

Data 'Salvation' for Suicide Research

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Even after spending more than 3 decades working to establish a robust clinical science to study suicide behaviors, APS James McKeen Cattell Fellow Marsha M. Linehan (University of Washington) still is shocked by some of the discoveries she has made over the course of her career.

In the 1970s, when Linehan began examining the methodological problems plaguing early studies of suicide — including the lack of operational definitions, the infrequent use of blind assessment, and the absence of a scientifically validated, reliable measure of suicide itself — she was struck by one improbable conundrum in particular: Many of the studies barred high-risk-for-suicide participants.

“Whoever heard of excluding the suicidal people from their own study?” Linehan asked incredulously at her award address during the 2015 APS Annual Convention in New York City.

In fact, of the paltry 83 randomized clinical trials (RCTs) that had been conducted to measure suicidal behavior as of 2013, 23% excluded high-risk individuals who needed psychiatric treatment for suicide, inpatient hospitalization, or immediate help for suicidality. Those with certain mental disorders, including depression, anxiety, and bipolar disorder, also were rejected.

Given that suicide was the 10th leading cause of death in the United States in 2008 according to the Centers for Disease Control and Prevention as well as the Substance Abuse and Mental Health Services Administration, Linehan says, she finds the relative absence of studies — compared to 1,092 studies for liver disease (the 12th leading cause of death) and 1,049 studies for hypertension (the 13th leading cause of death) — incomprehensible. “We can do better!” she urges. The standards of care for treating suicidal behavior, including standards for hospitalizing suicidal individuals, are based on expert opinion, not on data showing they are correct, she says: “We lock people up for their own good with no data [proving] that it is even helpful.”

Linehan adds that there is no evidence that hospitals are more effective or safer than well-developed outpatient services: In fact, 1,500 people committed suicide while in hospitals in 2003, according to the American Psychological Association, she says. Even more sobering, she adds, is the fact that people with borderline personality disorder (BPD) — the disorder with the highest risk for suicide — are more likely to kill themselves if they have had any emergency room contact (27.9% more likely) or if they have been admitted to inpatient programs (a staggering 44.3% more likely) than if they have not been hospitalized.

“What is amazing about this,” Linehan says, “is no one has looked into this. There is not one randomized clinical trial that has shown that hospitalization of high-risk-for-suicide individuals is therapeutic or keeps anyone alive longer. Rates of postdischarge suicide deaths are hundreds of times greater than in the general population, [which] seems to be ignored. Everyone seems to have assumed that the high rates of suicide among people who have been hospitalized is due to the fact that these individuals were worse off before they were hospitalized, and that that, not the hospitalization, is the problem.” Linehan, on the other hand, is not so sure that explanation accounts for the disparity, although she said she has not yet conducted any studies on the subject.

Because of this pressing concern, Linehan asserts, psychological scientists in the field of suicide research must begin conducting more robust studies to answer the question, “Is sending highly suicidal people to emergency departments and hospitals iatrogenic [accidentally introduced by treatment] rather than therapeutic?” Over the course of her long career, she has encountered several reoccurring issues she believes should be addressed as well as practices she says could be improved upon.

One of the most salient changes Linehan suggests making — and one she hopes will have long-term effects — is to stop “fragilizing” graduate students.

“We treat them as if we can’t give them very-high-risk-for-suicide patients,” she says. “Everybody knows what you learn in graduate school is what you do when you get out. We have completely failed at training graduate students to deal with high-risk-for-suicide, difficult-to-treat patients. If not them, then who? Those who have no training?”

Linehan has remedied this failure with her own graduate students by developing and running a clinical training program in her center, the Behavioral Research and Therapy Clinics Treatment Development Clinic, dedicated solely to treating extremely high-risk-for-suicide multidagnostic individuals.

“My graduate students and I conduct an adolescent program, an adult program, and a ‘friends and family’ program, the latter mostly [composed of] individuals with highly disordered and/or suicidal

relatives who refuse to get treatment,” she says, adding that developing and running this training program is “the thing I’m the very proudest of in my career.”

The program is based primarily on Linehan’s dialectical behavior therapy (DBT), the first evidence-based cognitive behavioral treatment developed for suicidal multidisciplinary individuals with BPD. The acclaimed treatment is now employed by clinicians the world over across diagnoses. According to Linehan’s website, DBT involves a skills training group that teaches behavioral skills including mindfulness; interpersonal effectiveness; emotion regulation; distress tolerance; and, for those with addictions, addiction coping skills. All DBT programs also include individual DBT therapy, phone coaching for real-time coping during difficult situations, and weekly consultations with a therapist team. All team members are responsible for all clients.

Linehan’s DBT treatment is based on the idea that highly suicidal individuals who meet criteria for BPD suffer from pervasive emotion dysregulation as well as an inability to regulate maladaptive behaviors and emit effective behaviors. As it turns out, this pattern also seems to be the case for many suicidal individuals, as well as for nonsuicidal individuals who do and do not meet the criteria for BPD. Linehan says that in her research, “use of DBT skills has been found to mediate reductions in suicidal behaviors.”

Another difficulty that Linehan says impedes suicide research is the resistance from institutional review boards (IRBs) at universities and from other organizations that are reluctant to allow investigators to conduct high-risk suicide studies.

“I am without doubt the world’s best at responding to criticism from IRBs on suicide,” she notes wryly. “This may be, of course, because the University of Washington has one of the world’s best IRBs, which has never even once stopped my research, even though the university has told me I am the highest risk research at the university. I have learned a lot from them. I’m thinking of starting a club called ‘How to Respond to IRBs on Suicide.’” But, she continues, “You can always win with data. That’s the only way to win that I know of. I send them all the data all the time and say, ‘Look, you’re saying this, but here’s the data’ ... Data is our salvation.”

Linehan also hopes to convince the National Institute of Mental Health to conduct an RCT on suicide behavior comparing inpatient and outpatient risk for suicide.

“Constantly studying predictions of suicide is not going to change it,” she says. “First of all, you can’t predict it. Secondly, [even if you could] predict a behavior, that doesn’t mean you’ve got the cause of the behavior, and that’s where the mistakes constantly get made. People think, ‘Since we know what happens beforehand, that must be what’s causing it to happen.’”

Instead, Linehan says, psychological scientists must “focus on teaching behavioral skills and how to deal with the behaviors that make you want to kill yourself, or how to solve the problems that make you want to kill yourself.”

A third obstacle Linehan often encounters when she suggests DBT as a treatment program is the concern that it is too expensive — people cite costs including training, hiring teams of therapists, and conducting group and individual therapy. But, she says, the cost effectiveness of DBT is “unbelievable, primarily

because we keep them out of hospitals, out of emergency departments, and out of therapy once they complete their DBT program. More than five cost-effectiveness studies have been published in the United States and internationally. All have shown very large cost savings with DBT.”

Despite these hurdles, Linehan says she is intent on making sure the field of research on treating suicidal behaviors stays “up and running” when she retires: “I can’t go without a field left behind me. For most of my early years in the United States, I was the only clinical suicide researcher ... That cannot happen to someone again.”

“I just want to call to arms this group. You are scientists. We’ve got all these people dying,” she adds. “We’re going to have to win. Too many people are dying for us not to win.”