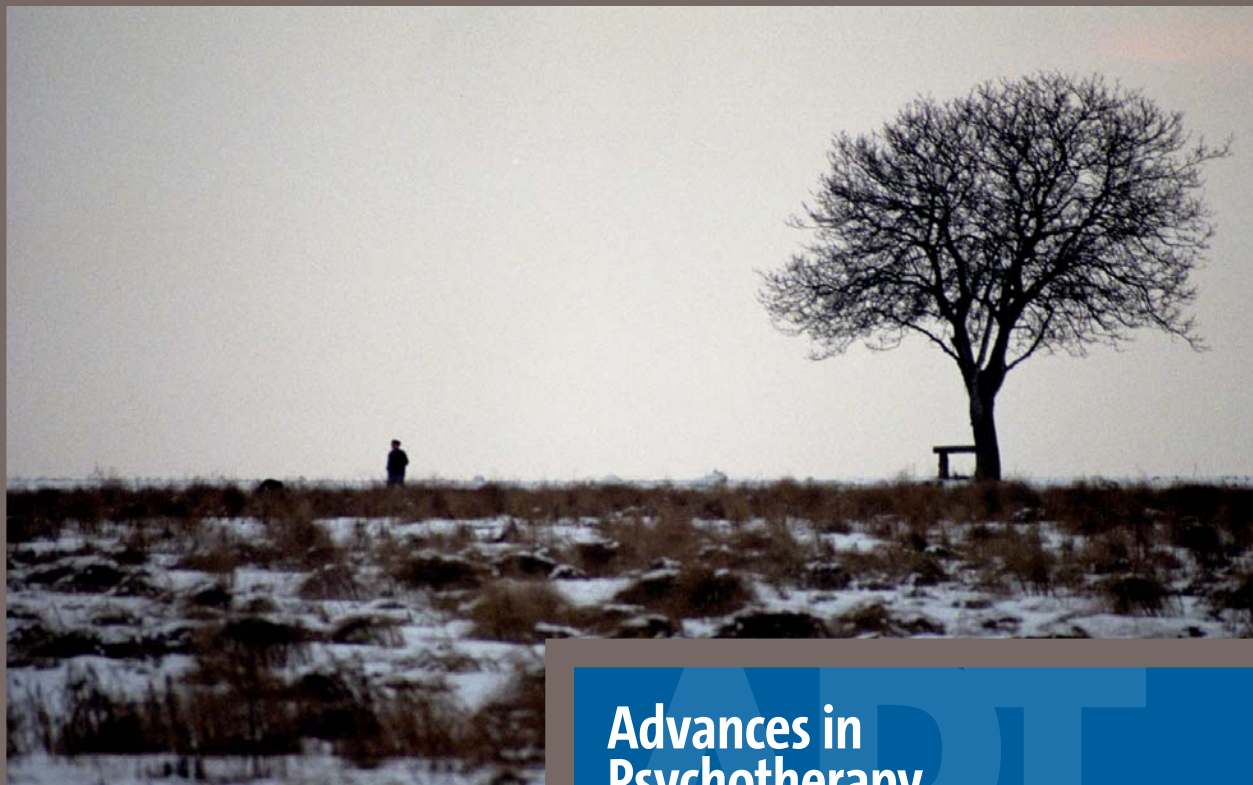


Richard McKeon

Suicidal Behavior



Advances in
Psychotherapy

Evidence-Based Practice

HOGREFE



Suicidal Behavior

About the Author

Richard McKeon PhD, MPH received his doctorate in Clinical Psychology from the University of Arizona, and a Master's of Public Health in Health Administration from Columbia University. He has spent most of his career working in community mental health, including 11 years as director of a psychiatric emergency service and four years as Associate Administrator/Clinical Director of a hospital based community mental health center in Newton, New Jersey. He established the first evidenced based treatment program for chronically suicidal borderline patients in the state of New Jersey utilizing Marsha Linehan's Dialectical Behavior Therapy. In 2001, he was awarded an American Psychological Association Congressional Fellowship and worked for United States Senator Paul Wellstone, covering health and mental health policy issues. He spent five years on the Board of the American Association of Suicidology as Clinical Division Director and has also served on the Board of the Division of Clinical Psychology of the American Psychological Association. He is currently a public health advisor on suicide prevention for the Substance Abuse and Mental Health Services Administration where he coordinates suicide prevention activities. He also serves as Co-Chair of the Federal Working Group on Suicide Prevention.

Advances in Psychotherapy – Evidence-Based Practice

Danny Wedding; PhD, MPH, Prof., St. Louis, MO
(Series Editor)

Larry Beutler; PhD, Prof., Palo Alto, CA

Kenneth E. Freedland; PhD, Prof., St. Louis, MO

Linda C. Sobell; PhD, ABPP, Prof., Ft. Lauderdale, FL

David A. Wolfe; PhD, Prof., Toronto

(Associate Editors)

The basic objective of this series is to provide therapists with practical, evidence-based treatment guidance for the most common disorders seen in clinical practice – and to do so in a “reader-friendly” manner. Each book in the series is both a compact “how-to-do” reference on a particular disorder for use by professional clinicians in their daily work, as well as an ideal educational resource for students and for practice-oriented continuing education.

The most important feature of the books is that they are practical and “reader-friendly.” All are structured similarly and all provide a compact and easy-to-follow guide to all aspects that are relevant in real-life practice. Tables, boxed clinical “pearls”, marginal notes, and summary boxes assist orientation, while checklists provide tools for use in daily practice.

Suicidal Behavior

Richard T. McKeon

Former Clinical Division Director, American Association of Suicidology



Library of Congress Cataloging in Publication

is available via the Library of Congress Marc Database under the
LC Control Number 2008939655

Library and Archives Canada Cataloguing in Publication

McKeon, Richard T

Suicidal behavior / Richard McKeon.

(Advances in psychotherapy--evidence-based practice)

Includes bibliographical references.

ISBN 978-0-88937-327-3

1. Suicidal behavior--Prevention. 2. Suicidal behavior--Treatment.

I. Title. II. Series.

RC569.M41 2008

616.85'8445

C2008-906676-6

© 2009 by Hogrefe & Huber Publishers

PUBLISHING OFFICES

USA: Hogrefe & Huber Publishers, 875 Massachusetts Avenue, 7th Floor,
Cambridge, MA 02139

Phone (866) 823-4726, Fax (617) 354-6875; E-mail info@hhpub.com

EUROPE: Hogrefe & Huber Publishers, Rohnsweg 25, 37085 Göttingen, Germany

Phone +49 551 49609-0, Fax +49 551 49609-88, E-mail hh@hhpub.com

SALES & DISTRIBUTION

USA: Hogrefe & Huber Publishers, Customer Services Department,
30 Amberwood Parkway, Ashland, OH 44805

Phone (800) 228-3749, Fax (419) 281-6883, E-mail custserv@hhpub.com

EUROPE: Hogrefe & Huber Publishers, Rohnsweg 25, 37085 Göttingen, Germany

Phone +49 551 49609-0, Fax +49 551 49609-88, E-mail hh@hhpub.com

OTHER OFFICES

CANADA: Hogrefe & Huber Publishers, 1543 Bayview Avenue, Toronto, Ontario M4G 3B5

SWITZERLAND: Hogrefe & Huber Publishers, Länggass-Strasse 76, CH-3000 Bern 9

Hogrefe & Huber Publishers

Incorporated and registered in the State of Washington, USA, and in Göttingen, Lower Saxony,
Germany

No part of this book may be reproduced, stored in a retrieval system or transmitted, in any form or
by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without
written permission from the publisher.

Printed and bound in the USA

ISBN 978-0-88937-327-3

Acknowledgments

I would like to acknowledge all those who have made this book possible, including the publisher, Hogrefe and Huber, and especially Robert Dimbleby for his patience and support. I would also like to thank series editor Danny Wedding for supporting the inclusion of a book on suicidal behavior in the series *Advances in Psychotherapy: Evidence Based Practice*. His guidance during the development of this manuscript was invaluable.

It is of particular importance for me to express my gratitude to all those who have shared their stories, their pain, and their hopes with me over the years, including all those I have worked with in community mental health. All that I know I learned from them. To all the colleagues I have worked with to prevent suicide, whether we have worked together in emergency rooms, or on conference calls, in therapy groups or in symposiums, thank you for sustaining me in our shared vision of reducing the tragic loss of lives to suicide. I must also acknowledge all those I have met who have survived the loss of a loved one to suicide, but who have utilized their grief to insist we must do better, and in so doing have transformed a nation.

Finally, this book would not have been possible without the support of my family. I would like to thank my wife, Liz, for her advice, love, editing and encouragement, my sister, Kathy, for her assistance, my mother, Ruth, for her continued interest and support, and my daughters Britt and Shauna, who are my sources of hope for the future.

Disclaimer

All opinions expressed in this book are those of the author alone and do not represent the views of the Substance Abuse and Mental Health Services Administration.

Dedication

This book is dedicated to the memory of United States Senator Paul David Wellstone. Paul was a passionate champion for suicide prevention, and a transforming influence on all those who knew him.

Table of Contents

Acknowledgment	v
Disclaimer	v
Dedication	v
1 Description	1
1.1 Terminology	4
1.2 Definition.	5
1.3 Differential Diagnosis	8
1.4 Epidemiology	11
1.5 Course and Prognosis	15
1.6 Comorbidities	18
1.7 Assessment Procedures	21
2 Theories and Models of Suicidal Behavior	26
2.1 Neuropsychiatric Theories.	26
2.2 Psychological Theories	27
3 Risk Assessment and Treatment Planning	31
3.1 Assessing Suicide Risk and Protective Factors.	32
3.2 Estimating Suicide Risk Level	33
3.3 Resolving Contradictory Risk Factors	34
3.4 Understanding the Time Dimension of Suicide Risk	35
3.5 Documenting Suicidal Risk.	37
4 Treatment	39
4.1 Methods of Treatment	42
4.1.1 Multiphase Models	42
4.1.2 Orientation and Engagement.	42
4.2 Crisis Intervention and the Management of Acute Risk.	45
4.2.1 Assuring Telephone Accessibility After Hours	45
4.2.2 Suicide Prevention Hotlines	46
4.2.3 Emergency Appointment Capability	47
4.2.4 Use of the Emergency Department	48
4.2.5 Psychiatric Emergency Services	50
4.2.6 Involuntary Hospitalization and the Use of the Police	50
4.2.7 Use of Mobile Outreach Services	51
4.3 Safety Planning	52
4.3.1 Involving Family and Friends	53
4.3.2 Means Restriction	55
4.3.3 Safety Planning Versus No-Suicide Contracts	56
4.4 Treatment Techniques	58
4.4.1 Skills Training	59
4.4.2 Self Monitoring/Homework Assignments.	60
4.4.3 Cognitive Interventions	61

4.4.4	Exposure Treatment	62
4.4.5	Reducing Perceived Burdensomeness	63
4.4.6	Failed Belongingness	64
4.4.7	Bibliotherapy	65
4.4.8	Outreach and Follow-up	66
4.4.9	Postvention	67
4.5	Mechanisms of Action	69
4.6	Efficacy and Prognosis	70
4.7	Variations and Combinations of Methods	71
4.7.1	Medication and Psychotherapy	71
4.7.2	Working With Families	72
4.7.3	Treatment of Adolescents	73
4.7.4	Individual and Group Treatment	74
4.8	Problems in Carrying Out the Treatments	75
4.8.1	Problems in Communication and Information Gathering	75
4.8.2	Problems in Continuity of Care	75
4.8.3	Problems in Initial Risk Assessment	76
4.8.4	Problems in Collaboration	77
4.9	Multicultural Issues	78
5	Case Vignette	80
6	Case Example	83
7	Further Reading	87
8	References	88
9	Appendices: Tools and Resources	97

1

Description

Suicide is a tragic end to an individual's life, a devastating loss to families and friends, a diminishment of our communities, and a public health crisis for our nation. For clinicians, losing a patient to suicide is probably our worst fear. In 2005, over 32,000 Americans died by suicide (Centers for Disease Control, 2008a). Worldwide, an estimated one million people die by suicide each year, more than are lost to homicide or to war (World Health Organization, 2000). Self-inflicted injury is estimated to account for 1.4% of the total burden of disease worldwide (World Federation for Mental Health, 2006). Yet, despite the magnitude of these losses, or perhaps because of the depth of our distress and uncertainty when confronted with acts of deliberate self-destruction, we have tended as a society to look away and not grapple with the issue of suicidal behavior, despite the tragic toll it exacts.

Kay Redfield Jamison (1999) has eloquently stated that in dealing with suicide, "The gap between what we know, and what we do, is lethal." In *Night Falls Fast* (1999), her first-person account of her struggles with intense suicidal urges, she emphasizes the powerful link between mental illness and suicide, and the disturbing reality that the majority of those who die by suicide have never received mental health treatment. Despite the fact that we know how to treat successfully many of the conditions that are risk factors for suicide, such as depression, substance abuse, and bipolar illness, so many of those who die by suicide never receive such treatment for these disorders (Luoma, Martin, & Pearson, 2002).

While the gap between what we know and what we do is undoubtedly lethal, it is also tragically true that there is a huge gap between what we know and what we need to know to prevent suicide more effectively. This gap is also lethal. For, example, we do not have research that confirms that inpatient treatment is effective in preventing suicide, let alone under what circumstances hospitalization might be effective. We lack this knowledge even though reliance on inpatient hospitalization is a cornerstone of how virtually all mental health systems respond to suicidal individuals. In the past decade, the face of inpatient care in the U.S. has drastically changed, with lengths of stay being dramatically shortened for all patients (Pottick, McAlpine, & Andelman, 2000). This has amounted to a major, uncontrolled experiment in how we treat suicidal people, yet we know little about the impact such massive changes have had. In addition, despite the fact that involuntary hospitalization laws across the U.S. utilize the concept of imminent risk, the research on acute risk factors for suicide measures risk in months, not in hours or days (Simon, 2006). We also know distressingly little about how to successfully engage people at risk in treatment. The Utah Youth Suicide study showed that even though 44% of

Worldwide, about a million people per year die by suicide, more than are lost to homicide or war

youth who died by suicide and had received psychiatric diagnoses had been prescribed psychotropic medication, upon autopsy none of the youth were found to have either therapeutic or sub-therapeutic medication levels (Moskos, Olson, Halbern, Keller, & Gray, 2005). We also know that continuity of care after acute episodes of care such as emergency department visits and inpatient hospitalization is poor despite substantial evidence that these are high risk times (Appleby et al., 1999).

Suicide is a public health crisis that has not received the attention it deserves

The President's New Freedom Commission Report on Mental Health, *Achieving the Promise, Transforming Mental Health Care in America* (2003), described suicide as "A public health crisis that has not received the attention it deserves." At least in part as a result of our failure to treat suicide as the public health crisis it is, the evidence base is not as strong for much of our work as it needs to be. The Institute of Medicine (IOM), in its 2002 report, *Reducing Suicide: A National Imperative*, reviewed the status of our scientific understanding of the causes and prevention of suicide, and pointed out both the extensive knowledge we have as well as how much we need to learn. "Despite the extensive knowledge that research has provided regarding (suicide) risk and protective factors, we are still far from being able to integrate these factors so as to understand how they work in concert to evoke suicidal behavior or to prevent it." (Goldsmith, Pellmar, Kleinman, & Bunney, 2002, p. 3).

The fragmentary nature of the evidence is also due to the systematic exclusion of suicidal patients from randomized controlled trials of psychotherapies and medications. Thus, approaches to preventing suicide that are sound conceptually, such as treating underlying risk factors such as depression or substance abuse, are often silent on the question of whether by treating these conditions successfully we are also preventing suicide. In addition, demonstrating the effectiveness of any intervention in preventing suicide is challenging because the size of the study required to demonstrate that lives have been saved is enormous. For this reason, the Institute of Medicine (2002) recommended the establishment of nationwide population laboratories so that sufficient participants can be included in research studies to be able to detect if lives are being saved (Goldsmith et al., 2002).

More recently, the field has advanced the state of knowledge by examining the full range of suicidal behavior as an outcome variable, rather than focusing exclusively on deaths by suicide. Because suicidal behavior is much more common than death by suicide, research demonstrating the effectiveness of interventions is much more feasible. Both treatment and prevention studies have demonstrated reductions in suicidal behavior (Allmon, Armstrong, Heard, Linehan, & Suarez, 1991; Aseltine & DeMartino, 2004; Brown et al., 2005; May, Serna, Hurt, & De Bruyn, 2005). While some would argue that those who die by suicide are a very different population from those who attempt suicide, and that therefore findings based on research on suicide attempters cannot be generalized to those who die by suicide, recent research that highlights both the subsequent mortality and morbidity associated with suicide attempts (Beautrais, 2004) supports the importance of research focused on this population.

Both treatment and prevention studies have demonstrated reductions in suicidal behavior

Advances in related fields, such as violence research, have taken place in part because of a willingness to look at violent behavior as a continuum, rather than focusing solely on homicide. As a result, findings with significant

clinical implications, such as the ability to assess the risk of violent behavior on inpatient units at the time of hospital admission (McNiel, Gregory, Lam, Binder, & Sullivan, 2003), have occurred in violence research but not yet in suicide research. Such findings in the violence risk literature suggest that while evidence identifying imminent risk for suicidal behavior may now be lacking, it may be possible to obtain this evidence.

Additional research has demonstrated reductions in suicidal thinking or in suicidal intent (Bruce et al., 2004; Gould, Kalafat, Harris, Munfah, & Kleinman, 2007). While reducing suicidal ideation or intent certainly does not assure a concomitant reduction in suicide attempts or in death by suicide, such cognitive phenomena are clearly very meaningful intermediate variables as they are very likely preconditions for suicide attempts or death by suicide.

The nation's failure to focus on suicide prevention has begun to change. In 2001, the U.S. Department of Health and Human Services, on behalf of a coalition of Federal agencies and private nonprofit organizations, issued the National Strategy for Suicide Prevention (NSSP). The U.S. thus joined nations around the world that have begun to implement and evaluate national strategies. The NSSP contains 11 goals and 68 objectives as part of a comprehensive public health strategy to reduce suicide and suicide attempts. Improved research is one of these critical objectives. The National Strategy also contained numerous objectives that challenge the mental health field to improve its readiness and capacity to prevent suicides. Implementation of these objectives holds promise for improving the treatment and management of suicidal people. These objectives include the routine incorporation of training in suicide risk assessment and management into graduate training programs and into continuing education programs.

Bongar (2002) reviewed how frequently formal training in the study of suicide or the assessment or treatment of suicidal patients was offered in graduate school training in the mental health professions and found that the frequency of such training ranged from 29–41% in studies of psychology, social work, and marriage and family therapy training programs. It is clear that many mental health professionals receive little or no formal training in suicide prevention. Yet, most Americans probably assume that when they go to see a mental health professional they are seeing someone who has been trained to assess, manage, and treat suicide risk and behavior.

Other crucial national strategy objectives emphasize the importance of developing guidelines for assessing and managing risk in mental health systems, for improving continuity of care of suicidal patients following discharge from emergency departments and inpatient psychiatric units, and for more effectively involving and educating families of patients who are at risk of suicide.

While students in graduate training in the mental health professions may all too often receive little training in suicide risk assessment, treatment, or management, this does not mean that students are not treating patients at significant risk. In fact, one study found that one in nine graduate students in psychology had experienced a patient's suicide at some point during their training, 40% of them prior to their internship (Kleespies, Penk, & Forsyth, 1993). Findings such as these underscore the importance of training for graduate students in suicide prevention, not only to be a competent mental health professional, but

The National Strategy challenges the mental health field to improve its readiness and capacity to prevent suicides

Many mental health professionals receive little or no formal training in suicide prevention

1 in 9 psychology graduates students experienced a patient's suicide during their training

also for trainees to be adequately prepared to treat those suicidal patients they will encounter during their training.

Treating suicidal patients requires numerous skills and competencies, including skills in assessment, treatment planning, managing crises, and knowledge of applicable laws and regulations. All these must occur within the context of clinicians having a clear understanding of their own feelings, attitudes, and judgments regarding suicidal behavior. We all react strongly to witnessing self-destruction. These reactions are based on our own past personal and professional experiences, including our own or our family or friends' experience of suicidal behavior. Understanding these reactions is essential to competently treating suicidal individuals.

I first experienced the loss of a patient to suicide when I was a psychology intern. I was providing outpatient psychotherapy to a patient that our entire treatment team believed to be at high, continuing risk for suicide. The reason for this perception of elevated risk was solidly grounded in what we now know about heightened suicide risk. He had a past history of suicide attempts, and these attempts were high in lethality, including one attempt during which he cut his own throat. A past history of suicide attempts, particularly attempts that are high in potential lethality, is the single, strongest predictor of ultimate death by suicide (Hawton, 2005). This was a man who had clearly demonstrated that he had the capacity for lethal self-destruction. Because of an increase in his level of depression, hopelessness, and suicidal ideation, he was hospitalized on an inpatient psychiatric unit. While he was hospitalized, I needed to return to my university to defend my doctoral dissertation. Upon my return to my internship, I learned that he had been discharged from the inpatient unit to a day hospital, but had taken a fatal overdose within 48 hours of his discharge. This powerful personal experience made me appreciate something I would later learn from the literature: The period immediately after an inpatient discharge, indeed after any episode of acute care for suicidality, contains significant, but frequently unrecognized risk for suicide.

In this book, I use the phrase "died by suicide" rather than the more common term, "committed suicide." I use this term out of respect to the countless family members who have lost a loved one to suicide. They have pointed out that we frequently use the word commit in contexts such as "commit a crime" or "commit a sin," and that suicide, though in the past treated as both a crime as well as a sin, is neither.

1.1 Terminology

Suicidal thoughts and behavior are not limited to any single diagnostic group or condition

Suicidal thoughts or behavior are not limited to any single diagnostic group or condition. Death by suicide occurs with distressing frequency among many different illnesses, including mood disorders, substance abuse disorders, schizophrenia, and personality disorders. The Institute of Medicine (2002) summarized the state of research in suicide and suicide prevention and reported that in the U.S. over 90% of suicides are associated with mental illness or substance abuse disorders (Goldsmith et al, 2002).

Table 1
DSM-IV TR diagnoses that include suicidal behavior

Diagnostic criteria for 296.xx Major Depressive Episode:

Criteria 9 – recurrent thoughts of suicide (not just fear of dying), recurrent suicidal ideation without specific plan, or a suicide attempt or a specific plan for committing suicide

Diagnostic criteria for 301.83 Borderline Personality Disorder

Criteria 5 – recurrent suicidal behavior, gestures, threats, or self-mutilating behavior

Suicidal behavior is not a DSM-IV TR diagnoses, although two DSM-IV TR diagnoses reference suicidality (see Table 1). The International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) includes codes for classifying external causes of injury (E-codes). These codes are an important mechanism for surveillance of suicide attempts, particularly in hospital settings, and are used to distinguish between intentional and nonintentional injuries. The ICD also provides codes for overdose and poisoning in an appendix labeled “overdose.” These are used to code this frequent method for suicide attempts, as well as to code for accidental overdoses.

1.2 Definition

As suicidal behaviors are not DSM-IV TR diagnoses, the diagnostic manual has not been the definitive source for definition and nomenclature that it has been in other areas of mental health. This has been the source of significant confusion. While many nations do have surveillance systems to monitor deaths by suicide, no national or international surveillance system exists for monitoring suicide attempts and estimating national rates of occurrence (Silverman, Berman, Sanddal, O’Carroll, & Joiner, 2007a) despite the significance of suicidal behavior as both a clinical and public health issue. In addition, many confusing terms and inconsistencies exist in both the research and clinical literatures (Silverman et al., 2007a)

A pivotal event in the development of terminology occurred in 1970, when the Center for the Study of Suicide Prevention of the National Institute of Mental Health convened a committee on classification chaired by Aaron Beck (Brown, Jeglic, Henriques, & Beck, 2006). A classification system was developed that included the categories of completed suicide, suicide attempts, and suicidal ideation. Suicidal intent was identified as a critical variable in this classification scheme. For a self-injurious behavior to be considered a suicide attempt, suicidal intent was necessary (Beck et al., 1973). Self-injurious behavior was the recommended term when there was no suicidal intent associated with the behavior (Beck et al., 1973).

One challenge for this system has been that suicidal intent, which is essential for determining whether a death by suicide or suicide attempt has occurred, can be very difficult to determine. Self-report on intent after an attempt can be

Self-report of suicidal intent can be unreliable and heavily influenced by the perceived consequences of acknowledging intent to die

Suicidal intent can fluctuate over time and be fraught with ambivalence

unreliable and heavily influenced by context and the potential consequences for patients of acknowledging suicidal intent. In addition, suicidal intent can also fluctuate over time and be fraught with ambivalence. Despite these challenges, the nomenclature has met many clinical needs, and terms like suicidal ideation and suicidal intent have become familiar to virtually all clinicians. However, this terminology has proved inadequate for research purposes, leading nomenclature in this field to be described as a “Tower of Babel” (Silverman et al., 2007a) as studies have used varying definitions of terms such as suicide attempt. Such variability in definition has made comparability across studies extremely difficult.

Recently, a revised nomenclature has been proposed (Silverman, Berman, Sanddal, O’Carroll, & Joiner, 2007b). While a key goal of this revision was to help advance research, the revision was also “designed to serve as an instrument to assist clinicians in better identifying those most at risk for suicide related behaviors in order to keep them alive” (Silverman et al., 2007b, p.274). The revision affirms the crucial role of suicidal intent, and, recognizing the inherently difficult nature of determining intent, utilizes three categories of no intent, uncertain intent, and intent. This replaces the prior dichotomy of suicide attempts versus self-injury. A suicide attempt is defined as a self-inflicted, potentially injurious behavior with a nonfatal outcome for which there is evidence of intent to die (Silverman et al., 2007b). The term “undetermined suicide-related behavior” is used when suicide intent is uncertain. Self-harm is used rather than self-injury when it is clear there is no suicidal intent. This classification system thus explicitly deals with those problematic situations where intent is difficult or impossible to determine.

A suicide plan is a systematic formulation of a program of action that has the potential to lead to self-injury

Suicide plan is another term frequently used in clinical practice but often not defined clearly. In fact, there is a tendency to equate having a suicide plan with having a suicide method. While thinking about what method to use in a suicide attempt is clearly subsumed under the notion of planning, by equating them, much important assessment information is often missed. There may be other significant preparatory behaviors taking place (e.g., writing a suicide note, giving away possessions), and simply knowing whether a person has thought of a method tells us nothing about the degree of planning, forethought, and mental rehearsal the person has devoted to the possibility of killing himself or herself. In this proposed nomenclature, a suicide plan is described more broadly as “a systematic formulation of a program of action that has the potential to lead to self-injury” (Silverman et al., 2007b).

Another common term in clinical usage is *suicide gesture*. Suicide gesture typically refers to a circumstance in which overt suicidal behavior takes place

Clinical Vignette

Systematic Planning for Suicide

John told several high school friends he was planning on killing himself that night. Alarmed, one of his friends told a parent, who in turn contacted the mental health center. When evaluated, it was discovered that John had obtained a large stash of pills with which to overdose, had given away some of his prized records and other possessions, and had picked out the clothes he wanted to be found in when his body was discovered. He exhibited detailed, systematic planning for his suicide. He was assessed as being at high, imminent risk and was hospitalized.

but the person's intent is judged by others to be an attempt to communicate distress rather than reflecting true intent to die. These "gestures" are frequently labeled as manipulative. Such terms are pejorative and can lead clinician's to assume the absence of potential lethality prior to a thorough assessment being completed. The proposed nomenclature recommends against the use of the term suicide gesture because of this pejorative implication (Silverman et al, 2007b). The term should be avoided.

The term "suicide gesture" can lead clinician's to assume the absence of potential lethality prior to conducting a thorough assessment

The proposed Silverman et al. (2007b) nomenclature is shown in Table 2. In addition to the important role of suicidal intent, the nomenclature also incorporates whether or not the outcome of a suicidal act is a fatal or nonfatal injury. There can be very serious suicide attempts that do not lead to injury. For example, a person who points a loaded gun at themselves and deliberately pulls the trigger has clearly made a suicide attempt, even if the gun jams and there is no resulting injury.

Table 2
Nomenclature For Suicide Related-Behavior

Nomenclature for Suicide-Related Behavior		Intent to Die by Suicide	Outcomes		
			No Injury	Non-Fatal Injury	Death
Suicide-Related Behavior	Self-Harm	With No Suicidal Intent			
		Without Injuries Self-Harm – Type I	No	√	
		With Injuries Self-Harm – Type II	No		√
		With Fatal Injuries Self-Inflicted Unintentional Death	No		√
	Undetermined Suicide-Related Behavior	With Undetermined Suicidal Intent			
		Without Injuries Undetermined Suicide-Related Behavior – Type I	Undetermined	√	
		With Injuries Undetermined Suicide-Related Behavior – Type II	Undetermined		√
		With Fatal Injuries Self-Inflicted Death with Undetermined Intent	Undetermined		√
	Suicide Attempt	With Suicidal Intent			
		Without Injuries Suicide Attempt – Type I	Yes	√	
		With Injuries Suicide Attempt – Type II	Yes		√
		With Fatal Injuries Suicide	Yes		√

Preparatory action toward imminent suicidal behavior crosses the line between ideation and action

An additional classification system for suicidal events has been proposed by Posner, Oquendo, Gould, Stanley, and Davies (2007). In response to the recent controversy that has swirled around possible links between the use of selective serotonin reuptake inhibitors (SSRIs) and suicidality, the Food and Drug Administration (FDA) commissioned Columbia University to review adverse events involving suicidality in the randomized controlled trials performed by the pharmaceutical companies in the development of the medications. In order to accomplish this, the Columbia Classification Algorithm of Suicide Assessment (C-CASA) was developed, along with the Columbia Suicide Severity Rating Scale (CSSRS). In this system as well, suicidal intent plays a critical role. This system also utilizes terms with clinical utility, such as preparatory action toward imminent suicidal behavior, which can include actions such as purchasing pills to overdose or writing a suicide note. This system also utilizes the terms aborted and interrupted suicide attempts. An aborted suicide attempt is when an attempt is stopped by the person themselves, for example, taking out pills or a firearm to use in an attempt and then deciding not to go through with it. An interrupted attempt is when the attempt is stopped by some other person. In this system, there are essentially four categories rather than the traditional three categories of suicidal ideation, attempts, and deaths by suicide; the fourth category being preparatory behaviors, where the line between ideation and action has been crossed, but short of an action that could cause injury. This system also distinguishes between wish to die without suicidal ideation, specific ideation versus general ideation, and planning versus method.

With the support of the Centers for Disease Control, a working group is currently attempting to reach a consensus on these important definitional issues,

1.3 Differential Diagnosis

The differential diagnosis of suicide attempts versus self-harm or self-injury can be complex for a number of reasons (see Table 3). First, there may be no overt behavioral differences to distinguish between them. Rather, the critical difference involves the presence or absence of suicidal intent. If the person tells us that he intended to die when he cut his wrists, we will call it a suicide attempt. If he tells us he did not wish to die, but rather that he was attempting to distract himself from emotional pain, or to punish himself, we will call it self-harm, self-mutilation, or self injury. In either instance we are relying mostly on the individual's self-report regarding his intent. However, some people who have suicidal intent may deny it because of concern they will be hospitalized or because of shame or embarrassment. Others may claim suicidal intent when in reality there was none, feeling that otherwise what they have done may be minimized or invalidated by others. And this distinction presumes that a person was clear at the time of his or her self-destructive act regarding his or her intentions. It also presumes he or she is remembering it clearly, since such acts frequently take place during moments of intense emotional dysregulation (Linehan, 1993).

Table 3
Differential Diagnosis of Suicide Attempts Versus Self-Harm

SELF-HARM (with no suicidal intent) Similar terms: self-mutilation, deliberate self-harm, self injury		
	Similarities	Differences
Self-harm with no suicidal intent	Intentional act (may result in fatal or nonfatal injuries)	No intent to die (may be a variety of different intents, such as reduce pain, punish self)
Suicide attempt	Intentional act (may result in fatal or nonfatal injuries)	Intent to die

The following are examples of self-harm with no suicidal intent, a suicide attempt with clear suicidal intent, and a suicide-related behavior with undetermined intent.

Clinical Vignettes

Role of Suicidal Intent

Self Harm with No Suicidal Intent

A physical education teacher noticed during gym class that Julie was trying to conceal multiple cuts on her arms. When interviewed later by the school psychologist, she admitted to cutting herself repeatedly to “relieve my pain.” She denied any thoughts about wanting to die or kill herself.

Suicide Attempt with Clear Suicidal Intent

Richard had a long history of depression and alcohol abuse. Following his third arrest for driving while intoxicated, which would trigger the loss of his driver’s license, which in turn would force him to quit his job, he took an overdose of approximately 40 of his anti-depressants and went to bed, fully expecting he would die in his sleep. In the middle of the night his wife found him stumbling around the bedroom delirious and called 911. When interviewed in the emergency department he reported being upset he was still alive.

Suicide-Related Behavior with Undetermined Intent

Harold was a 31-year-old Caucasian male. Since the onset of legal problems that had been pending over a period of many months, he had been experiencing recurrent suicidal ideation. Intensive outpatient therapy had averted a hospitalization, but he was still being monitored carefully for suicidal risk. While on vacation, he experienced what was presumed to be a serious skiing accident. After a number of days in the hospital for his injuries, he returned to psychotherapy. Since Harold was an excellent skier, his therapist talked with him about how this had happened. Harold acknowledged that he had been having thoughts about suicide that day, but that he had made no plan to kill himself. He reported that as he was skiing down the hill he went around a curve and left the trail and crashed into a tree at high speed. He did not recall making a conscious decision to try to die. He also didn’t know if his wish to die had led him to be less careful and less focused on his safety. He was genuinely uncertain about his suicidal intent

Presuming the meaning/intent of a self-destructive act based on past history can bias assessment

Another complication in making a differential assessment is that the same person may engage in both suicide attempts and self-harm with no suicidal intent. Therefore each person needs to be assessed without presuming that because they have a history of “self-mutilation” suicidal intent is not present at the current time. Presuming to know the meaning or intent of a self-destructive act based on past history and allowing this to bias the assessment is a clinical error. Another error in clinical reasoning is to make a judgment about intent based on the degree of lethality of the actions taken. Persons who take an overdose of a few pills or who make superficial cuts should not be presumed to be without suicidal intent based on the lack of lethality of their actions. The person may have misjudged the lethality of her behavior, or may have very serious suicidal intent and be working up the resolve to make a more lethal attempt.

While suicidality and self-harm may seem inextricably interwoven, there are different implications for these two behaviors. Suicide attempts are more likely to lead to psychiatric hospitalization than self-harm without suicidal intent. Self-mutilation is more likely to occur with greater frequency, at times in an almost addictive spiral, compared to suicide attempts. Such distinctions, as well as others, have led Walsh (2006) to argue that the two conditions should be understood, managed, and treated differently. When a person only has a history of self-harm, it is tempting to assume that each repeated episode of harm is unlikely to be a suicide attempt. However, it is hazardous, even for an individual with a history of solely self-harm without suicidal intent, to assume that all future episodes are without suicidal ideation or intent. In a study in England in which patients seen in emergency departments for episodes of deliberate self-harm were followed up over time, the suicide rate was 36 times that for the general population (Cooper et al., 2005). There was no difference in the suicide rate between those who had reported suicidal intent and those who had not, highlighting the hazard of assuming that those who engage in self-harm without suicidal intent are not at risk, at least for those whose self-harm is serious enough to warrant emergency care. The clinician must always assess, not assume. Such cases must be managed and assessed considering the potential for suicide risk, at least until the assessment has made clear that there is low risk.

Persons who make low lethality attempts should not be presumed to be without suicidal intent

Clinicians must always assess, not assume

Clinical Vignette

Assessing Suicidal Intent

Eileen was a 55-year-old, married, Irish-American female with a diagnosis of borderline personality disorder and recurrent major depressions. She was referred to the clinic for dialectical behavior therapy. She had a history of many episodes of self-harm without suicidal intent, as well as several suicide attempts, some utilizing potentially lethal methods such as hanging. During the course of treatment she made additional suicide attempts as well as episodes of self-harm without suicidal intent, although the frequency of such episodes declined over time with continuing treatment. Assessment around these episodes revealed that there were times that there was clear suicidal intent, there were times that suicidal intent was clearly absent, and there were times that in the throes of emotional dysregulation, Eileen was simply unsure what her intent had been.

1.4 Epidemiology

The epidemiology of suicidal behavior, particularly deaths by suicide, has been studied extensively, both in the U.S. as well as in many countries around the world. In the year 2000, there were over 100,000 deaths by suicide in India, and more than 170,000 in China (WHO, 2000). However, to fully understand the impact that suicidality represents to our society, it is important to understand the different levels of suicidal behavior that exist, including deaths by suicide, suicide attempts, and suicidal thinking, and the burden these impose, including the costs of hospitalizations and emergency department visits.

Over 30,000 Americans die by suicide each year. Significantly more Americans die by suicide than by homicide, by a 3 to 2 ratio.

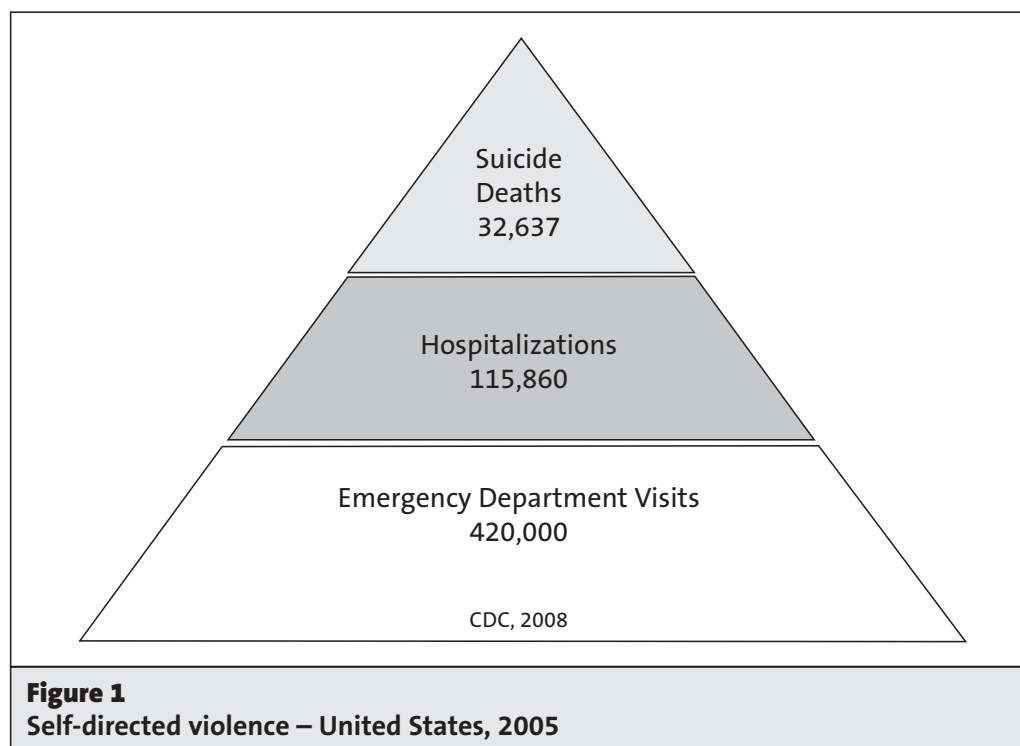
According to the most recent data available from the Centers for Disease Control (CDC, 2008a), suicide is the eleventh leading cause of death for all ages, accounting for 1.3% of all deaths in the U.S. Suicide is the eighth leading cause of death among males, and the seventeenth leading cause of death among females. For some age groups, suicide ranks even higher as a leading cause of death. Suicide is the second leading cause of death among 25–34-year-olds and the third leading cause of death among 15–24-year olds (CDC, 2008a). Among 15–24-year olds, suicide accounts for 12.3% of all deaths (CDC, 2008a).

More than 32,000 suicides occurred in the U.S. in 2005, a rate of 11.05 suicides per 100,000 population (CDC, 2008a). This is the equivalent of 89 suicides per day; or one suicide every **16** minutes.

Males outnumber females in suicide deaths by a ratio of almost four to one. Among males, adults aged 75 years and older have the highest rate of suicide – 37.97 per 100,000 (CDC, 2008a). Among females, those in their 40s and 50s have the highest rate of suicide – 7.53 per 100,000 (CDC, 2008a). In the past, suicide rates, particularly for males, increased in a linear fashion with age, this effect has been moderated in recent years.

Significantly more Americans die by suicide than by homicide

An American dies by suicide every 16 minutes



Firearms are the most commonly used method of suicide among males

Firearms are the most commonly used method of suicide among males – 57.6% (CDC, 2008a), while poisoning is the most common method of suicide for females – 39.1% (CDC, 2008a). An increase in the number of suicides using hanging has also been reported by the CDC, particularly among youth (CDC, 2007).

Poisoning is the most common method of suicide for females

In the US, suicide risk is highest among Caucasians, American Indians, and Alaska Natives. American Indian and Alaska Native youth and young adults have particularly high suicide rates.

For both fatal and nonfatal self-harm, injury rates begin to rise sharply at ages 13 and 14 (Vajani, Annet, Crosby, Alexander, & Millet, 2007).

While the highest rates of suicide are found among the elderly, particularly those over the age of 75, the greatest number of suicides in the U.S. takes place in midlife, particularly among males. This is because this cohort (which includes the “baby boom” generation) is more populous. This points out the hazards of adapting epidemiologic data to clinical practice without careful analysis. Assigning risk to groups in the population tends to be interpreted in relation to the U.S. average, but it is critical to remember that even if a group has a lower suicide rate than the national average this does not mean that hundreds, if not thousands, from that demographic group may not die by suicide every year. For example, the fact that significantly more males than females die by suicide does not mean that clinicians should not be alert to suicide risk in women. In fact, more than 50% of female suicides occur among those receiving mental health treatment (CDC, 2008b), underscoring the importance for clinicians of being alert to the potential for suicide in women. Suicide among those in midlife is a concern, not only because of the large numbers of deaths by suicide in this age group, but also because of recent increases in the suicide rate (American Association of Suicidology, 2008).

More than 50% of U.S. women who died by suicide were being treated for a mental health problem

The epidemiology of suicide attempts differs in important respects from deaths by suicide. Unfortunately, surveillance data on suicide attempts has been less available than data on death by suicide. In the US, there is no official national estimate of the number of suicide attempts. The various estimates that do exist of the numbers of suicide attempts nationally vary widely depending on the source of data. A common estimate is that there is a 25 to one ratio between nonfatal suicide attempts and deaths by suicide. If this estimate is correct then the number of suicide attempts in the US is approximately 800,000 annually (American Association of Suicidology, 2008). The most conservative measures are based on cases seen and counted in the healthcare system. In 2005, 420,000 people were treated in emergency departments (EDs) for self-inflicted injuries and 115,860 people were hospitalized due to self-inflicted injury (McCaig & Nawar, 2006). These figures represent neither the total numbers of persons hospitalized or seen in EDs because of suicidality, as those seen in these acute settings because of suicidal ideation are not included, nor does it represent the total number of attempted suicides, as not all suicide attempts receive medical attention

The ratio of deaths by suicide to suicide attempts varies dramatically with age. Among young adults ages 15 to 24 years old, there is 1 suicide for every 100–200 attempts (Goldsmith et al., 2002). Among adults ages 65 years and older, there is 1 suicide for every 4 suicide attempts (Goldsmith et al., 2002).