Suicide Intervention Research: A Field in Desperate Need of Development

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According to the World Health Organization (WHO), an estimated 873,000 people die by suicide every year (news release, 9 October 2006). Worldwide, suicide rates have increased by 60% over the past half century (WHO, 1999); furthermore, suicide attempt rates are 10 to 20 times higher than suicide rates, with no evidence that these rates are coming down (WHO, 2006). Public health care systems clearly have failed to prevent suicide and suicide attempts. The reasons for this failure are undoubtedly complex and not easy to remedy; however, a major factor is the absence of empirically supported interventions for the prevention of suicidal behavior. This absence is a result of both the unbelievable dearth of treatment development and evaluation research as well as inadequate research methodology in many of the studies that are conducted.

The central theory of suicide and suicide prevention that has shaped suicide prevention research to date contends that suicide is a symptom of a mental disease and prevention of suicide requires treatment of the underlying disease. Although an alluring model, to date there is no compelling evidence that the disease model of suicidal behavior has led to effective interventions for suicidal behaviors or has prevented suicide. In addition, no published randomized trial has shown that interventions targeting mental disorders result in significant reductions in suicide attempts or death by suicide. This is despite thousands of randomized clinical trials investigating interventions for schizophrenia, depression, anxiety disorders, and substance abuse, disorders commonly linked to suicidal behaviors. Although many of these trials excluded highly suicidal patients, many did not. In sum, reducing symptoms of schizophrenia, depression, anxiety disorders, and substance abuse has not been shown to reduce the incidence of suicide attempts or suicide.

An alternative theory suggests that suicidal behaviors should be treated as dysfunctional and disordered individual and social behaviors. From this perspective, treatments need to address suicidal behavior and its causes directly. Development of new treatments must take advantage of and translate the sciences of suicidal behavior and behavior change. A number of pharmacotherapy trials have been conducted where a specific medication was selected for its purported effect on suicidal behaviors (Draper & Hirsch reported in Hirsch, Walsh, & Draper, 1983; Meltzer et al., 2003; Montgomery et al., 1979, referred to in Montgomery & Montgomery, 1982; Verkes, Hengeveld, van der Mast, Fekkes, & Van Kempen, 1998). Two have reported significant reductions in suicide attempts compared to control conditions (Montgomery et al., 1979). The best known
of these compared clozapine to olanzapine (Meltzer et al., 2003) and found that clozapine resulted in significantly fewer suicide attempts.

Greater progress has been made in the application of psychological interventions. In a recent review, Katherine Comtois and I reviewed 32 randomized (or almost randomized) published trials of psychological treatments where subjects were selected due to suicidality and the experimental treatment targeted suicidality directly (Comtois & Linehan, 2006). Seven of these interventions were found effective in reducing suicide attempts (Comtois & Linehan, 2006) while one intervention reduced actual death by suicide (Motto, 1976; Motto & Bostrom, 2001).

Three points are of note here. First, given the high death rate due to suicide, it is outrageous that more effort has not been made to develop effective interventions. The belief that we know how to treat suicidal behaviors and the general unwillingness among clinicians, researchers and research review boards to withhold standard, but untested, treatments has been the enemy of finding effective interventions. For example, hospitalization of highly suicidal individuals as a standard-of-care interferes with research to examine the possible iatrogenic effects of hospitalizing suicidal individuals. The belief that hospitalization saves lives is appealing but is, none-the-less, an untested assumption. Second, it is notable that treatments targeting suicidal behavior have been much more effective than those targeting presumed underlying disorders. Our research, however, is limited. Where are the large randomized trials with highly suicidal patients testing whether reducing depression actually does reduce suicidal behavior? Where is even one rigorous, randomized trial documenting that lithium really does reduce suicide among highly suicidal bipolar individuals? We need these research studies. Third, behavioral interventions apparently are more effective than biological interventions. The only treatment ever shown to decrease suicide is the caring letters intervention of Motto (Motto, 1976; Motto & Bostrom, 2001), and the only treatment to reduce suicide attempts that has been replicated across independent sites is dialectical behavior therapy (see Liech, Zanarini, Linehan, & Bohus, 2004). Both of these interventions are behavioral (as opposed to biological) interventions.

We must do better. We must expand and support suicide intervention research. Senior suicide researchers experienced in treatment development and evaluation are necessary to get such a field to grow. In an attempt to improve this situation, my colleagues and I at the Behavioral Research and Therapy Clinics at the University of Washington decided to form a strategic suicide intervention working group aimed at encouraging new and innovative treatment development and rigorous treatment evaluation among suicide investigators. The idea was to mentor the young, challenge the experienced, and find a way to jump-start the field so that over time we could participate in building a respectable field of suicide behavioral interventions research. The many individuals who have died by suicide without effective interventions demand no less of us.

The Suicide Intervention Strategic (SIS) work group met for its first biannual meeting in 2006 at the University of Washington, Seattle. Thirty-one people attended. Graduate students, postdoctoral fellows, and professors either planning or currently conducting suicide research presented new ideas for treatment and debated appropriate treatment development and evaluation methodologies. Under the leadership of Cheryl King, a major outcome of the meeting was a proposal to begin a series of articles addressing methodological and ethical issues in suicide treatment research. The following articles are the first two in this series. We are committed to improving our field and need the best intervention scientists, the most passionate young investigators, the most astute clinician–scientists ready to take on treatment development, and the most fearless ethicists to join us. If you are committed I encourage you to step up and join us.
REFERENCES


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