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Do Brief Preventive Interventions for Acute Suicide Risk Work?

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Abstract

Suicide is the 10th leading cause of death in the United States and the 2nd leading cause among youth and young adults, aged 10–34 years. There has been an alarmingly increased trend in suicide rates in the US over the past decades from 10.5 to 14.0 per 100,000 or a 33% increase between 1999 and 2017¹. Studies show that 91.7% of people who die by suicide had a health care contact with an emergency room visit, primary care, or outpatient specialty setting within a year prior to suicide, 54% within 30 days, and 29.6% within one week prior to suicide². Thus, the need for effective brief interventions that could be easily applied by a range of clinicians at each one of these settings to reduce risk for suicide is now more important than ever. We thank Doupnik and colleagues³ for their important contribution conducting a meta-analysis on studies addressing brief preventive interventions for acute suicide risk. The results provide valuable information for clinicians, researchers, and health policy makers about whether these interventions work in order to determine if these strategies should be implemented to reduce the public health burden of suicidal behavior.

The studies included in Doupnik and colleagues³ meta-analysis included brief suicide preventive interventions consisting of safety planning, brief contact intervention, coordination of care, and other brief interventions. Safety planning was the most prominently administered brief intervention. In safety planning, the patient and clinician collaboratively develop a plan to help the patient from acting on suicidal urges. In specific, safety plans include the identification of the warning signs that precede a suicidal crisis, strategies to distract from suicidal thoughts, people in their support system whom they can reach out to for help during a suicidal crisis, mental health resources to contact during a suicidal crisis, and steps to make their environment safer from lethal means. Brief contact interventions are used in patients at risk for suicidal behavior following an emergency room visit or hospital discharge and include phone calls, letters, postcards, and handwritten notes to check in with suicidal patients and provide support and reminders about their mental health appointments. Another brief preventive intervention consists of coordination of care and helping at risk patients in scheduling an appointment with a mental health professional

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and reducing the barriers that prevent them from making it to their appointment. Suicidal patients are often non-adherent with treatment recommendations. Studies report only 35% of adult hospital discharges keep an outpatient appointment within 7 days of discharge and 55% keep an outpatient appointment within 30 days^{4,5}. Other brief therapeutic interventions include those focused on enhancing problem-solving skills and delivering components of different therapies such as the functional assessment of self-directed violence from Dialectical Behavioral Therapy and Cognitive Behavioral Therapy, and the use of motivational interviewing techniques to reduce suicide risk and engagement in outpatient mental health treatment.

The meta-analysis by Doupnik and colleagues³ included 14 clinical trials of brief preventive interventions conducted between 2000 and 2019. To be included in this meta-analysis, the trials were brief; consisting of a single in-person encounter, although they could include follow-ups over the phone; measured at least one of the following outcomes of suicide attempt, linkage to follow-up care, and depression symptoms; included a comparison group; and were published in English. The analysis included 4,270 patients with 7 studies measuring attempt, 9 studies measuring follow-up care, and 6 studies measuring depression symptoms. The pooled OR for attempt within 2–12 months following intake showed a significant reduction in risk (OR=0.69, 95% Confidence Interval [CI]: [0.55, 0.87]) over the follow-up period. Studies showed increased linkage to follow-up care (OR=2.74, 95% CI [1.80, 4.17]) a week to 3 months following the intervention. However, there were no significant reduction in depression symptoms 2–3 months later. These results show that brief suicide preventive interventions do work in abating a suicidal crisis and increasing coordination or linkage to care. These results have important clinical implications and should guide us in mobilizing our health care systems and getting them prepared to deliver these type of brief interventions that can potentially save lives and reduce the burden of this public health problem. According to Doupnik and Colleagues³, these estimates correspond to 78 fewer attempts in 2241 patients who were included in the analysis of this outcome. In addition to reducing the morbidity and health care costs associated with suicide attempt, reducing attempts is one step towards reducing risk for death by suicide. Prior history of attempt is one of the most important predictors of suicide, an outcome that was not included in this meta-analysis.

While it is not surprising that these brief interventions did not reduce depression symptoms, we and others showed that the severity and variability in depression symptoms is an important predictor for suicide attempt and it is likely that reduction in depressive symptoms is key to the reduction in suicidal risk⁶. However, interventions including more than a single encounter are needed to result in a sustained reduction in depression symptoms. In addition, most of the interventions included some of the components of safety planning, coordination of care, brief contact, and other brief therapies. A combination of these approaches are likely needed for the long-term reduction in risk for suicide. It is important to note that this meta-analysis did not include several brief interventions that may have required more than a single encounter but are also promising in reducing risk for suicidal behavior and could work in other types of settings^{7,8}. Meta-analyses show a reduction in repeat suicide attempts with intensive care plus outreach and follow-up with brief interventions among attempters^{9,10}.

Future studies are needed to identify whether there is a dose-response relationship between the frequency of delivery of these brief preventive interventions and risk for suicide.

All of these studies show that we have evidence-based treatments in our arsenal to fight the suicide epidemic that work in different settings and different populations. What we need to do next is to implement them at the appropriate point of contact in the health care system and train clinicians to deliver them. However, before delivering an intervention, we need to first embrace, as a medical community, the widespread screening for suicidal ideation in order to identify those at risk. We cannot continue to inadvertently apply the “don’t ask” mindset in our health care systems. We need to break the stigma and the discomfort about asking questions related to suicidal ideation and behavior, which originate from the lack of training and preparedness about the next steps after identification. Together with the potential benefit of ketamine to reduce acute suicide risk and novel treatment targets that could result from genetic and neurobiological studies, the path for suicide prevention is clear and straightforward as long we have the public health policies to support the implementation of effective interventions. As the world is now grappling with the COVID19 pandemic and its potential impact on mental health and the suicide epidemic in the US, we need to be prepared with brief suicide preventive interventions that every clinician could deliver face to face or through telemedicine. This contribution by Doupnik and Colleagues³ could not be more timely. It shows us that available brief interventions do work and can potentially save lives.

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