoughts, and deficits in personal coping strategies (see Rudd, 2000). Temporary protective factors are created by building support systems, specif-

ically, the therapeutic relationship, group therapy, telephone number to crisis center, AA, and referral for job training (see Table A2 in Appendix C, under the "Short-term risk management" heading). The psychologist can encourage the patient to establish permanent protective factors by joining social groups, using AA as a support system, and increasing contact with his old army friend (see Table A2 in Appendix C, under the "Long-term risk management" heading). The psychologist assesses the psychosocial–environmental and clinical risk factors at each visit and adjusts the treatment plan accordingly.

Conclusion

Suicide assessment and treatment will continue to be difficult challenges for psychologists. These tasks can be made easier by using the risk–protective model discussed above to complete suicide assessments and to develop treatment interventions. Psychologists should review and update treatment plans in accordance with changes in the risk–protective profile of their patients. Treatment for emergency or crisis and short-term risk situations should focus on the specific acute clinical and psychosocial–environmental risk factors contributing to the suicidal behavior. Long-term management includes developing and implementing specific treatments that target the identified chronic risk factors and strengthening protective factors. Psychologists should document the risk–protective factors that they considered when making their clinical decisions.

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Beck, A. T., Steer, R. A., Beck, J. S., & Newman, C. F. (1993). Hopelessness, depression, suicidal ideation and clinical diagnosis of depression. *Suicide and Life-Threatening Behavior, 23*, 139–145.

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.

Brent, D. A., Bridge, J., Johnson, B. A., & Connolly, J. (1996). Suicidal behavior runs in families: A controlled family study of adolescent suicide victims. *Archives of General Psychiatry, 53*, 1145–1152.

Clark, D. C. (1998). The evaluation and management of the suicidal patient. In P. M. Kleespies (Ed.), *Emergencies in mental health practice* (pp. 75–94). New York: Guilford Press.

Clark, D. C., & Fawcett, J. (1992). Review of empirical risk factors for evaluation of the suicidal patient. In B. Bongar (Ed.), *Suicide: Guidelines for assessment, management and treatment* (pp. 16–48). New York: Oxford University Press.

Cornelius, J. R., Salloum, I. M., Mezzich, J., & Cornelius, M. D. (1995). Disproportionate suicidality in patients with comorbid major depression and alcoholism. *American Journal of Psychiatry, 152*, 358–364.

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.

Duberstein, P., & Conwell, Y. (1997). Personality disorders and completed suicide: A methodological and conceptual review. *Clinical Psychology: Science and Practice, 4*, 359–376.

Ellis, T. E., & Ratliff, K. G. (1986). Cognitive characteristics of suicidal and nonsuicidal psychiatric patients. *Cognitive Therapy and Research, 10*, 625–634.

Fawcett, J., Scheftner, W. A., Clark, D. C., Hedeker, D., Gibbons, R. D., & Coryell, W. (1987). Clinical predictor of suicide in patients with major affective disorders: A controlled prospective study. *American Journal of Psychiatry, 144*, 35–40.

Fenton, W. S. (2000). Depression, suicide, and suicide prevention in schizophrenia. *Suicide and Life-Threatening Behavior, 30*, 34–49.

Garrison, C. Z. (1992). Demographic predictors of suicide. In R. W. Maris, A. L. Berman, J. T. Maltsberger, & R. I. Yufit (Eds.), *Assessment and prediction of suicide* (pp. 484–498). New York: Guilford Press.

Gibbs, J. T. (1997). African-American suicide: A cultural paradox. *Suicide and Life-Threatening Behavior, 27*, 68–79.

Gove, W. (1973). Sex, marital status and mortality. *American Journal of Sociology, 79*, 45–67.

Hawton, K., & Vislisel, L. (1999). Suicide in nurses. *Suicide and Life-Threatening Behavior, 29*, 86–95.

Heikkinen, M., Aro, H., & Lonnqvist, J. (1993). Life events in social support in suicide. *Suicide and Life-Threatening Behavior, 23*, 343–358.

Hirschfeld, R. M. A., & Russell, J. M. (1997). Assessment and treatment of suicidal patients. *The New England Journal of Medicine, 337*, 910–915.

Hovey, J. D., & King, C. A. (1997). Suicidality among acculturating Mexican-Americans: Current knowledge and directions for research. *Suicide and Life-Threatening Behavior, 27*, 92–103.

Jobes, D. A., (1995). The challenge and promise of clinical suicidology. *Suicide and Life-Threatening Behavior, 25*, 437–449.

Jobes, D. A., & Mann, R. E. (1999). Reasons for living versus reasons for dying: Examining the internal debate of suicide. *Suicide and Life-Threatening Behavior, 29*, 97–104.

Joiner, T. E., Walker, R. L., Rudd, M. D., & Jobes, D. A. (1999). Scientizing and routinizing the assessment of suicidality in outpatient practice. *Professional Psychology: Research and Practice, 30*, 447–453.

Klatsky, A. L., & Armstrong, M. A. (1993). Alcohol use, other traits, and risk of unnatural death: *Alcoholism: Clinical and Experimental Research, 17*, 1156–1162.

Kleespies, P. M., Deleppo, J. D., Gallagher, P. L., & Niles, B. L. (1999). Managing suicidal emergencies: Recommendations for the practitioner. *Professional Psychology: Research and Practice, 30*, 454–463.

Kotler, M., Finkelstein, G., Molcho, A., Botsis, A. J., Plutchik, R., Brown, S. L., & van Praag, H. M. (1993). Correlates of suicide and violence risk in inpatient populations: Coping styles and social support. *Psychiatry Research, 47*, 281–290.

Lester, D. (1987). Benefits of marriage for reducing risk of violent death from suicide and homicide for White and non-White persons: Generalizing Gove's findings. *Psychological Reports, 61*, 198.

Lester, D. (1992). Alcoholism and drug abuse. In R. W. Maris, A. L. Berman, J. T. Maltsberger, & R. I. Yufit (Eds.), *Assessment and prediction of suicide* (pp. 321–336). New York: Guilford Press.

Lester, D. (1997). Suicide in America: A nation of immigrants. *Suicide and Life-Threatening Behavior, 27*, 50–59.

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. (1992a). Overview of the study of suicide assessment. In R. W. Maris, A. L. Berman, J. T. Maltsberger, & R. I. Yufit (Eds.), *Assessment and prediction of suicide* (pp. 3–22). New York: Guilford Press.

Maris, R. W. (1992b). The relation of nonfatal suicide attempts to completed suicides. In R. W. Maris, A. L. Berman, J. T. Maltsberger, & R. I. Yufit (Eds.), *Assessment and prediction of suicide* (pp. 362–380). New York: Guilford Press.

McIntosh, J. L. (1992). Suicide and the elderly. In B. Bongar (Ed.), *Suicide: Guidelines for assessment, management and treatment* (pp. 106–124). New York: Oxford University Press.

Plutchik, R., & van Praag, H. M. (1995). The nature of impulsivity: Definitions, ontology, genetics and relations to aggression. In E. Hollander & D. J. Stein (Eds.), *Impulsivity and aggression* (pp. 7–24). Chichester, England: Wiley.

Pollock, L. R., & Williams, J. M. G. (1998). Problem solving and suicidal behavior. *Suicide and Life-Threatening Behavior, 28*, 375–387.

Rosenberg, J. I. (1999). Suicide prevention: An integrated training model using affective and action-based interventions. *Professional Psychology: Research and Practice, 30*, 83–87.

Roy, A. (1992). Genetics, biology, and suicide in the family. In R. W. Maris, A. L. Berman, J. T. Maltsberger, & R. I. Yufit (Eds.), *Assessment and prediction of suicide* (pp. 553–573). New York: Guilford Press.

Roy, A. (1994). Affective disorders. In M. Hersen, R. T. Ammerman, & L. Sisson (Eds.), *Handbook of aggressive and destructive behavior in psychiatric patients* (pp. 221–236). New York: Plenum Press.

Rudd, M. D. (1998). An integrative conceptual and organizational framework for treating suicidal behavior. *Psychotherapy, 35*, 346–360.

Rudd, M. D. (2000). The suicidal mode: A cognitive-behavior model of suicidality. *Suicide and Life-Threatening Behavior, 30*, 18–33.

Smith, J. C., Mercy, J. A., & Conn, J. M. (1988). Marital status and the risk of suicide. *Journal of Public Health, 78*, 78–80.

Stack, S. (1992). Marriage, family, religion, and suicide. In R. W. Maris, A. L. Berman, J. T. Maltsberger, & R. I. Yufit (Eds.), *Assessment and prediction of suicide* (pp. 540–552). New York: Guilford Press.

Stack, S. (2000). Suicide: A 15-year review of the sociological literature: Part I. Cultural and economic factors. *Suicide and Life-Threatening Behavior, 30*, 145–162.

Stelmachers, Z. T. (1995). Assessing suicidal clients. In J. N. Butcher (Ed.), *Clinical personality assessment: Practical approaches* (pp. 367–379). New York: Oxford University Press.

Strakowski, S. M., McElroy, S. C., Keck, P. E., & West, S. A. (1996). Suicidality among patients with mixed and manic bipolar disorder. *American Journal of Psychiatry, 153*, 674–676.

Tanney, B. L. (1992). Mental disorders, psychiatric patients, and suicide. In R. W. Maris, A. L. Berman, J. T. Maltsberger, & R. I. Yufit (Eds.), *Assessment and prediction of suicide* (pp. 277–320). New York: Guilford Press.

Veevers, J. E. (1973). Parenthood and suicide: An examination of a neglected variable. *Social Sciences and Medicine, 7*, 135–144.

Veiel, H. O. F., Brill, G., Hafner, H., & Welz, R. (1988). The social support of suicidal attempters: The different roles of family and friends. *American Journal of Community Psychology, 16*, 839–861.

Weishaar, M. F., & Beck, A. T. (1992). Clinical and cognitive predictors of suicide. In R. W. Maris, A. L. Berman, J. T. Maltsberger, & R. I. Yufit (Eds.), *Assessment and prediction of suicide* (pp. 467–483). New York: Guilford Press.

Weiss, R. D., & Stephens, P. S. (1992). Substance abuse and suicide. In D. Jacobs (Ed.), *Suicide and clinical practice* (pp. 101–114). Washington, DC: American Psychiatric Press.

Yang, B., & Clum, G. A. (1996). Effects of early negative life experiences on cognitive functioning and risk for suicide: A review. *Clinical Psychology Review, 16*, 177–195.

Appendix A
Checklist for Assessing Suicide Risk and Protective Factors

Psychologist's Name _____ Psychologist's Signature _____

Name: _____

Ethnicity: _____ Marital Status: _____

Date of Birth: _____ Age: ____

Date of Evaluation: _____

Historical Risk Factors

Demographic Information

____ Unattached (e.g., never married, separated, divorced, or lack of significant relationships)
____ Spotty work history
____ Chronic unemployment

Psychosocial History

____ Childhood abuse
____ History of violent behavior

Mental Health History

____ Mental disorder associated with suicidal behavior (e.g., depression, schizophrenia, alcohol dependence, substance abuse, and combination of mental disorders)
____ History of head injury
____ Prior suicidal behavior (e.g., suicide threats, suicide attempts)
____ Prior mental health treatment
____ Family history of suicidal behavior
____ Suicidal behavior within the past 3 months

Medical History

____ Major medical problems, particularly chronic, incurable, or painful conditions (e.g., AIDS, brain disease, renal failure, cancer, and Huntington's disease)

Personal Risk Factors

____ Emotional instability (chronic)
____ Impulsivity or aggression (chronic)
____ Poor coping skills
____ Poor judgment
____ Personality disorder associated with suicide (e.g., borderline, antisocial)
____ Poor problem solving
____ Low stress tolerance

(Appendixes continue)

___ Rigid thinking
___ Distorted thinking
___ Irrational beliefs

Psychosocial–Environmental Risk Factors

___ Major life stressors (e.g., physical or sexual assault, threats against life, diagnosis of serious medical problem, dissolution of significant relationship, sexual identity issues)
___ Any significant loss
___ Breakdown of support systems
___ Social isolation

Clinical Risk Factors

___ Specific behaviors suggestive of suicide planning (e.g., giving away possessions; saying goodbye to friends; telephoning or writing to family, friends, or both to say goodbye; thinking about suicide; talking about death, suicide, or both; verbalizing specific plans to commit suicide; rehearsing suicidal act; asking about ways to die; accumulating medications; and threatening suicide)
___ Changes in mental status (e.g., acute deterioration in mental functioning; onset of major mental illness, particularly early phase of schizophrenia or depression; psychosis with agitation, command hallucinations, or both; extreme anxiety, paranoia, or both; and severe depression)
___ Changes in behavior (e.g., social withdrawal, agitation, provocativeness, increased or decreased appetite, disturbed sleep, impulsivity, and aggressive behavior)
___ Changes in mood (e.g., depression, hopelessness, helplessness, fearfulness, unfounded happiness, anger, anxiety, and lability)
___ Changes in attitude (unrealistic sense of the future, apathy, overly optimistic, and overly pessimistic)
___ Lack of compliance with treatment

Protective Factors

___ Married (or significant relationship)
___ Employed or involved in a structured program (e.g., educational or vocational training program)
___ Support system (e.g., family, friends, church, social clubs)
___ Having children who are under the age of 18 years
___ Constructive use of leisure time (enjoyable activities)
___ General purpose for living
___ Involved in mental health treatment
___ Effective problem-solving skills

Appendix B
Guidelines for Suicide Risk Assessment

1. Review record (or records).
2. Conduct clinical observations.
3. Conduct clinical interview.
4. Conduct mental status examination.
5. Diagnose all mental disorders.
6. Assess suicidal ideation.
7. Assess homicide–suicide risk.
8. Examine prior self-injurious and suicidal behavior.
9. Request prior treatment records and collateral information.
10. Conduct psychological testing and administer rating scales.
11. Incorporate the data to develop a risk profile (identify acute and chronic suicide risk factors and temporary and permanent protective factors).

Appendix C

Treatment Recommendations for the Clinical Case

Table A1
Treatment Recommendations for the Clinical Case on the Basis of Suicide Risk Factors

Risk factors	Crisis intervention (for acute risk factors)	Long-term risk management (for chronic risk factors)
Historical		
1. Alcohol dependence		1. Alcoholics Anonymous
2. Two prior suicide attempts		2. Psychotherapy to explore origins of suicidal behavior
Personal		
1. Poor stress tolerance		1. Skill building to improve stress management
2. Poor coping skills		2. Skill building to improve coping
3. Poor impulse control (chronic)		3. Skill building to improve decision making and impulse control
4. Poor insight		4. Psychotherapy to increase understanding of the connection between emotions, thought patterns, and behaviors
5. Possible personality disorder		5. Psychological testing to rule out personality disorder
Psychosocial–environmental		
1. Breakup of significant relationship	1. Recognition of stressors that contributed to the current situation	1. Help patient work on establishing permanent support systems
2. Loss of job	2. Recognition of the patient's role for his current predicament and the changes necessary to improve situation	2. Help patient work on securing and maintaining permanent employment
		3. Assess patient at each contact and update treatment plan accordingly
Clinical		
1. Depression	1. Reduce symptoms of depression (consider referral for medication consultation)	1. Assess patient at each contact and update treatment plan accordingly
2. Passive suicidal thoughts	2. Monitor and reduce suicidal thoughts	2. Implement relapse prevention (i.e., for alcoholism)
3. Anger	3. Facilitate anger management	
4. Questionable impulse control	4. Improve decision making and impulse control	
5. Alcohol dependence	5. Refer to Alcoholics Anonymous	

(Appendix continues)

Table A2
Treatment Recommendations for the Clinical Case on the Basis of Protective Factors

Protective factors	Short-term risk management (increase protective factors)	Long-term risk management (identify and strengthen new protective factors)
Temporary or none	1. Therapeutic relationship (consider increasing contacts and group therapy referral) 2. Telephone number to crisis center 3. Alcoholics Anonymous (serves as support group) 4. Referral for employment counseling or job training	
Permanent 1. English mastiff puppy 2. Old army friend		1. Encourage joining social groups 2. Encourage increased contact with army friend

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