Intervention reduced suicide attempts among at-risk emergency department patients

April 30 2017

Credit: CC0 Public Domain

In a clinical trial involving nearly 1,400 suicidal patients in the emergency departments of eight hospitals, a team led by Brown University and Butler Hospital psychologist Ivan Miller found that a multifaceted intervention lowered the relative risk of new suicide attempts by 20 percent.

In results published in *JAMA Psychiatry*, emergency department (ED) patients who received the intervention composed of specialized screening, safety planning guidance and periodic follow-up phone check-ins made 30 percent fewer total suicide attempts compared to people who received standard ED care.

"We were happy that we were able to find these results," said Miller, the study's lead and corresponding author and a professor of psychiatry and human behavior at the Warren Alpert Medical School of Brown University. "We would like to have had an even stronger effect, but the fact that we were able to impact attempts with this population and with a relatively limited intervention is encouraging."

A prevention intervention

While suicide prevention efforts such as hotlines are well known, published controlled trials of specific interventions have been much rarer, Miller said. This report was one of several from the Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE) study led by Miller, Professor Edwin Boudreaux of the University of Massachusetts and Dr. Carlos Camargo of Massachusetts General Hospital and Harvard University. This study might be the largest intervention trial conducted so far in the U.S., Miller said. It focused on an especially high-risk group: emergency department patients who said they had engaged in suicidal ideation or had made an attempt within a week before their ED visit.

The trial took place in three phases to create three comparison groups. In the first phase, August 2010 to December 2011, 497 patients received each ED's usual treatment as a control group. In the second phase, September 2011 to December 2012, 377 patients received additional suicide screening. In the third phase, July 2012 to November 2013, 502 patients received the experimental intervention. Those patients received

additional suicide screening from ED physicians, suicide prevention information from nurses and a personal safety plan that they could opt to fill out to be better prepared for times when they might begin to harbor suicidal thoughts again. Over the next year they also received brief, periodic phone calls from trained providers at Butler Hospital who would discuss suicide risk factors, personal values and goals, safety and future planning, treatment engagement, and problem solving.

The intervention was designed to directly involve a designated loved one whenever feasible, as well.

In all three phases, patients were briefly screened for suicidality at the ED and were also followed for a year with periodic assessment phone calls. Regardless of phase, patients who demonstrated a specific suicide risk during assessments were connected with the Boys Town suicide prevention hotline.

The number of suicide attempts and the proportion of people attempting suicide declined significantly in the intervention group compared to treatment as usual. The middle group, which received only additional screening, did not show a significant drop compared to the treatment as usual group.

Suicide attempts were not the only measure the researchers employed to understand the potential impact of the intervention. Fortunately, there were so few deaths by suicide among patients (only five total) that there could be no statistically valid conclusions drawn from that data point. But the researchers also created a broader suicide composite score which included not only attempts and deaths, but also interrupted or aborted attempts, and acts to prepare an attempt. Across the three groups, 46.3 percent of the patients reported one or more of these behaviors, but the relative risk declined significantly among people in the intervention compared to the usual care group (by 15 percent), but not among people

who received screening alone.

While other interventions have also been found to reduce suicide risk, some of the most effective ones have involved providing patients with many hours of psychotherapy.

"This intervention was significantly less costly than most other interventions," he said. The research team is currently engaged in a cost-effectiveness analysis.

He noted that the intervention was associated with significant declines in suicide attempts, even though not every patient engaged in the full intervention (e.g. only 37.4 percent reported receiving a safety plan and nearly 40 percent did not complete a follow-up phone call). The intervention's apparent efficacy also persisted despite the study's ethical design, in which even people in the control phases received suicide prevention counseling that could have prevented an attempt if they presented an urgent need.

Continuing work

In further studies, the ED-SAFE team is looking at whether more intensive safety planning while patients are in the ED could help further. Miller and his colleagues are also conducting further tests of the phone follow-ups with patients from Butler Hospital and the Providence Veterans Affairs Medical Center.

More information: Ivan W. Miller et al, Suicide Prevention in an Emergency Department Population, *JAMA Psychiatry* (2017). DOI: 10.1001/jamapsychiatry.2017.0678

Medical Xpress

Provided by Brown University

Citation: Intervention reduced suicide attempts among at-risk emergency department patients (2017, April 30) retrieved 20 March 2024 from https://medicalxpress.com/news/2017-04-intervention-suicide-at-risk-emergency-department.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.