Suicide, Suicide Attempts, and Suicidal Ideation

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Abstract

Suicidal behavior is a leading cause of death and disability worldwide. Fortunately, recent developments in suicide theory and research promise to meaningfully advance knowledge and prevention. One key development is the ideation-to-action framework, which stipulates that (*a*) the development of suicidal ideation and (*b*) the progression from ideation to suicide attempts are distinct phenomena with distinct explanations and predictors. A second key development is a growing body of research distinguishing factors that predict ideation from those that predict suicide attempts. For example, it is becoming clear that depression, hopelessness, most mental disorders, and even impulsivity predict ideation, but these factors struggle to distinguish those who have attempted suicide from those who have only considered suicide. Means restriction is also emerging as a highly effective way to block progression from ideation to attempt. A third key development is the proliferation of theories of suicide that are positioned within the ideation-to-action framework. These include the interpersonal theory, the integrated motivational-volitional model, and the three-step theory. These perspectives can and should inform the next generation of suicide research and prevention.

Contents

INTRODUCTION

Suicidal behavior is a global cause of death and disability. Worldwide, suicide is the fifteenth leading cause of death, accounting for 1.4% of all deaths (WHO 2014). In total, more than 800,000 people die by suicide each year. The annual global age-standardized death rate for 2012 is estimated to be 11.4 per 100,000, and the World Health Organization (WHO) projects this rate to remain steady through 2030 (WHO 2013, 2014).

In addition to suicide deaths, suicidal thoughts and nonfatal suicide attempts also warrant attention. Globally, lifetime prevalence rates are approximately 9.2% for suicidal ideation and 2.7% for suicide attempt (Nock et al. 2008a). Suicide ideation and attempts are strongly predictive of suicide deaths; can result in negative consequences such as injury, hospitalization, and loss of liberty; and exert a financial burden of billions of dollars on society (CDC 2010a; Nock et al. 2008a,b; WHO 2014). Taken together, suicide and suicidal behavior comprise the nineteenth leading cause of global disease burden (i.e., years lost to disability, ill-health, and early death), and the sixth and ninth leading cause of global disease burden among men and women 15 to 44 years of age, respectively (WHO 2008). By any measure, there is urgency to better understand and prevent suicide and suicidal behavior.

DEFINITIONS AND TERMINOLOGY

The use of vague or inconsistent terms and definitions has hindered progress in suicide research and theory. For example, some use the term suicidal behavior as a general term encompassing any suicidal thought or action without taking additional steps to distinguish thoughts from plans, from nonfatal attempts, and from attempts that result in death. Similarly, some use the term self-harm to refer to intentional self-injury without intent to die (i.e., nonsuicidal self-injury behaviors such as superficial skin cutting), whereas others use the term to encompass all intentional self-injurious behaviors regardless of intent to die. Because these different aspects of suicidality and self-injury can have very different prevalence rates, functions, clinical correlates, and outcomes, it is critical to be precise with our use of definitions and terminology.

The scope of this review precludes a comprehensive discussion of issues of terminology and definition, but we emphasize a few key points. We utilize the definitions provided by the US Centers for Disease Control and Prevention (CDC) (CDC 2015a, Crosby et al. 2011), whereby suicidal self-directed violence is distinguished from self-directed violence with undetermined or nonsuicidal intent. Within the domain of suicidal self-directed violence, suicide is defined as death caused by self-directed injurious behavior with an intent to die as a result of the behavior; suicide attempt is defined as a nonfatal, self-directed, potentially injurious behavior with an intent to die as a result of the behavior even if the behavior does not result in injury; and suicidal ideation is defined as thinking about, considering, or planning suicide. The terms completed suicide, failed attempt, nonfatal suicide, successful suicide, suicidal gesture, and suicide threat are considered pejorative or misleading, and the term parasuicide is considered overly broad and vague and therefore unacceptable by the CDC.

The American Psychiatric Association (APA) has also addressed an important definitional issue with the publication of the fifth edition of the *Diagnostic and Statistical Manual for Mental Disorders* (DSM-5; Am. Psychiatr. Assoc. 2013). Section III of the DSM-5 includes nonsuicidal self-injury (NSSI) and suicidal behavior disorder as "conditions for further study." A key reason for proposing a distinct disorder for NSSI was to distinguish the behavior from suicide attempts (i.e., self-harm with intent to die). Although NSSI is strongly correlated with suicide attempts (Klonsky et al. 2013, Wilkinson et al. 2011), the behaviors differ in terms of prevalence (NSSI is more prevalent), frequency (NSSI is often performed dozens or hundreds of times, whereas suicide attempts are typically performed once or a few times), methods (cutting and burning are more characteristic of NSSI, whereas self-poisoning is more characteristic of attempted suicide), severity (NSSI rarely causes medically severe or lethal injuries), and functions (NSSI is performed without intent to die, usually to temporarily relieve overwhelming negative emotion, and sometimes in an effort to avoid suicidal urges) (CDC 2010a, Klonsky 2007, Klonsky & Muehlenkamp 2007, Muehlenkamp 2005, Muehlenkamp & Gutierrez 2004). We believe NSSI has a strong relationship with suicide attempts for two reasons: NSSI correlates with variables, such as depression, known to increase risk for suicidal ideation; and NSSI facilitates habituation to self-inflicted violence and pain, which in turn increases the capacity to attempt suicide (Klonsky et al. 2013).

CHALLENGES FOR RESEARCH

The study of suicide is fraught with many challenges resulting from the nature of suicidality itself, the research practices common to the field over the past several decades, and the complicated cultural meaning of suicide (Goldsmith et al. 2002). Five challenges are detailed in this section.

First, as noted above, the field of suicidology has struggled to establish a set of agreed upon terms over the past 50 years. Although it has become more common for researchers to be clear about the terms they use and their meaning (like we do above), the existing research literature is filled with different terms, which hampers our ability to integrate findings across the various studies published. The field has repeatedly sought to address the issue, including at a meeting hosted in the 1970s by the National Institute of Mental Health (NIMH), and subsequent efforts in the 1990s by multiple organizations including NIMH, the American Association of Suicidology, and the Center for Mental Health Services. These meetings resulted in a seminal article by O'Carroll et al. (1996) that was subsequently revised and updated by Silverman et al. (2007). However, despite these workshops, differences persist in terminology between subfields (e.g., mental health professionals versus school systems versus coroners) and even among mental health professionals and suicidologists (e.g., whether to distinguish NSSI from suicide attempts). Such diversity impedes the ability to combine knowledge from disparate studies and publications and limits the advancement of suicide knowledge and prevention (Posner et al. 2014).

Second, in part due to the aforementioned inconsistencies in nomenclature, measures of suicidality are numerous and often divergent in their aims and content. For example, assessments of suicide ideation range from simple one- to two-item screenings [e.g., "Did you ever seriously consider suicide?" (CDC 2015b)] to full assessments that capture frequency, severity, planning, communication, and intent (Nock et al. 2007). Though versatility in measurement approaches allows for assessments in different settings and time frames, it also leads to confusion in the literature. For example, the presence of ideation is at times operationalized as fleeting thoughts about suicide and at other times requires heightened severity or frequency. A history of suicide attempt may be determined by a single question (e.g., "Have you ever attempted suicide?") or may explicitly require intent or a certain degree of lethality. The diverse measurement approaches make it difficult to compare findings and integrate knowledge across studies.

A third challenge to research is the variability across studies in whether suicidal ideation and attempts are treated as states or traits. In other words, is suicide ideation and attempt better conceptualized as an experience someone has at a moment in time (e.g., studies of ideation or attempts) or as an individual difference variable attached to anyone who has thought about or attempted suicide at least once (e.g., studies of ideators or attempters)? For most, ideation is a relatively rare experience isolated to a particular period of one's life rather than a chronic experience (Kessler et al. 2012). Similarly, most individuals who attempt suicide only do so once (Kessler et al. 2012). Thus, it may be most accurate to consider suicidality a state and to study it accordingly. However, because previous suicide attempts strongly predict future attempts (Borowsky et al. 2001, O'Connor et al. 2013) and because some ideators, often with early onset, experience persistent ideation (Kessler et al. 2012), there is also reason to view suicidality as a trait-like variable, especially in the context of clinical risk assessment. Different perspectives on this issue imply different research designs and questions, and yield different types of knowledge (e.g., when is an individual at risk versus who is at risk). Unfortunately, the basis for the approach taken is rarely explicitly considered or rationalized in published studies, and knowledge about suicide and suicide risk suffers as a result.

Fourth, even when clear definitions are agreed upon and standardized measures are used, the heavy stigma surrounding suicide can influence reporting. For example, individuals in countries strongly influenced by religions that prohibit suicide may underreport suicide attempts and deaths. It is even possible that individuals with a history of suicidal thoughts or attempts are less likely to identify as such and agree to participate in research studies, although for obvious reasons it would be extremely difficult to recruit a representative sample of suicidal individuals to examine this possibility. Nonetheless, it is likely that cultural differences in the stigma around suicide affect the accuracy of the rates reported in global epidemiological studies (Mars et al. 2014, Nock et al. 2008b).

Finally, the nature of suicidal thoughts and behaviors themselves presents a variety of obstacles for research. To begin with, low base-rate behaviors such as suicide are hard to study for both practical and statistical reasons. Even in high-risk populations, where suicide deaths are more common than in the general population, thousands of participants are needed to obtain reliable results (Goldsmith et al. 2002). Moreover, unlike many other clinically relevant behaviors, such as binge drinking or occurrences of panic attacks, a suicide death precludes the possibility of reporting about the event retrospectively. Instead, examining suicide as an outcome means utilizing large longitudinal studies and psychological autopsy studies. Longitudinal studies present challenges for the inclusion of large sample sizes, comprehensive clinical assessment, and sufficiently frequent assessments so as to ensure that any suicide death that occurs is likely to have been preceded by an assessment relatively close in time. Psychological autopsy studies are limited by their reliance on the memories, knowledge, and interpretations of informants and medical records.

Because of the difficulty in studying suicide as an outcome, researchers instead often study suicidal thoughts and/or behaviors as proxies for suicide. These behaviors make good research targets because they are strongly related to suicide but occur far more frequently and are thus easier to study. However, these studies have their own practical and ethical limitations. For example, researchers have an ethical responsibility to intervene should they believe a suicide attempt is imminent, which means that researchers often must impact the participants they are studying precisely when, from a scientific perspective, it would be most important to observe and assess the natural course of suicidal thoughts and attempts. In addition, a few studies suggest that suicidal thoughts and behaviors have some different predictors and correlates than suicide death (Daigle 2004, DeJong et al. 2010), which means that studies of suicidal thoughts and behaviors may not fully generalize when it comes to understanding suicide itself. Although these challenges will remain for the foreseeable future, suicide research is also poised to benefit from creative advances in psychological research, including using social networking analysis, ecological momentary assessment, and big data approaches. It will be important for suicidologists to use these and other methodological innovations to combat the challenges inherent to the study of suicide.

SOCIODEMOGRAPHIC CORRELATES

A comprehensive examination of correlates of suicide, suicide attempts, and suicidal ideation is beyond the scope of this review; however, we briefly emphasize some key points. Most notably, suicide rates are not distributed evenly across people or places.

For example, high-income countries have higher suicide rates than low- and middle-income countries (LMICs; 12.7 versus 11.2 per 100,000, respectively). LMICs, however, account for over 75% of all suicides worldwide. Suicide rates also differ by gender and age (Nock et al. 2008a; WHO 1999, 2014). Men account for roughly three times the number of suicides than women, and this gender disparity is even greater in high-income countries (WHO 2014). When stratified by age, suicide rates are highest in adults aged 70 and older across both men and women. However, although overall rates of suicide are lower in children and young adults, suicide accounts for a disproportionately large number of deaths in these age ranges. For example, suicide is the second leading cause of death among those 15 to 29 years old, and the leading cause of death among young women aged 15 to 19 (Patton et al. 2009). Notably, sex and age patterns often differ across countries. For example, in high-income countries, middle-aged men have a higher suicide rate than their LMICs counterparts, whereas in LMICs, young adults and elderly women have higher suicide rates compared with young adults and elderly women in high-income countries.

Changes in suicide rates over time also differ across peoples and places (WHO 2014). Between 2000 and 2012, age-standardized suicide rates decreased worldwide by an average of 26%. However, this decrease was far from uniform. For example, during this period suicide rates decreased by 69% among women in Malta but increased by 416% among men in Cyprus. Meaningful variability was even observed between neighboring countries. Whereas Canada experienced an 11% decrease in suicide rates from 2000 to 2012, the United States experienced a 24% increase.

Rates of nonfatal suicidal behavior also differ by region, age, sex, and sexual orientation. For example, the United States has higher rates of suicide ideation (15.6%), plans (5.4%), and attempts (5.0%) than the global average (Nock et al. 2008a). In addition, rates of lifetime suicidal ideation, suicide plans, and suicide attempts are higher in females than males (Kessler et al. 1999; Nock et al. 2008a, 2013) and higher in adolescents than adults (Nock et al. 2008b). It is also recently becoming clear that individuals reporting sexual- or gender-minority orientations (i.e., lesbian,

gay, bisexual, and transgender) are at increased risk for suicidal ideation and suicide attempts, a trend that appears to hold constant worldwide (Figueiredo & Abreu 2015).

MENTAL DISORDERS AND OTHER CLINICAL CORRELATES

It is often stated that over 90% of individuals who die by suicide have mental disorders (Bertolote & Fleischmann 2002). However, it is also true that the overwhelming majority of individuals with mental disorders—more than 98%—do not die by suicide (Nordentoft et al. 2011). In addition, some mental disorders confer higher risk for suicide than others.

In developed countries, the disorders that most strongly predict a subsequent suicide attempt are bipolar disorder, posttraumatic stress disorder, and major depression; in developing countries, the most predictive disorders are posttraumatic stress disorder, conduct disorder, and drug abuse/dependence (Nock et al. 2009). Importantly, additional analyses of these data showed that the associations between these disorders and suicide attempts are mostly due to the disorders predicting the development of suicidal ideation. When limiting analyses to individuals with suicidal ideation, mental disorders became very weak predictors of suicide attempts. This tendency of potential risk factors to predict suicidal thoughts better than attempts is a key theme that is revisited throughout the remainder of this article.

Besides mental disorders, numerous clinical and psychological variables have been demonstrated to influence suicide risk. A recent paper on the psychology of suicide by O'Connor & Nock (2014; see panel 2) lists more than 30 psychological risk and protective factors. Here, we focus on three psychological variables often considered to be particularly important predictors of suicidal thoughts and attempts: depression (measured as a continuous variable rather than a discrete mental disorder), hopelessness, and impulsivity. Indeed, there is evidence that each of these variables exhibits statistically reliable relationships to measures of suicidality and suicide risk. However, the literature for each of these variables has important nuances. Depression appears to be one of the strongest predictors of suicidal ideation but does not appear to distinguish those who have attempted suicide from those who have experienced suicidal ideation without attempts (May & Klonsky 2016). Hopelessness is well known for demonstrating prospective prediction of suicide and suicide attempts in very-long-term studies; however, the magnitude of prediction in this research is actually quite small, similar to a correlation of about 0.2 (Beck et al. 1989). In addition, like depression, hopelessness is elevated in those who have experienced suicidal ideation but is not higher in attempters compared to ideators (May & Klonsky 2016).

The role of impulsivity in suicide is particularly noteworthy because impulsivity has long been conceptualized as a key risk factor for suicide attempts. Indeed, because impulsivity is thought to hasten the transition from thoughts to action, it has often been conceptualized as a critical clinical factor in the progression from suicidal thoughts to attempts (Bryan & Rudd 2006, Mann et al. 1999). However, recent research disputes these long-held clinical beliefs. For example, a recent meta-analysis found that impulsivity is a relatively modest predictor of suicide attempts (Anestis et al. 2014). Other studies find no connection between measures of trait impulsivity and more "impulsive" suicide attempts (e.g., attempts made with little planning or forethought) (Wyder & De Leo 2007). Research has also found that most measures of impulsivity are no higher in suicide attempters than in those who have experienced ideation without attempts (Klonsky & May 2010), although this same study found higher impulsivity in those who have experienced either ideation or attempts compared to those without histories of suicidality.

Taken together, most clinical correlates of suicidality appear to be best conceptualized as correlates of suicidal ideation. These variables appear to predict suicide attempts or deaths only to the extent that they predict ideation. This pattern and its implications are discussed further below in the section titled The Ideation-to-Action Framework.

MOTIVATIONS FOR SUICIDE

Whereas most studies on suicide focus on correlates, another way to improve suicide knowledge and prevention is to better understand the motivations for suicide attempts. Understanding the most common motivations for suicide attempts can inform conceptual models of suicide and facilitate the development of intervention and prevention programs that are most likely to resonate with and help those at risk. Clinically, identifying the motivation for a specific client's attempt allows the clinician and the attempter to find alternative solutions that may solve the problem and reduce the likelihood of future attempts. Though a desire to die is, by definition, a motivation common to all suicide attempts, research suggests that individual attempts may be motivated by a myriad of reasons such as escape, communication, altering one's environment, and dealing with an unbearable state of mind (Brown et al. 2002a, Chapman & Dixon-Gordon 2007, Holden et al. 1998, May & Klonsky 2013, Schnyder et al. 1999).

Different theories of suicide offer different hypotheses about why people attempt suicide. Edwin Shneidman's (1993) theory of suicide describes psychache (i.e., emotional or psychological pain) as the primary motivator of an attempt. He posits that suicide occurs when an individual's threshold for tolerating psychological pain is surpassed and that this threshold varies across individuals. Roy Baumeister presents a theory of suicide based on constructs from cognitive, social, and personality psychology. His escape theory suggests that many suicide attempts are motivated by a need to reduce aversive self-awareness (Baumeister 1990). Thomas Joiner's (2005) interpersonal theory states that two domains, perceived burdensomeness and thwarted belongingness, interact to confer the desire for suicide. Other theories highlight the roles of hopelessness (Abramson et al. 1989), problem-solving (Baechler 1979), impulsivity (Simon et al. 2001), and interpersonal communication (Farberow & Shneidman 1961, Kobler & Stotland 1964, Kreitman 1977) in motivating a suicide attempt.

Interestingly, and perhaps unfortunately, most instruments designed to assess suicide motivations have been developed with little regard for the theoretical work described above. Early efforts to assess motivations for suicide were carried out by John Bancroft and colleagues in the 1970s. Potential motivations for overdoses were generated by researchers and study participants, resulting in a list of 14 possible reasons (Bancroft et al. 1976, 1979). Twenty years later, Ronald Holden and collaborators (1998) used these items to construct the Reasons for Attempting Suicide Questionnaire. Shortly thereafter, Marsha Linehan and colleagues (Brown et al. 2002a) included reasons for self-injurious behavior as part of their Parasuicide History Interview. More recently, the Inventory of Motivations for Suicide Attempts (IMSA; May & Klonsky 2013) was developed. Unlike for previous measures, development of the IMSA was informed by prevailing theories of suicide, and the IMSA consists of nine scales assessing motivations emphasized by these different theories.

Some important lessons can be drawn from studies utilizing the above measures. Across both rationally and empirically derived measures, two superordinate dimensions of attempt motivations arise (Brown et al. 2002a, Holden & DeLisle 2006, May & Klonsky 2013, May et al. 2016). The first represents internal (self-oriented) motivations, such as hopelessness, extreme emotional pain, a need to escape, and other distressing emotional or cognitive states. The second domain captures communication (other-oriented) motivations, such as a desire to communicate with, influence, or seek help from others. The fact that multiple independent lines of inquiry converge on these two factors increases confidence in the validity and clinical utility of these domains.

Internal motivations for suicide, particularly overwhelming pain and hopelessness, are more often endorsed than communication motivations. Numerous studies find that a majority of suicide attempters report internal motivations (Brown et al. 2002a, Hjelmeland et al. 2002, Holden et al.

1998, May & Klonsky 2013, May et al. 2016), and to our knowledge there are no exceptions. A smaller subset of participants report communication motivations, almost always in addition to, rather than instead of, internal motivations. Importantly, the types of motivations endorsed have implications for the type of suicide attempt made. Relative to internal motivations, communication motivations appear to be protective. For example, among a sample of undergraduates and outpatients with recent attempts, greater endorsement of communication motivations was associated with lower suicidal intent and a greater likelihood the attempt would be interrupted, whereas greater internal reasons were correlated with a greater desire to die (May & Klonsky 2013). These findings are consistent with earlier studies reporting that internal reasons were correlated with higher intent and preparation, whereas communication motivations were not (Hjelmeland et al. 2002, Holden et al. 1998).

A possible explanation for this pattern is that the presence of socially oriented motivations signifies a continued connection to people, a desire to maintain these relationships, and thus a continued investment in living. This connection to people may counterbalance a desire to die, whereas the absence of communication motivations may signify less connection and thus less ambiguity about the desire to die. In addition, individuals who attempt suicide with communication motivations, particularly help-seeking, may be more interested and engaged in the treatment options that are often offered postattempt. It is important to remember that all research on suicide motivations has been conducted with suicide attempters who survived, limiting our knowledge of whether these same motivations generalize to suicide decedents.

EVIDENCE-BASED CLINICAL ASSESSMENT

Suicide research and prevention require accurate evaluation of suicide phenomena. Therefore, reliable, valid, and comprehensive assessments are essential. For in-depth reviews of such measures, including scope and psychometric properties, see Brown (2001), Goldston (2003), and Nock et al. (2008c). Here we summarize some of the more widely used and better-validated measures.

The Suicide Attempt and Self-Injury Interview (SASII; Linehan et al. 2006a), formerly the Parasuicide History Interview (Linehan et al. 1989), is a structured interview composed of 31 items designed to assess the intent, context, and topography of nonsuicidal and suicidal behaviors. The SASII subscales were factor-analytically derived using three medium-sized cohorts. The SASII demonstrates excellent internal consistency and high interrater reliability (Linehan et al. 2006a), and has been repeatedly used in samples with borderline personality disorder (Brown et al. 2002b, Crowell et al. 2012, Harned et al. 2010).

The Self-Injurious Thoughts and Behaviors Interview (SITBI), developed by Nock et al. (2007), is another structured interview that comprehensively assesses both nonsuicidal and suicidal self-harming behaviors. The SITBI's 169 items assess characteristics associated with NSSI, suicidal ideation, plans, gestures, and attempts including their frequency, severity, methods used, function, perceived cause, and age of onset. The SITBI was developed and has been primarily used with adolescent samples (Barrocas et al. 2012, Janis & Nock 2008, Nock et al. 2007), where it has been found to have strong psychometric properties, including high interrater and test-retest reliability, and has demonstrated concurrent validity by overlapping with established measures of NSSI, suicide ideation, and suicide attempts (Janis & Nock 2008, Nock et al. 2007).

The Scale for Suicide Ideation (SSI; Beck et al. 1979) is a long-standing semi-structured interview assessing the presence, frequency, and severity of suicidal thoughts using 21 items. The SSI has been found to have high internal consistency and test-retest reliability (Beck et al. 1979, 1997) and strong concurrent validity (Beck et al. 1979, 1985, 1997), and it is one of the few clinician-administered measures to have been shown to predict suicide attempts. Specifically, participants

who obtained scores at or greater than 3 on the SSI were found to be seven times more likely to attempt suicide over a ten-year period than those who scored less than 3 (Brown et al. 2000). A more recently developed semi-structured interview, the Columbia-Suicide Severity Rating Scale (C-SSRS; Posner et al. 2008, 2011), has also demonstrated predictive validity. The C-SSRS assesses lifetime presence of suicide ideation, plans, intensity of ideation, and attempts as well as NSSI, and it has been shown to predict suicide attempts during a 24-week follow-up period (Posner et al. 2011).

A variety of self-report measures assessing constructs related to suicide (such as depression and hopelessness) and aspects of suicidality (ideation, intent, lethality) have been developed over the past 40 years. However, only a few of these measures have been shown to predict future suicide attempts. The Beck Hopelessness Scale (Beck et al. 1974) assesses participants' sense of hopelessness using 20 true-or-false items. Psychiatric outpatients who obtained scores at or above 9 on the Beck Hopelessness Scale were found to be 11 times more likely to die by suicide than were outpatients scoring 8 or below. Question nine on the Beck Depression Inventory-II (Beck et al. 1961, 1996) assessing suicidal thoughts/wishes has demonstrated sensitivity to future suicide attempts in three psychiatric samples (Beck et al. 1990, Brown et al. 2000, Oquendo et al. 2004). Patients scoring at or above 2 on this question were found to be 6.9 times more likely to die by suicide than those who scored below 2 (Brown et al. 2000). Similarly, baseline scores obtained by a psychiatric sample on the 25-item Adult Suicidal Ideation Questionnaire (Reynolds 1991), a measure of the frequency of suicidal ideation, predicted suicide attempts over a three-month period (Osman et al. 1999).

Virtually all clinical interviews and self-report measures rely on participants self-disclosing information regarding their past suicide attempts and current suicidal thoughts and plans. Suicide, however, is an extremely personal and sensitive subject that is often stigmatized and difficult to discuss. In response to these challenges, objective measures free of reporting biases have been developed to assess suicide risk. One such measure is the death/suicide implicit association test (IAT) developed by Nock et al. (2010). Administering the death/suicide IAT to patients in an emergency department revealed that the death/suicide IAT correctly distinguished participants admitted following a suicide attempt from those who were admitted for reasons other than a suicide attempt. Furthermore, and critically, performance on the death/suicide IAT predicted future suicide attempts, over and above both the patients' own predictions and clinicians' predictions of the likelihood of future suicide attempts (Nock et al. 2010). The death/suicide IAT therefore is promising for predicting suicide attempts, although further study of these findings and their clinical utility is required.

EVIDENCE-BASED CLINICAL INTERVENTION

Suicidal thoughts and behaviors remain difficult to treat. Unfortunately, no gold-standard, highly effective treatments exist. However, some treatments have better evidence than others for reducing suicidal thoughts and behaviors, and we summarize these below. We specifically focus on clinical interventions that target individuals at risk for suicide and that seek to reduce suicidal thoughts and behaviors; we address community-level suicide prevention efforts separately in a subsequent section.

Dialectical behavior therapy (DBT; Linehan 1993) is a multimodal treatment that combines behavioral and acceptance-based strategies. DBT was developed for populations with extensive histories of self-injurious and suicidal behaviors, and it has been primarily used and studied in samples with borderline personality disorder. Randomized controlled trials (RCTs) have found that patients who received DBT engaged in less self-harm (suicidal intent not always assessed

or reported; Koons et al. 2001; Linehan et al. 1991, 1993; van den Bosch et al. 2005; Verheul et al. 2003), attempted suicide less often (Linehan et al. 2006b), and experienced improvements in disability and quality of life (Carter et al. 2010).

Another treatment, cognitive therapy for suicide prevention (CT-SP; Brown et al. 2002a), is based on Beck's cognitive theory (Beck 1976). CT-SP views suicide as resulting from patients' sense of hopelessness and dysfunctional automatic thoughts. CT-SP therefore focuses on mitigating hopelessness, evaluating and challenging the accuracy of patients' assumptions, and providing patients with coping strategies and problem-solving skills. RCTs have found that patients who received CT-SP experienced greater reductions in suicidal thoughts (Slee et al. 2008) and made fewer suicide attempts at 6-month (Evans et al. 1999) and 18-month (Brown et al. 2005) follow-up.

The collaborative assessment and management of suicide risk (CAMS; Jobes 2006) is a relatively new treatment of suicidal behavior. CAMS uses a collaborative, nonjudgmental approach and focuses on developing a strong therapeutic patient relationship as the basis for working with patients to design and implement a treatment plan. Studies have found that CAMS can quickly reduce suicidality broadly defined (Jobes et al. 2005) and that treatment gains are sustained at 50 days (Ellis et al. 2012). An RCT found CAMS to be effective in treating suicidal ideation and that CAMS patients had continued to improve 12 months after treatment (Comtois et al. 2011). These studies suggest that CAMS might be an effective treatment for suicidal ideation. Additional and larger CAMS trials are currently under way.

EVIDENCE-BASED PREVENTION

Treatments for suicidality tend to focus on individual and/or group modalities. However, some key approaches to suicide prevention can be implemented at the level of the community or government. These approaches include means restriction, physician education, and school-based programs.

There may be no more effective approach to suicide prevention than to reduce access to means on a large scale. Access to firearms in the United States represents a prime example. Firearms are the leading cause of suicide death in the United States, and laws regulating the availability of firearms vary by state. In two important studies, Anestis and colleagues found that laws restricting access to handguns, such as those requiring permits, registration, licenses, background checks, and gun locks, were associated not only with reductions in suicides by handgun, but also with lower suicide rates overall (Anestis & Anestis 2015, Anestis et al. 2015). In addition, evidence indicates that states with higher self-reported gun ownership have higher rates of firearm suicide as well as overall suicide (Miller et al. 2007). These patterns are not due to an association of gun ownership with mental health or suicidal thoughts; in fact, there is no relationship of gun ownership to either mental health or suicidal thoughts, and the relationship between gun ownership and suicide persists after controlling for these variables (Betz et al. 2011, Hemenway & Miller 2002, Miller et al. 2009).

Means restriction applies beyond the United States and beyond firearms. For example, when particularly lethal pesticides became a common method of suicide in Sri Lanka, regulations restricting the availability of these pesticides resulted in a halving of the overall suicide rate (Gunnell et al. 2007). A similar story took place in the United Kingdom. Up until the 1950s, domestic gas came from coal and included 10% to 20% carbon monoxide. During this time, gas inhalation was the leading method of suicide. Starting in the late 1950s and through the 1970s, natural gas, which contains very little carbon monoxide, was introduced, and its use became increasingly common. As the carbon monoxide levels in domestic gas decreased between the 1950s and 1970s, rates of suicide by carbon monoxide poisoning as well as overall suicide rates decreased substantially (Kreitman 1976).

There is a common assumption that if someone seeking to attempt suicide has a method of choice blocked, he or she will simply find another method. The data described above provide strong evidence disputing this assumption. A probable explanation is that suicidal crises are motivated by extreme pain, hopelessness (May & Klonsky 2013), and other distressing affective and cognitive states that, by their nature, ebb and flow over time. The suicidal crisis occurs when these states are at a peak. If someone can be kept alive during a suicidal crisis, it is quite likely the individual will not seek to attempt suicide again in the near or even far future. In fact, a review of 90 studies found that most individuals who make a severe but nonfatal suicide attempt never attempt again and have a 93% survival rate (i.e., 7% eventually die by suicide; Owens et al. 2002). Means restriction can take many forms and should be a key component of suicide prevention worldwide.

Evidence indicates that suicide prevention approaches other than means restriction can be effective. Programs to educate physicians about depression assessment and management have led to improved detection of patients with suicidal ideation and a reduction in suicides (Mann et al. 2005). Thus, like means restriction, physician education programs should be considered a key component of suicide prevention efforts worldwide. In addition, school-based programs designed to increase knowledge about suicide, suicide risk, and ways to help those at risk have received increased attention, with some promising results for improved knowledge about suicide and reduced suicide ideation and attempts (Aseltine et al. 2007, Schilling et al. 2014). However, not all of the evidence for these programs is high quality, and there is no direct evidence that these programs reduce suicide rates (Cusimano & Sameem 2011).

THE IDEATION-TO-ACTION FRAMEWORK

Although many promising approaches to treatment and prevention are described above, suicide remains a leading cause of death worldwide and is projected to remain so through 2030 (WHO 2013). We believe a key reason for the limited success in reducing suicides is inadequate knowledge, particularly about why and when suicidal thoughts progress to potentially lethal attempts. In this section, we elaborate on this knowledge gap and describe the ideation-to-action framework, a framework that we believe can address this gap and guide the next generation of suicide theory, research, and prevention.

As noted previously, it is becoming increasingly clear that most oft-cited risk factors for suicide—including depression, hopelessness, most mental disorders, and even impulsivity—predict suicidal ideation but do not distinguish those who have made suicide attempts from those who have experienced ideation without attempts (Klonsky & May 2014, May & Klonsky 2016). This pattern is apparent both in large epidemiological studies and in a recent meta-analysis. For example, a large epidemiological study in the United States found substantially higher rates of mental disorders in suicide ideators compared to those who had never been suicidal; however, the same study found that mental disorders minimally or negligibly distinguished suicide attempters from ideators without attempts (Kessler et al. 1999). More recent and worldwide epidemiological studies have found similar patterns (Nock et al. 2012, 2013). In fact, the variables examined in the WHO World Mental Health Surveys explain more than 60% of the variability in suicidal ideation, but only 7% of the variability in suicide attempts among ideators (Glenn & Nock 2014). Moreover, this pattern was reported in a recent meta-analysis that examined mental disorders as well as other clinical variables (May & Klonsky 2016). For example, the meta-analysis found that depression and hopelessness were robust predictors of suicidal ideation, but when attempters were compared to ideators without attempts, the effect sizes for depression and hopelessness dropped to near zero.

The fact that most oft-cited risk factors for suicide predict ideation but not behavior is of great import because most individuals with suicidal ideation do not go on to make attempts (Nock

Table 1 Three theories of suicide positioned within the ideation-to-action framework

Theory	Main factors causing suicidal ideation	Main factors causing progression from ideation to attempts
Interpersonal (Joiner 2005)	Perceived burdensomeness and thwarted belongingness	Acquired capability for suicide
Integrated motivational-volitional (O'Connor 2011)	Defeat and entrapment (facilitated by threat-to-self and motivational moderators)	Capability, impulsivity, planning, access to means, imitation, and other volitional moderators
Three-step (Klonsky & May 2015)	Combination of pain and hopelessness, especially when pain exceeds connectedness	Dispositional, acquired, and practical contributors to increased capacity for suicide

et al. 2008a). It thus becomes critical for both theoretical and clinical purposes that the field better understand suicide and suicide risk, in particular the progression from suicidal ideation to behavior. In response to this need, Klonsky & May (2014) proposed the ideation-to-action framework. From this perspective, (*a*) the development of suicidal ideation and (*b*) the progression from suicide ideation to attempts should be viewed as distinct processes with distinct predictors and explanations.

One implication of the framework concerns research design. Most studies of suicide compare attempters to a nonsuicidal group. Because all (or virtually all) attempters have also experienced ideation, this design allows predictors of ideation to masquerade as predictors of attempts. It is crucial that future studies stop this practice. No longer should the studies that compare attempters to ideators (e.g., Kessler et al. 1999, Klonsky & May 2015, Nock et al. 2008a) be the exception rather than the rule.

The ideation-to-action framework also represents a departure from traditional approaches to suicide theory. Theories of suicide have emphasized many different factors, including psychache (overwhelming psychological pain; Shneidman 1985, 1993), social isolation (Durkheim 1897), escape from aversive self-cognitions (Baumeister 1990), and hopelessness (Abramson et al. 2000). Although these theories have been tremendously helpful for stimulating thought, motivating research, and advancing the field, they also share a particular limitation: They do not offer separate explanations for the development of suicidal ideation and the progression from ideation to attempts.

An important theoretical advance occurred when Thomas Joiner proposed his interpersonal theory of suicide (Joiner 2005). This theory proposed explanations for suicidal desire and for acting on suicidal desire. In particular, the theory stipulated that the combination of perceived burdensomeness and low belongingness (and hopelessness about these perceptions) creates desire for suicide, whereas the capability to act on suicidal desire requires that one overcome fears of death and pain that are a natural part of attempting suicide. While the specifics of the interpersonal theory have received significant study, we propose that the framework itself is at least as important a contribution to the field. Thus, we view Joiner's theory as the first theory of suicide to be positioned within the ideation-to-action framework.

Indeed, Joiner's theory appears to have spawned additional theories grounded in the ideation-to-action framework (see **Table 1**). To our knowledge, Rory O'Connor's integrated motivational-volitional theory (IMV; O'Connor 2011) represents the second ideation-to-action theory. The IMV suggests that defeat and entrapment are the primary causes of suicidal ideation and that acquired capability along with other factors (e.g., access to lethal means, planning, impulsivity) predict and explain the progression from ideation to attempts.

Table 2 The difference between the (*a*) traditional and (*b*) ideation-to-action approaches to suicide. The traditional approach treats suicide risk as a unitary construct; in contrast, the ideation-to-action framework distinguishes predictors of ideation from predictors of the progression from ideation to behavior[a]

(*a*) Traditional approach	(*b*) Ideation-to-action framework	
Risk factors for suicide	**Risk factors for suicidal ideation**	**Risk factors for suicide attempts**
Mental disorders	Mental disorders	Certain mental disorders (e.g., posttraumatic stress disorder)
Depression	Depression	Access to lethal means
Hopelessness	Hopelessness	Knowledge/comfort with lethal means
Impulsivity	Impulsivity (most forms)	Impulsivity (poor premeditation)
Access to lethal means	Nonsuicidal self-injury	Nonsuicidal self-injury
Knowledge/comfort with lethal means	. . .	. . .
Nonsuicidal self-injury	. . .	. . .
. . .	. . .	. . .

[a]This table is meant to be illustrative, as indicated by the ellipses in each column; it is not a comprehensive account of suicide risk factors.

In addition to guiding research and theory, the ideation-to-action framework should also inform applied domains, such as prevention and risk assessment. For example, prevention and treatment programs should distinguish which intervention targets and mechanisms of change address ideation and which are meant to impede progression from ideation to attempts. We believe the framework should also inform the field's approach to risk assessment. To illustrate, we consider efforts to identify and label suicide risk factors. **Table 2** contrasts the traditional approach to suicide risk with the approach suggested by the ideation-to-action framework. The traditional approach treats suicide risk as a unitary construct; all risk factors are listed in a single column. In contrast, the ideation-to-action framework distinguishes predictors of ideation from predictors of the progression from ideation to behavior. Variables such as depression, most mental disorders, hopelessness, and most forms of impulsivity are included only in the ideation column on the basis of evidence suggesting that these are strong correlates of ideation but that they poorly distinguish attempters from ideators without attempts (Kessler et al. 1999, Klonsky & May 2010, May & Klonsky 2016). In contrast, variables such as access to and comfort with lethal means and a specific impulsivity-related trait are listed in the behavior column on the basis of evidence that these variables reliably distinguish attempters from ideators who have never attempted (Klonsky & May 2010, 2015). Finally, some variables, such as a diagnosis of posttraumatic stress disorder and a history of NSSI, appear in both columns because research indicates that they are correlates of both suicidal ideation and behavior (Klonsky et al. 2013, Nock et al. 2009). Importantly, the research summarized above is mainly correlational, and it will be necessary for future research to specifically identify risk factors for suicidal ideation and attempts using prospective designs.

THE THREE-STEP THEORY OF SUICIDE

Recently, we developed the three-step theory (3ST) of suicide (Klonsky & May 2015), which we feel has the potential to improve understanding and prediction of suicide, suicidal behavior, and suicide ideation. The 3ST utilizes the ideation-to-action framework, is informed by previous research and theory, and provides a parsimonious and testable model of suicide. The key constructs of the 3ST are pain and hopelessness, connectedness, and suicide capacity. The theory is summarized below and illustrated in **Figure 1**.

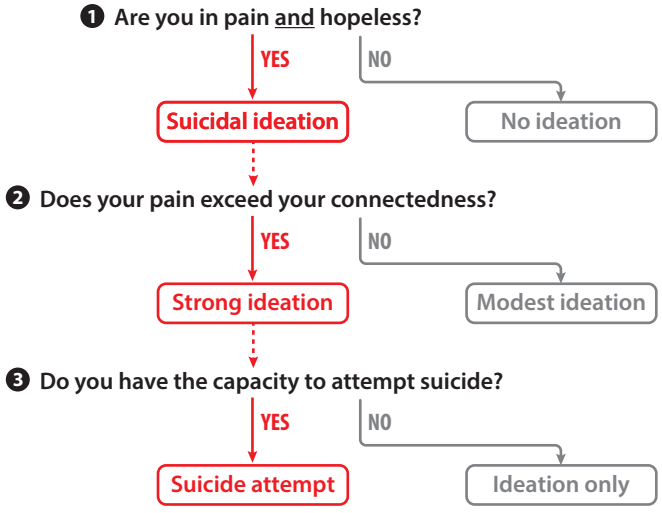

Figure 1

The three-step theory (3ST) of suicide. Key constructs of the 3ST are pain and hopelessness, connectedness, and suicide capacity. Figure adapted from Klonsky & May (2015).

Step 1. Development of Suicidal Ideation

According to the 3ST, the first step toward ideation begins with pain. Pain typically (but not necessarily) means psychological or emotional pain. All people are shaped by behavioral conditioning (Skinner 1953). We engage in behaviors that are rewarded and avoid those that are punished. If someone's experience of living is characterized by pain, this individual is essentially being punished for living, which can decrease desire to live.

It is intentional that the theory does not specify the nature of the pain. Just as any sufficiently aversive stimulus can effectively punish behavior (Mazur 2012), whether it be electric shock, a loud noise, or social exclusion, different sources of pain in daily life can all lead to a decreased desire to live. These can include many of the factors emphasized by others as playing roles in suicidal ideation, such as physical suffering (Ratcliffe et al. 2008), social isolation (Durkheim 1897), burdensomeness and low belongingness (Joiner 2005), defeat and entrapment (O'Connor 2011), and negative self-perceptions (Baumeister 1990), as well as numerous other aversive thoughts, emotions, sensations, and experiences. The first step toward suicidal ideation begins with pain, regardless of its source.

However, pain alone will not cause suicidal ideation. If someone in pain has hope that his situation can improve and that the pain can be diminished, the individual will strive to achieve a future with diminished pain rather than consider suicide. For this reason, hopelessness is also required for the development of suicidal ideation. That is, if someone's life includes considerable pain, and he feels hopeless that the pain will improve, he will consider ending his life. In short, the combination of pain and hopelessness is what leads to suicidal ideation.

This first tenet of the 3ST is consistent with some key recent research findings. First, as reviewed above, studies on suicide motivations find that suicide attempts are prompted by overwhelming pain and hopelessness more than by other factors, including burdensomeness, thwarted belongingness, desire for help or to communicate, and impulsivity; moreover, this pattern has replicated in both clinical and nonclinical samples, and in both adults and adolescents (May & Klonsky 2013, May et al. 2016). In addition, a recent study surveyed two groups—loved ones who lost someone

to suicide, and individuals who had made a suicide attempt requiring hospitalization—about which of 42 variables appeared different in the minutes, hours, or days leading up to the suicide death or attempt (Wintersteen 2014). The list of 42 variables was diverse and included items such as sleep problems, agitation, giving away possessions, family conflict, disengagement from social activities, anger and hostility, and guilt or shame. The results of the investigation were very much in line with the 3ST. Aggregating across both groups, the two factors most commonly observed to precede suicide deaths and attempts were pain and hopelessness, specifically "emotional misery or pain" and "feelings of hopelessness about the future."

Importantly, the 3ST emphasizes that it is the combination of pain and hopelessness that brings about suicidal ideation. Someone in pain but with hope for a better future will continue to engage with life. Likewise, someone who feels hopeless about the future but lives without pain will not feel suicidal. To illustrate this latter case, consider the example of a young man who has recently graduated from university and moved back home with his parents. If this young man lacks a marketable degree, strong grades, and career goals, he may feel hopeless about the future. However, if day-to-day he is comfortable and without pain, if his food and shelter are provided and he has ample free time for friends and activities he enjoys, then he is unlikely to consider suicide. Pain and hopelessness in combination are what lead to suicidal ideation.

Step 2. Strong Versus Moderate Ideation

According to the 3ST, the second step toward potentially lethal suicidal behavior occurs when pain exceeds connectedness. The term connectedness is used in a broad sense. Connectedness can mean connection to other people as well as to an interest, role, project, or any sense of purpose or meaning that keeps one invested in living. The 3ST stipulates that someone who experiences pain and hopelessness and considers suicide will only have moderate ideation (e.g., "Sometimes I think I might be better off dead") if connectedness remains greater than the pain. However, ideation becomes strong (e.g., "I would kill myself if I had the chance") if pain overwhelms any sense of connectedness. Consider the example of a parent who experiences daily pain and hopelessness but who also feels invested in and connected to his or her children. If the parent's connectedness exceeds the parent's pain, this individual may still have passive ideation but will not progress to active desire for suicide. However, if both pain and hopelessness are present, and connectedness is dwarfed by pain, the individual will experience strong ideation and actively consider ending his or her life.

Disrupted connectedness is similar to low belongingness and burdensomeness, as described in Joiner's interpersonal theory, but operates differently in the 3ST. In the interpersonal theory, belongingness and burdensomeness are thought to directly cause suicidal ideation. In the 3ST, the primary role of connectedness is to protect against escalating suicidal ideation in those at risk due to pain and hopelessness. Although disrupted connectedness can contribute directly to pain and hopelessness, it is not viewed as necessary for the development of pain or hopelessness, or for the development of suicidal ideation. From the perspective of the 3ST, many people with suicidal ideation do not have disrupted connectedness, and many with disrupted connectedness do not develop suicidal ideation.

Recent research supports the second step of the 3ST (Klonsky & May 2015). Specifically, in a large online sample of ideators and nonideators, connectedness was protective against ideation in those high on both pain and hopelessness but was negligibly related to ideation in everyone else. Moreover, in this same study we created a difference variable indexing the extent to which pain exceeds connectedness (i.e., we subtracted standardized scores on a measure of connectedness from standardized scores on a measure of psychological pain). As predicted by the 3ST,

this variable robustly predicted ideation in the combined pain and hopelessness group but was a negligible predictor of ideation in everyone else. In short, findings support the 3ST's tenet that connectedness is most relevant to suicidal ideation as a protective factor among those high on pain and hopelessness, especially when one's connectedness exceeds one's pain.

It is important to be clear that the 3ST's emphasis on pain, hopelessness, and connectedness does not suggest that other oft-cited suicide risk factors are unimportant. On the contrary, we believe that numerous disorders (e.g., depression), states of mind (e.g., self-criticism), personality traits (e.g., borderline personality), temperaments/dispositions (e.g., negative emotionality) and experiences (e.g., interpersonal loss) are highly relevant to suicidal ideation. However, the 3ST suggests they are relevant in a particular way, through their contributions to pain, hopelessness, and/or connectedness. For example, depression would be expected to contribute to suicidal ideation to the extent it contributes to pain, hopelessness, and/or disrupted connectedness, but not beyond.

Step 3. Progression from Ideation to Attempts

Most individuals with ideation do not make a suicide attempt; therefore, the final step of the 3ST addresses the conditions under which strong ideation leads to a suicide attempt. We agree with Joiner (2005) that the key determinant is whether the individual has the capacity to make a suicide attempt. Joiner suggests that fear of death is a powerful instinct that makes it extremely difficult to attempt suicide, even if experiencing strong suicidal ideation; thus, individuals can only attempt suicide if they have developed the capacity to overcome this barrier. The 3ST echoes this point but expands it in two ways.

Joiner's theory emphasizes acquired capability. In short, this ability is developed and increased through experiences with painful and provocative events that increase one's tolerance for pain, injury, and death. The 3ST broadens the concept and proposes three categories of variables that contribute to suicide capacity: dispositional, acquired, and practical.

Dispositional refers to relevant variables that we are born with. For example, some individuals are born with higher or lower pain sensitivity (Young et al. 2011). Someone born with lower pain sensitivity will have a higher capacity to carry out a suicide attempt. The concept of dispositional contributors to capacity is supported by recent research from Joiner and others suggesting that capability for suicide is largely genetic (Smith et al. 2012). The second contributor to suicide capacity, acquired variables, refers to the same concept Joiner describes. That is, habituation to experiences associated with pain, injury, fear, and death can, over time, lead to higher capacity for a suicide attempt.

Finally, practical variables are concrete factors that make a suicide attempt easier. There are many kinds of practical factors. For example, someone with both knowledge of and access to lethal means, such as a firearm, could act on suicidal thoughts much more easily than someone without knowledge of and access to lethal means. Practical contributors to capacity may explain findings that anesthesiologists and other medical professionals have elevated suicide rates (Swanson et al. 2003). These individuals have both easy access to the necessary drugs and extensive knowledge of how to end one's life painlessly, which makes their practical capacity extraordinarily high. In summary, dispositional, acquired, and practical factors contribute to the capacity for attempted suicide, and individuals with strong suicidal ideation will only make suicide attempts if and when they have the capacity to do so.

This third step of the 3ST has also been supported by recent research (Klonsky & May 2015). In a US-based online sample, which included large numbers of attempters and ideators, dispositional, acquired, and practical contributors to suicide capacity each related to suicide attempt history, and

they continued to relate to attempt history in analyses controlling for current ideation and for past ideation. Thus, consistent with the 3ST, all three components of suicide capacity matter, and they each predict suicide attempts above and beyond ideation.

FUTURE DIRECTIONS

The adoption of the ideation-to-action framework and the proliferation of ideation-to-action theories of suicide are promising developments that will help meaningfully advance suicide knowledge and prevention. At the same time, key knowledge gaps remain. These gaps limit our ability to understand and reduce suicide and should be the focus of intensive research efforts in the coming years.

First, it is imperative that we better understand progression from suicidal ideation to attempts. As discussed above, the vast majority of oft-cited suicide risk factors predict who is at risk for suicide ideation but not which ideators are at risk for attempting or dying by suicide. Suicide capacity, which is emphasized by all three ideation-to-action theories, does appear to be an important factor, but its predictive ability remains moderate (Klonsky & May 2015). In short, there are unknown factors that explain when and why individuals transition from suicidal thoughts to action, and it is imperative that they be identified and understood.

Related to this point, it is crucial to better understand the time-course of suicide risk. For example, few studies examine the factors that predict suicide attempts in the minutes or hours or days before the attempt (Glenn & Nock 2014; but see Bagge et al. 2013, 2014). There is likely both important overlap and important divergence between the factors that predict suicide at longer (years/months) versus shorter (weeks/days/hours) time scales. This information is particularly important for clinical risk assessment and is also likely to be highly relevant to treatment for individuals with histories of suicidal thoughts and behavior.

A third future direction is to apply evidence-based theories of suicide to risk assessment and treatment/prevention. For example, the 3ST suggests that brief but valid measures of pain, hopelessness, connectedness, and capacity could be combined to form a measure that targets variables most central to suicide risk. Likewise, the 3ST suggests four clear objectives for suicide prevention: decrease pain, increase hope, improve connectedness, and/or reduce capacity.

A final critical knowledge gap concerns the difference between those who make nonfatal and those who make fatal suicide attempts. Most studies on suicide assess those who have experienced suicide attempts or ideation, which means the participants are still alive. It is much more difficult, and thus much more rare, for studies to examine individuals who have died by suicide. An implicit assumption is that studying individuals who have made nonfatal attempts provides knowledge that is also relevant to understanding and preventing suicide death. However, only a minority of attempters die by suicide, and the majority of those who do die by suicide do so on their first attempt (DeJong et al. 2010, Fushimi et al. 2006, Suominen et al. 2004). Therefore, future research must consider and aggressively investigate the possibility that, compared to those who make nonfatal attempts, those who die by suicide have important differences in clinical presentation, motivation, and other characteristics that could meaningfully inform risk assessment and prevention.

SUMMARY POINTS

1. Many commonly cited risk factors for suicide, including depression, hopelessness, most mental disorders, and impulsivity, are best conceptualized as predictors of suicidal ideation.

2. These same risk factors struggle to differentiate those who have attempted suicide from those who have experienced suicidal ideation without making an attempt.
3. The ideation-to-action framework stipulates that (*a*) the development of suicidal ideation and (*b*) the progression from ideation to attempts should be viewed as distinct processes with distinct predictors and explanations and should guide the next generation of suicide research, theory, and prevention.
4. The capacity to attempt suicide (including the capacity to tolerate the fear of pain and death that accompanies suicide attempts) plays a key role in the progression from ideation to attempts.
5. Means restriction is a practical way to reduce capacity and a powerful way to block progression from ideation to attempts.
6. The interpersonal (Joiner 2005), integrated motivational-volitional (O'Connor 2011), and three-step (Klonsky & May 2015) theories are the first theories of suicide to utilize an ideation-to-action framework.
7. The three-step theory posits that (*a*) the combination of pain and hopelessness leads to suicidal ideation, (*b*) ideation escalates if pain exceeds connectedness, and (*c*) dispositional, acquired, and practical contributors to suicide capacity facilitate the transition from ideation to attempts.

FUTURE ISSUES

1. We must better understand when and why suicidal ideation progresses to suicide attempts.
2. Research should clarify the time-course of suicidal ideation and behavior, including the kinds of factors that increase suicide risk in the years/months versus weeks/days versus hours/minutes leading up to a suicide attempt.
3. Evidence-based theories of suicide should be utilized to inform and improve treatments for individuals who are at risk.
4. We must better understand the extent to which fatal suicide attempts have different predictors and risk profiles than nonfatal suicide attempts.

DISCLOSURE STATEMENT

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Compelling evidence that means restriction, especially when it comes to firearms in the United States, saves lives.

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