CHAPTER ONE

Challenges to Classifying Suicidal Ideations, Communications, and Behaviours

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Abstract

There is no uniform set of terms, definitions, and classifications for the range of thoughts, communications, and behaviours that are related to self-injurious behaviours, with or without the intent to die. Nor is there an agreed taxonomy that encompasses the full spectrum of what is clinically defined as suicide-related behaviours. As a result, researchers cannot easily compare their study populations or results, and clinicians have difficulty in translating research findings into practical applications when working with patients at risk for suicidal behaviours. This chapter will briefly review this issue from a historical perspective, and present some of the current efforts to improve our ability to communicate clearly, consistently, and confidently about suicidal individuals. Recommendations are made as to the next steps in the process of developing and implementing a standardized nomenclature and classification system for the field of suicidology.

Introduction

After a century of serious attention to the public health problem of suicide and suicidal behaviours, there have been many significant advances in suicidology; yet many challenges remain. We now know a great deal about the epidemiology of suicide and suicidal behaviours. We are beginning to develop a body of knowledge about the biological underpinnings to suicidal behaviour through research on the neurobiology and genetics of risk.
However, we still know little about protective factors and what places an individual at acute risk for suicidal behaviour. We need to bridge the gap between our expanding knowledge base about the aetiology and transmission of suicidal behaviour and the development of effective clinical and population-based interventions, protocols, practices, procedures, and policies.

In order to achieve this goal we need to translate what we have learned from epidemiological surveillance and research studies into practical applications. Similarly what is learned in clinical settings needs to be communicated to researchers and theoreticians so they can better investigate and understand these behaviours. One major stumbling block is that the suicide literature remains replete with confusing terms, definitions, and classifications that make it difficult, if not impossible, to compare and contrast research, epidemiological or clinical studies. Advances in suicidology are hindered by a lack of a standardized nomenclature and classification system. This remains a challenge.

Most individuals who die by suicide are reported to have communicated their intent to others (usually next of kin or friends), and the majority have also visited or been treated by psychiatrists, psychologists, clinical social workers, other mental health professionals, general practitioners or other physicians during the weeks or months preceding their death by suicide (Luoma, Martin, & Pearson, 2002). Why is this so? A compelling answer is that suicidal behaviour is often undiagnosed, under-treated, or mistreated in clinical settings because it is misunderstood and associated with stigma, denial, guilt, anger, and shame (Malone, Szanto, Corbitt, & Mann, 1995; Mann, Apter, Bertolote, Beautrais, Currier, et al., 2005).

One of the major difficulties in communicating about suicidal phenomena with our patients and within our discipline (as well as across disciplines) is that we do not speak the same scientific language. We also do not share the same conceptualizations of what constitutes self-harm and the suicidal process. The terminology we use is often based on our training; theoretical, political, social, psychological, biological, and religious perspectives; and the professional needs to identify and count these behaviours in the first place (clinical, epidemiological, public health, research, etc.). Conceptual, methodological, and clinical problems result from widely varying definitions and classification schemes for such terms as suicide attempt (Nock & Kessler, 2006). As a result, researchers cannot easily compare their study populations, and clinicians have difficulty in translating research findings into practical applications when working with an individual at risk for suicidal behaviours.

It is a known fact that there is inaccuracy in the reporting of suicidal deaths (Jobes & Berman, 1985; Shneidman, 1980). Estimates of under-reporting have ranged from 10% to 50% (Jobes, Berman, & Josselson, 1987; Litman, 1980). Some have noted substantial under-reporting and misclassification of children and adolescent suicides (Wekstein, 1979). Jobes and Berman (1985) reported that the majority (58%) of medical examiners they surveyed in the United States either agreed or strongly agreed that ‘the actual suicide rate is probably two times the reported rate’. It appears that there may be variations in both the death certification process and the manner of death determination.

Jobes and colleagues (1987) have identified over 20 possible sources of variability in the official reporting of suicide data. They suggest that perhaps the single most important
source of variability and error in suicide statistics arises from the virtual absence of any standardized classification criteria that coroners and medical examiners might use more uniformly to evaluate cases of equivocal suicide. Although relatively small in number, the category of ‘undetermined manner of death’ may represent a significant number of true suicides (O’Carroll, 1989).

If we cannot even agree upon what defines a suicide, how, then, are we to determine what is an attempt at suicide? There is considerable debate about the differential attributes of those who die by suicide and those who attempt suicide. The resolution of this controversy is hampered because studies have used descriptive methods and dissimilar definitions for suicide attempts (Linehan, 1986; Maris, 1992). When the suicide attempts are medically serious (e.g., admission to an intensive care unit, requiring surgery under general anaesthesia, needing extensive, specialized medical care, etc.) these two populations overlap considerably. However, because most epidemiological studies are based on self-report of prior suicidal behaviour without defining these terms for the population being surveyed, the profile of those engaging in non-medically serious suicide attempts remains inconsistent and unreliable.

The suicide literature remains replete with confusing (and sometimes derogatory or pejorative) terms, definitions, descriptors, and classifications that make it difficult, if not impossible, to compare and contrast different research studies, clinical reports or epidemiological surveys (Jenkins & Singh, 2000; Rudd & Joiner, 1998; Shneidman, 1985; Silverman, 2006), or to make comparisons, generalizations, or extrapolations (Linehan, 1997; Westefeld, Range, Rogers, Maples, Bromley, et al., 2000). There is no national or international surveillance system for the primary purpose of estimating annual national rates of suicide attempts (Silverman, Berman, Sanddal, O’Carroll, & Joiner, 2007a).

Challenges to developing and implementing a standardized nomenclature and classification system

The ongoing debate concerning nomenclature has perpetuated the use of multiple terms to refer to the same behaviour (Bille-Brahe, Kerkhof, De Leo, & Schmidtke, 2004; O’Carroll, Berman, Maris, Moscicki, Tanney, et al., 1996; Silverman, 2006). Such variability in terminology not only contributes to imprecise communication, but also limits comparison of epidemiological prevalence rates nationally and internationally, and hampers clinical and preventive interventions.

There are currently several nomenclatures and/or classification systems that are being developed and tested in the United States (Posner, Oquendo, Gould, Stanley, & Davies, 2007; Silverman, Berman, Sanddal, O’Carroll, & Joiner, 2007b), as well as internationally (De Leo, Burgis, Bertolote, Kerkhof, & Bille-Brahe, 2006). I argue elsewhere that not only must we use the same terminology and definitions, but that these terms must be easily understood, easily applied, and internally consistent, and should relate to each other in a way that has utility, meaning, and relevance to the real world of at-risk individuals (Silverman, 2006). We must develop an accurate suicide mortality database in order to do meaningful research, develop and implement prevention efforts, and advance general public health (Jobes, Berman, & Josselson, 1987; O’Carroll, 1989).
Clarifying Terminology

Before I review some of the current attempts to develop and implement nomenclature and classification systems, it is pertinent to provide some definitions for these constructs. The following terms and definitions illustrate the degree of overlap or 'fuzziness' when discussing the development of a uniform classification system.

**Nomenclature:** a set or system of names or terms, as those used in a particular science or art; a system of words used technically to name things in a particular discipline.

**Classification:** the act of distributing things into classes or categories of the same type; the act or method of distributing into a class or category according to characteristics.

**Taxonomy:** the practice and science of classification as well as the laws or principles underlying such a classification; the science dealing with the description, identification, naming, and classification of organisms.

Almost anything (e.g., behaviours, concepts, events) may be classified according to some taxonomic scheme. Hence, a nomenclature is simply establishing the words (and definitions) chosen for use in the development of a classification, using taxonomic principles.

**Terminology in Suicide Classification Systems**

Although one can argue about the degree of specificity for describing suicidal behaviours, there is a set of commonly used terms that generally describes the universe of suicidal thoughts and behaviours. These suicide-related generic terms are: ideation (with or without a plan); communication (verbal or non-verbal); intent; motivation; preparatory acts (towards imminent self-harm); self-harm or self-injurious behaviours (with or without injury, or fatal); undetermined suicide-related or self-injurious behaviours (with or without injury, or fatal); suicide attempt (with or without injury); and suicide.

The definitions of terms such as 'suicide attempt' or 'self-harm' are predicated on the definition of 'suicide'. After all, a suicide attempt is an action whose goal is to die by suicide. However, as noted elsewhere (Silverman, 2006), there are 15 definitions of suicide in our scientific literature. Until we establish a standardized nomenclature we will continue to have differences between and among official reporting sources (e.g., police, coroner, medical examiner death certificates), research studies, clinical population reports (e.g., hospital discharge summaries, emergency department reports, first-responder reports), and epidemiological surveys (self-report).

A brief list of the challenges to resolving these conundrums are:

1. Agreeing on which terms should be used and defining them as mutually exclusive. There remains confusion about when to apply and what exactly constitutes terms such as suicidality, deliberate or intentional self-harm (DSH), suicide-related behaviour, parasuicide, and non-suicidal self-injury (NSSI).
2. Developing a nomenclature that is free of bias – philosophical, theoretical, biological, sociological, political, religious, cultural, etc. Furthermore, a nomenclature must be sensitive to different needs, depending upon the constituency. For example, the epidemiologist, public health officer, first-responder, researcher, clinician, and emergency room physician often focus on different aspects of the suicidal continuum, and use different measures in order to record their findings and observations, and in order to do their own work. Furthermore, they require different standards of evidence, different levels of certainty for such evidence, and place different emphases on different aspects of evidence.

3. Remaining internally consistent. Agreeing a clear definition of the term ‘suicide’ has remained elusive, and, as a result, has implications for defining those terms which are related to the act of ‘death by suicide’, such as ‘suicide ideation’, ‘suicide intent’, and ‘suicide attempt’. The nomenclature must be internally consistent and all the terms must be based on, and relate to, the clear definition of suicide.

4. Resolving disagreements about the meaning, connotations, and appropriateness of terms such as committed suicide, attempted suicide, completed suicide, suicide gesture, failed attempt, suicide victim, cry for help, and non-fatal suicide or non-fatal suicide attempt (Silverman, 2006).

5. Remaining consistent with the terminologies and approaches used by scientific fields that study other forms of violence (e.g., homicides and sexual assault) and unintentional injuries (e.g., motor vehicle crashes).

6. Deciding which terms are pejorative or have a negative bias and should be eliminated from the lexicon. For example, suicide gesture, suicide threat, failed attempt, etc. (Silverman, 2006).

7. Resolving the distinctions between what we label as a suicide attempt and deliberate (intentional or instrumental), self-harm (DSH), or non-suicidal self-injury (NSSI).

8. Developing a standardized nomenclature that is sufficiently adaptable to allow some alterations for specific uses within certain specialties or professions. However, there must be a clear cross-over table to demonstrate equivalencies between and among terms currently used in existing nomenclatures, so that clinical, research and epidemiological studies can be compared.

We are dependent upon other scientific fields of inquiry to help us understand how aspects of cognition, brain development (acquisition of reasoning, cognitive skills, executive functioning), social behaviour, and risk-taking behaviours impact on the development of suicidal thinking and the unfolding of suicidal actions. For example, when does ideation become clinically significant? Under what conditions? What are the elements that go into an individual’s risk appraisal? At what age and under what conditions can an individual develop and access executive functioning, such as understanding the consequences of certain actions?

Another challenge is to overcome the factors that might affect the reliable self-reporting of self-destructive behaviours, for example, fear of reprisal (involuntary hospitalization), being judged by the researcher, care provider, or first-responder as ‘crazy’ or ‘mentally ill’. Until we destigmatize suicide, and redefine it as a self-inflicted injury that is mediated by biology or other external factors, we will never be able to accurately count or acquire the data we need.
to improve understanding of the suicidal process and the suicidal patient, develop interventions to address these components, and ultimately develop preventive interventions.

We must get beyond our almost total reliance on self-report for understanding and recording such important components of the suicidal process as suicidal thoughts, intent, motivation, planning, accurately remembering and reporting prior life events, assigning significance to life events, appraisal of current stressors, history of prior self-destructive behaviours, etc.

Examples of Definitional Obfuscation

There remains confusion about what exactly constitutes suicidal behaviour, deliberate self-harm, suicidality or suicide-related behaviour, and how to define suicide and suicide attempt (Silverman, 2006; Silverman et al., 2007a). In this section I will briefly highlight some of the issues that still exist.

Suicidality

There is no definition of ‘suicidality’ other than that it is the state of being suicidal. But what does that mean? Does that mean having suicidal ideations, intent, motivations, and plans? Does it mean that you have had a suicide attempt, been exposed to others who have been suicidal, or rehearsed a suicidal act? Is it the equivalent of being in a ‘suicidal condition’ or ‘suicidal, state of mind’? The term suicidality has been used to cover a broad range of suicide-related cognitions, emotions, and behaviours (Silverman, 2006). For the most part it has been used to categorize individuals who have expressed a combination or permutation of cognitions (ideation, intent, motivation, and planning), as well as behaviour (threats, gestures, rehearsals, and attempts). It has also been used to categorize mentally-ill patients who are so depressed that they feel suicidal (emotions). Hence, it becomes nearly impossible to compare populations who are deemed to be expressing suicidality. I would argue strongly that such a term be removed from the lexicon because it has no real utility other than to identify a situation or state where an individual is possessed by, or expresses some form of, suicide-related cognition, emotion, or behaviour.

Two lines of evidence suggest that suicidal behaviours are repetitive: many of those who die by suicide have made a previous suicide attempt; and many of those who make a non-fatal suicide attempt will make subsequent attempts (Beautrais, 2004; Conner, Langley, Tomaszewski, & Conwell, 2003). In a five-year follow-up study of a consecutive series of 302 individuals admitted for medically serious suicide attempts, Beautrais (2004) found that 37% made at least one further attempt and 6.7% died by suicide. In a larger study of all patients admitted for any degree of attempted suicide during the 10-year period, 1993–2002, Gibb, Beautrais, and Fergusson (2005) found that within 10 years, 28.1% of those who had been admitted for an index suicide attempt were readmitted for a further non-fatal suicide attempt, and 4.6% died by suicide. A prior suicide attempt is statistically the best predictor of future suicide attempts and death by suicide, and a history of repeated attempts further increases the risk of death by suicide.
It follows that concerted efforts need to be made to identify those at most risk of an index suicide attempt, as well as providing services to those who have engaged in an index suicide attempt, irrespective of its level of lethality. To that end, it is imperative that clinicians, researchers, and epidemiologists have a clear and consistent definition of what is a *suicide attempt*. Such a standardized definition does not presently exist.

**Deliberate Self-Harm (DSH) and Non-Suicidal Self-Injury (NSSI)**

The development of the concept of deliberate self-harm arose out of Kreitman’s term ‘parasuicide’ to label all non-accidental hospital-treated self-poisoning and self-injury that did not result in death, regardless of the intention of the act (Kreitman, 1977). As a result, the term gained much favour in Europe broadly, but not so in the United States. In fact, the WHO used the term to describe a number of large-scale epidemiological studies that were undertaken in multiple sites in Europe (Schmidtke, Bille-Brahe, De Leo, Kerkhof, Bjerke, et al., 1996; Schmidtke, Bille-Brahe, De Leo, Kerkhof, & Wasserman, 2001).

Over time the term ‘deliberate self-harm’ replaced ‘parasuicide’, but this term has a potentially pejorative connotation. Hence, the current term being used in Europe to describe self-injury that does not lead to death is self-harm (with or without intent). In the United States, the term ‘non-suicidal self-harm’ is gathering momentum to describe similar behaviours. A further complication is that the term ‘suicide gesture’ has not left the lexicon in the United States. In fact, it was used in the National Comorbidity Study (NCS) to describe ‘self-injury in which there is no intent to die, but instead an intent to give the appearance of a suicide attempt in order to communicate with others’ (Nock & Kessler, 2006, p. 616).

The original definition of deliberate self-harm included all self-injurious behaviours whether or not the individual had intended to die. DSH has been identified as a behaviour that carries considerable risk of subsequent self-harm, including death by suicide. An early study by Hawton and Fagg (1988) found that at least 1% of patients referred to general hospitals in the United Kingdom for DSH die by suicide within a year of an episode of DSH, and 3–5% within 5–10 years. Another study found that 1%–2% of patients die by suicide in the year following being seen in a hospital emergency department or admitted for treatment (Owens, Horrocks, & House, 2002), with an estimated 7%–10% of individuals eventually dying by suicide (Nordentoft, Breum, Munck, Nordestgaard, Hunding, et al., 1993). Of note is that, until recently, researchers have almost totally ignored studying non-hospital-treated self-harm. As a result, we know very little about the incidence and prevalence of deliberate self-harm that occurs in the community.

The DSH literature, as well as the suicide attempt literature, rarely distinguishes the populations by method (self-poisoning, cutting, etc.), location of the injury (wrists, arms, legs, head, etc.), physical location at the time of self-injury, time of day, day of week, etc. Without such a classification system it is more difficult to differentiate between non-suicidal deliberate self-harm and suicide-attempt behaviours. Thus, we are
describing a deliberately initiated act of self-harm with a non-fatal outcome, including both self-poisoning and self-injury. This self-injurious behaviour has been labelled attempted suicide, parasuicide, intentional self-harm, deliberate self-harm, and non-suicidal self-injury.

DSH is more common among females (upwards of two-thirds of patients in some studies). Similarly in the United States, suicide attempts occur at a ratio of about 3–4:1 for females versus males. In both populations, the largest percentage of cases are among adolescents and young adults. In the hospital-treated DSH literature, the large majority of the patients are self-poisoning (Hawton, 1997).

Recent studies suggest that DSH differs from suicide attempts in clinically important ways (Brown, Henriches, Sosdjan, & Beck, 2004; Chapman & Dixon-Gordon, 2007; Chapman, Gratz, & Brown, 2006). Reasons for suicide attempts are more likely to involve ‘making others better off’ (reducing burdensomeness), while reasons for DSH included ‘anger expression’ and ‘distraction’ (Brown et al., 2004). Other studies highlight the differing emotional experiences associated with these behaviours, although emotional relief is a key motivation for both DSH and suicide attempts (Brown et al., 2004). Individuals who engage in DSH report that the behaviour relieves unendurable anxiety or tension; temporarily reduces anger, anxiety, sadness, depression, and shame; or as a form of self-punishment, relieves anger directed inward, self-blame and self-loathing for perceived social transgressions (Chapman & Dixon-Gordon, 2007; Krasser, Rossman, & Zaporoczky, 2003; Kemperman, Russ, & Shearin, 1997).

Chapman and Dixon-Gordon (2007) found that relief was the most common consequence of DSH, whereas anger was the most common consequence of a suicide attempt. They suggest that DSH serves an emotion regulatory function. However, a significant proportion of individuals reported that their predominant emotional experience following DSH was negative, most notably including sadness. How these characteristics differ from those who engage in suicide attempts is yet to be delineated. Linehan (2000) has suggested that the presence or absence of the intent to die during self-harm is a critical factor that can differentiate the two behaviours. However, it is important to note that multiple motives often underpin both suicide attempts and DSH.

Determining intent to die

The presence or absence of intent to die is a key factor in differentiating non-suicidal from suicidal self-harm behaviours (Beck, Beck, & Kovacs, 1975; Hjelmeland & Knieser, 1999; Silverman, 2006; Silverman et al., 2007a). Many patients who self-harm, when asked by clinicians at the time of the injury, will deny that they had an intent to die, despite the evidence to the contrary (e.g., high lethality of the act, prior history of near-lethal suicide attempts, corroborating information from family, friends, or support network). Difficulties in diagnosis can arise when the assessment of the intent to die is denied by the patient yet some ambivalence is present. As Rosenberg, Davidson, Smith, Berman, Buzbee, et al. (1988) stated, ‘with respect to intent, absence of evidence is not evidence of absence’ (p. 1446).
The Need for Sensitivity

Measures of suicide and non-fatal suicidal behaviour continue to be hindered by the lack of a standard nomenclature and classification system (De Leo et al., 2006; Silverman et al., 2007a, 2007b), clear operational definitions (Garrison, McKeown, Valois, & Vincent, 1993; Silverman & Maris, 1995) and standardized lethality measures (Berman, Shepherd, & Silverman, 2003).

Current difficulties in communicating between and among professionals, as well as their patients, include: limitations of hindsight bias and informant bias regarding the reporting of suicidal thoughts, intent, and behaviours (Duberstein & Conwell, 1997); difficulty in comparing and contrasting epidemiological surveys or clinical research studies; inconsistency of scale development and validation when most measures assume that the respondent already possesses a definition and understanding of the suicidal behaviours being measured; and lack of specificity and consistency of definition for such terms as suicide attempt, self-injurious behaviour, and self-harm (Silverman, 2006). Furthermore, each clinical specialty, research group, or surveillance team has developed their own reporting forms and systems to gather similar information.

Not only must we use the same terminology, but these terms must be easily understood, ‘user-friendly’, easily applied, and internally consistent. The terms must relate to each other in a way that has utility, meaning, and relevance to the real world of at-risk individuals.

The measurement needs of epidemiologists differ from those of clinicians or researchers. Epidemiologists are interested in counting discrete outcomes (e.g., deaths). Primary care physicians do not need to know sub-types of self-destructive behaviours or the nuances of suicidal intentions or plans. They do need to know the few screening questions to ask that will elicit an answer that broadly identifies the patient as requiring a referral to a mental health professional. The emergency department physician needs to know the criteria to determine whether the behaviour being assessed is life-threatening. The clinical researcher needs to differentiate accurately within the population of persons who are engaged in self-destructive behaviours, and to be able to compare populations across research sites. Given the multidimensional aspects of suicidal thoughts and behaviours, the researcher needs to have valid and reliable criteria for allocating the study samples into discrete groups or categories. The mental health clinician needs to know the specifics of the current ideation, intent, plans, and actions, as well as the history of prior self-destructive behaviours (who, where, when, why, how much, how often) in order to determine which treatment approach has the best likelihood of succeeding. The mental health clinician also needs to determine what contribution a mental disorder may add to the expression of self-destructive behaviours.

Recent Efforts to Clarify Suicidal Behaviours

The intent of this overview is not to present an exhaustive review of all the attempts to develop nomenclatures and classification systems for the study of suicide and suicide-related thoughts and behaviours, but to highlight some notable examples.
Beck et al., classification of suicidal behaviours (1973)

The first modern attempt to systematically develop a ‘classification and nomenclature scheme’ was put forth by Beck, Davis, Frederick, Perlin, Pokorny, et al. (1973). This classification system is entirely based on three key terms: suicidal ideas; suicide attempts; and completed suicide. These three terms then encompass the entire range of suicidal phenomena. Each of these three types is further specified by: (a) certainty of the rater (0%–100%); (b) lethality (zero, low, medium, or high); (c) intent to die (zero, low, medium, or high); (d) mitigating circumstances (zero, low, medium, or high); and (e) method (list actual method used). Beck and colleagues argued that a key variable in the three forms of suicidal behaviour was the intent to die, especially when the behaviour was non-lethal in nature. However, they acknowledged that intention is difficult to measure, as evidenced by allowing for four categories (zero, low, medium, high). Intent ‘includes consideration of subject’s statements, the likelihood of rescue, past history, and other evidence; requires inference and judgment on part of the rater’ (p. 9).

In their classification schema, suicidal ideas ‘includes all overt suicidal behavior and communications except for overt acts classifiable under suicide attempt or completed suicide. Includes suicide threats, suicide preoccupation, expressions of wish to die, and indirect indicators of suicide planning, etc.’ (p. 11). Beck et al. went on to develop many psychometric scales, including the Beck Suicide Intent Scale, Beck Hopelessness Scale, and the Beck Suicide Ideation Scale (Beck, Herman, & Schuyler, 1974; Beck, Weissman, & Lester, 1974).

Operational Classification for Determination of Suicide (OCDS)

In the mid-1980s, the US Centers for Disease Control and Prevention (CDC) convened a working group representing coroners, medical examiners, statisticians, and public health agencies to develop operational criteria to assist in the determination of suicide. These criteria are based on a definition of suicide as ‘death arising from an act inflicted upon oneself with the intent to kill oneself’ (Rosenberg et al., 1988). This definition highlights two clear components: that the lethal outcome is self-inflicted (the agent); and that it is intentionally inflicted (awareness of outcome).

The criteria were intended to improve the validity and reliability of suicide statistics by: (1) promoting consistent and uniform classifications; (2) making explicit the criteria for decision-making in death certification; (3) increasing the amount of information used in decision-making; (4) aiding certifiers in exercising their professional judgement; and (5) establishing common standards of practice for the determination of suicide.

Rosenberg et al. (1988) placed great importance on establishing the evidence of intent to die. They introduced the concept of explicit (verbal or non-verbal) and implicit (or indirect) evidence of intent and provided 11 examples of the latter. They acknowledge that some of the examples of indirect evidence include many commonly identified risk factors (e.g., previous suicide attempt), while recognizing that a risk factor is not necessarily a causal factor. For Rosenberg et al. (1988), ‘intent’ requires that the decedent knew or had
in mind that a specific act would probably result in death. They acknowledge that intent is often difficult to determine when: death is delayed or when it is the unanticipated consequence of a potentially self-destructive act; a body is never found; drownings, leaps, or falls are unwitnessed; or the death is of a child too young to realize the consequences of jumping from a window, swallowing a lethal number of pills, or running in front of a car. Nonetheless, they agree that the establishment of intent may require judgement and that ‘absolute certainty is not the goal in certifying deaths’ (p. 1451). Instead, the basis for the determination should correspond to the legal notion of ‘preponderance of the evidence’; otherwise stated, it is an opinion based on ‘reasonable probability’ (p. 1451).

Despite its name, this is not a classification system because the working group only defines the term suicide and it is not operationalized. What they accomplished, through a consensus of experts was to establish the evidence needed to define a suicidal death to assist the decision-maker in answering two fundamental questions: (1) whether or not the injury was self-inflicted; and (2) whether or not the decedent intended to kill himself or herself. This tool has both relatively high content and face validity.

O’Carroll et al., ‘Tower of Babel’ nomenclature

In 1996, O’Carroll et al. published their ‘Tower of Babel’ nomenclature, which distinguished suicidal behaviours by three characteristic features: intent to die; evidence of self-inflicted injury; and outcome (injury, no injury, or death). They attempted to build on the Beck et al. classification system and to provide definitions for commonly used terms in suicide research. Although a number of investigators and professional organizations adopted the nomenclature (American Psychiatric Association, 2003; Daigle & Cote, 2006; Rudd & Joiner, 1998), the nomenclature was not widely used in the research and clinical communities, partially due to its introduction of unfamiliar terms and definitions.

WHO/EURO definitions (De Leo et al., 2006 revision)

In the 1980s the World Health Organization (WHO) embarked on the EURO/WHO Parasuicide Multi-Centre Study, which required a nomenclature to differentiate various suicidal behaviours (with a specific emphasis on the identification of parasuicidal behaviours) (Schmidtke et al., 1996). The use of the term ‘parasuicide’ was based on Kreitman’s definition of parasuicide as a non-fatal act in which an individual deliberately causes self-injury or ingests a substance in excess of any prescribed or generally recognized therapeutic dosage. As is evident, Kreitman’s term avoids any reference to intent or motivation (Kreitman, 1977).

Subsequently, after the study ended, members of the multi-centre study (De Leo et al., 2004) revised the initial WHO nomenclature based on some of their observations from the study. They established the key components of fatal and non-fatal suicidal behaviours: self-initiated; with or without intent to die; and outcome. One criticism is that although they collapsed ‘parasuicide’, ‘deliberate self-harm’, and ‘attempted suicide’ under one term, ‘non-fatal suicidal behaviour’, this term can be applied with or without the presence of intent to die.
Columbia University suicidality classification

Suicidologists at Columbia University were approached by the US Food and Drug Administration (FDA) to assist them in reviewing all the adverse event reporting associated with antidepressant drug trials involving children and adolescents. The FDA was concerned about whether some of the adverse events being reported were appropriately being labelled as ‘suicidality’. Under contract to the FDA, the Columbia team developed a ‘Classification Scheme’ – which is a nomenclature of terms and definitions. These researchers reviewed all the adverse events reports to determine how many actually were related to suicidal behaviours. The ‘Classification Scheme’ was also used for the review of adverse event reporting for drug trials with adults (Posner et al., 2007). It is hoped that this classification scheme will ideally lead to a more systematic assessment of suicidality and improved identification of high-risk groups for research protocols (clinical registries).

Subsequent to conducting the FDA analysis, the Columbia group developed the ‘Columbia Suicidality Severity Rating Scale’ (C-SSRS). Specifically, it measures the degree of suicidal ideation and the level of lethality. Suicidal ideation is measured on a 1–5 point scale (from ‘wish to die’, ‘active suicidal ideation’, ‘method’, ‘intent’ to ‘plan’). Hence, the assessment of intent, motivation, and plans are part of the measurement of suicidal ideation. Suicidal behaviour is measured on five levels: (1) actual attempt; (2) interrupted attempt; (3) aborted attempt; (4) preparatory act or behaviour; and (5) non-suicidal self-injury. Lethality is measured on a 0–4 scale with the level of severity defined as the frequency, duration, controllability, deterrents, and reasons for ideation.

CDC self-directed violence surveillance system

In the spring of 2003, the CDC began to develop surveillance definitions for self-directed violence, based on their prior work in developing surveillance definitions for other forms of violence. Over the ensuing years, this process included two major meetings of national experts in the field of suicidology and injury surveillance, as well as international external (national and international) and internal review. As of this writing, the current iteration is being reviewed for approval by officials within CDC.

Silverman et al., revised nomenclature

In 2006, with the support of the Department of Veterans Affairs’ Mental Illness, Research, Education, and Clinical Center (VA VISN 19 MIRECC) located in Denver, Colorado, critical input from the medical and psychiatric staff at the Denver VA Medical Center, and representatives from the Department of Defense, Silverman et al. (2007a, 2007b) published a revised nomenclature based on the O’Carroll et al. ‘Tower of Babel’ nomenclature (O’Carroll et al., 1996). This revision of the 1996 O’Carroll nomenclature also benefited from numerous recommendations and contributions from the international suicidology community. One improvement was to include a category of ‘undetermined’, which includes ‘undetermined suicide attempt’, ‘undetermined suicide-related behaviour’, ‘undetermined
suicide-related death’, and ‘self-inflicted death with undetermined intent’. The goal was to simplify the nomenclature and definitions in a manner that would increase communication between and among clinicians, researchers, administrators, policy-makers, and the public. It was hoped that a standardized nomenclature would lead to a standardized set of questions for determining the presence or absence of suicidal cognitions, motivations, emotions, and behaviours. As with the initial O’Carroll et al. (1996) effort, the authors struggled with the concepts of intent, motivation, risk, threat, gesture and non-suicidal self-harm.

Denver VA VISN 19 MIRECC self-directed violence classification system

Using the Silverman et al. (2007b) nomenclature as a template, researchers at the Denver MIRECC developed a nomenclature and classification system that has clinical utility and can be used across the US Department of Defense and the Veterans Administration Hospital system. The system has been ‘mapped’ onto developing surveillance systems, such as that of the CDC Self-Directed Violence Surveillance system. This system is currently undergoing clinical trials.

Conclusions

Unless and until the field of suicidology (comprising epidemiologists, sociologists, psychologists, physicians, neurobiologists, researchers, clinicians, first-responders, survivors, community leaders, etc.) speaks the same language and approaches the classification of suicidal behaviours in a clear, concise, and consistent manner, communications between and among all those who work for the goal of suicide prevention will remain clouded.

Consensus is required with regard to the development, implementation, and evaluation of clinical and preventive interventions (Silverman, 2006). All the components of the suicidal process then must be identified, labelled, and classified if we are ever to reach the point where we all can share information and observations to help identify and treat truly suicidal individuals and develop interventions to prevent the onset, maintenance, duration, intensity, frequency, and recurrence of suicidal thoughts and behaviours. Classifying individuals on the basis of the intent of their self-injury is a useful scientific and clinical endeavour (Nock & Kessler, 2006). Carefully defining key constructs, such as suicide attempts, will reduce variation in reporting and will enhance interpretation and communication of study results (Linehan, 1997; Meehan, Lamb, Saltzman, & O’Carroll, 1992).

Even if we are able to differentiate a range of self-destructive thoughts and behaviours into broad categories (such as suicide-related ideations, communications, and behaviours) and sub-categories (such as suicide ideation, suicide attempt, and suicide), not all suicide ideations are identical across domains (e.g., time, duration, frequency, context, degree of lethality, degree of planning, etc). It is our goal to have as few categories and sub-categories as needed to accurately label someone, so that finer differentiations can be made between and among individuals in each ‘cell’.
Within each sub-category (sub-classification) we need to provide more levels of detail and depth to fully describe the presentation in as many domains as possible. To differentiate further within each sub-category, we need to recognize and establish criteria for finer differentiation that are believed to be critical to understanding and classifying suicidal behaviours: levels of lethality; time frames; levels of intent; types of methods used; degree of planning; etc.

An ideal goal is to develop, for example, a classification system similar to that used in oncology, where first a tumour is classified by type of cancer, and then by staging (e.g., based on size, location, degree of invasiveness, extent of metastasis, etc.), which not only informs diagnosis, but also treatment, management, monitoring, and prognosis. In a similar fashion, ‘staging’ criteria for suicidal behaviours might be degree of intent, lethality of method used, likelihood of rescue, degree of planning (impulsivity), and presence and status of psychiatric or medical illness. Scales or ranking systems can be developed to measure these elements and provide clinicians and researchers with a richly nuanced approach to classifying the full range of suicidal thoughts, communications, and behaviours.

Although progress is being made on a number of different fronts, there remains a need for the establishment of an international working group to resolve differences between and among the existing nomenclatures, definitions and classification systems. This would be an important step towards improving our efforts to prevent suicide and suicidal behaviours.

References


