



RESEARCH REVIEW: SUICIDE PREVENTION AND BRIEF INTERVENTIONS

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INTRODUCTION

Suicide is a global public health issue for which a variety of approaches have been identified for prevention efforts (Cross et al., 2010). This research review offers a variety of perspectives on suicide prevention and brief interventions. Authors of the following set of articles describe ways in which their study findings can be adapted to different contexts. Cross, Matthieu, Lezine & Knox (2010) assessed a gatekeeper training program aiming to teach community members to identify signs of depression or behaviors that put individuals at risk for suicide. They found that a brief gatekeeper training on participating community members increased their observed skills and bolstered their knowledge, skills and attitudes to better identify individuals at risk for suicide and direct them to appropriate services. Similarly, Gysin-Maillart, Schwab, Soravia, Megert & Michel (2016) evaluated the efficacy of ASSIP (Attempted Suicide Short Intervention Program), a patient-centered brief therapy that emphasizes early therapeutic alliance, in reducing suicidal behavior. They found that the low-cost intervention was efficient in reducing the rate of repeat suicide attempts and amount of days spent in the hospital during follow-up.

In turn, Knox, Stanley, Currier, Brenner, Ghahramanlou-Holloway & Brown (2011) described a brief behavioral intervention for suicidal veterans at VA emergency departments, the Suicide Assessment and Follow-up Engagement: Veteran Emergency Treatment (SAFE VET). Evaluation of this intervention design and implementation showed that the model could be adapted to VA and non-VA settings, such as community emergency departments or other urgent care locations. Looking at a brief intervention in reducing suicide mortality among suicide attempters in five low and middle-income countries Fleischmann, Bertolote, Wasserman, De Leo, Bolhari, Botega & Schlebusch (2008) demonstrated that the brief intervention, which included information, feedback, health education and practical advice to raise awareness and impact change, along with follow-up, could be crucial in suicide prevention programs for low- and middle-income countries. Finally, Ward-Ciesielski, Tidik, Edwards & Linehan (2017) focused on non-treatment-engaged individuals with suicidal thoughts, a population often overlooked in the intervention literature. The authors conducted a randomized clinical trial comparing a single-session dialectical behavior therapy skills-based intervention to a relaxation training control condition and found that the two conditions significantly reduced levels of suicidal ideation, depression, and anxiety.

CITATION

Cross, W., Matthieu, M. M., Lezine, D., & Knox, K. L. (2010). Does a brief suicide prevention gatekeeper training program enhance observed skills?. *Crisis*, 31(3):149-59.

ARTICLE 1: DOES A BRIEF SUICIDE PREVENTION GATEKEEPER TRAINING PROGRAM ENHANCE OBSERVED SKILLS?

SUMMARY

Gatekeeper training programs is one approach to suicide prevention that relies on evidence-based efforts. Such programs teach community members (i.e., police officers, teachers, coaches, co-workers) who are able to perform informal detection and provide assistance for those in need, to identify signs and behaviors that put individuals at increased risk for suicide. In this article, the authors assess the impact of a short gatekeeper training on participating community members and their observed skills. The program itself consisted of a one-hour program with a lecture, a 10-minute introductory video, overview booklets and referral cards, and a question-and-answer discussion session.

The study aimed to apply a reliable observational measure of suicide prevention gatekeeper skills by using pre-post changes in observable skills and examine individual variables such as personality or pre-training experience to assess predictors of change in these observed skills. For that purpose, they used measures of declarative knowledge and perceived efficacy; observational rating scale of gatekeeper skills (ORS-GS); predicted skills; and fidelity of actor adherence to script. The 50 participants, who were employed at US universities, were videotaped for skill assessment prior and after their interactions with standardized actors and scenarios for training purposes. **The authors found that the training increased gatekeeper skills, from 10% of participants who met criteria for acceptable gatekeeper skills before training, to 54% after training.** Nevertheless, the authors acknowledge that one limitation of their results is that they do not predict participants' application of these observed skills in the future. However, their work contributes in building an evidence-base for prevention efforts to reduce deaths by suicide while addressing methodological and measurement challenges associated with assessing individual participant behavior during training.

CITATION

Cross, W., Matthieu, M. M., Lezine, D., & Knox, K. L. (2010). Does a brief suicide prevention gatekeeper training program enhance observed skills? *Crisis*, 31(3):149-59.

SUMMARY

Evidence for follow-up treatments reducing suicidal behavior in patients with a history of repeated suicide attempts is limited. The present study therefore evaluates the efficacy of ASSIP (Attempted Suicide Short Intervention Program) in reducing suicidal behavior. ASSIP is a patient-centered brief therapy that emphasizes early therapeutic alliance. In the study, set up at an outpatient clinic of a university hospital of psychiatry, 60 patients were randomly assigned to a regular treatment condition and 60 patients to a regular treatment with ASSIP. Patients included participants at high risk of suicide, with 63% diagnosed with an affective disorder, and 50% with a history of suicide attempts. **In the ASSIP treatment, participants went through three therapy sessions and were contacted regularly with personalized letters over the next 24 months.** Over the 24-month follow-up period, participants completed psychosocial and clinical questionnaires every 6 months. During the follow-up period, researchers measured repeat suicide attempts, suicidal ideation, depression, and health-care utilization. In addition, they looked at the effect of prior suicide attempts, baseline depression, diagnosis, and therapeutic alliance on the study's outcomes.

Results showed that:

1. in total, five repeat suicide attempts were recorded in the ASSIP group compared to 41 attempts in the control group,
2. **ASSIP was associated with an 80% reduced risk of participants making at least one repeat suicide attempt,**
3. ASSIP participants spent 72% fewer days in the hospital during follow-up,
4. higher scores of patient-rated therapeutic alliance in the ASSIP group were associated with a lower rate of repeat suicide attempts.

The authors identified a few limitations to their study, namely missing data and dropout rates--which increased during follow-up (N=4 in the ASSIP group and N=13 in the control group at 24 months). **The authors conclude that ASSIP, a brief, low-cost intervention, was efficient in reducing suicidal behavior.** Replication of findings and large trials in different clinical settings are next steps identified to further establish the efficacy of the program.

CITATION

Gysin-Maillart, A., Schwab, S., Soravia, L., Megert, M., & Michel, K. (2016). A novel brief therapy for patients who attempt suicide: a 24-months follow-up randomized controlled study of the attempted suicide short intervention program (ASSIP). *PLoS Medicine*, 13(3), e1001968.

ARTICLE 3 EMERGENCY DEPARTMENT-BASED BRIEF INTERVENTION FOR VETERANS

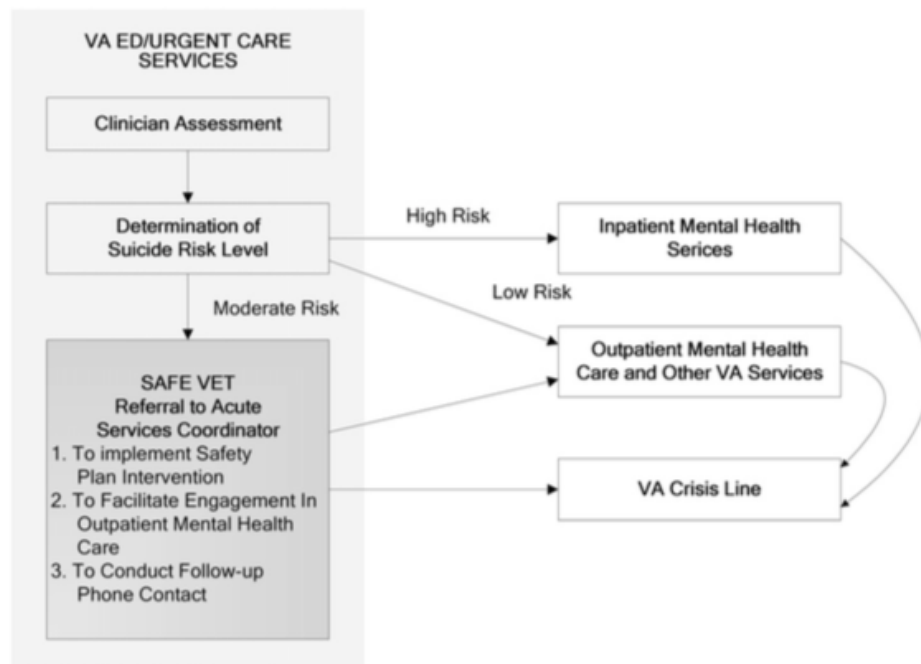
SUMMARY

Veterans Affairs (VA) emergency departments are often the primary—if not only—point point of contact for suicidal individuals in the VA healthcare system. As such, they are a crucial space to help identify at-risk veterans. **Here, the authors describe a brief behavioral intervention for suicidal veterans who seek care at VA emergency departments, called the Suicide Assessment and Follow-up Engagement: Veteran Emergency Treatment (SAFE VET).** Such emergency department-based intervention for suicidal veterans was put in place to respond to a gap in service observed by VA leadership. The primary purposes of the program were to: first, increase emergency mental health service delivery; second, increase identification of veterans at risk of suicide in VA hospital emergency departments; three, provide a brief intervention to reduce risk; and, four, make sure that veterans identified as moderate suicide risk receive timely and adapted follow-up care through an outreach protocol post-discharge.

Four specific evidence-based risk reduction strategies were incorporated in the intervention:

- i. means restriction,
- ii. teaching brief problem-solving and coping skills,
- iii. enhancing social support and identifying emergency contacts, and
- iv. motivational enhancement for further treatment.

SAFE VET added a post-discharge protocol—performed by a new acute services coordinator (ASC)—to facilitate the veteran’s transition to outpatient mental health care and maintain veteran safety during the transition through regular phone calls and a review of the individual’s safety plan. The table below illustrates the care pathway for veterans seeking care at VA urgent care services.



Note. SAFE VET = Suicide Assessment and Follow-up Engagement: Veteran Emergency Treatment.

FIGURE 1—Pathways to care for veterans in Veterans Affairs (VA) emergency department (ED) or urgent care settings.

Evaluation of the program quality and acceptability was measured in terms of percentage of veterans willing to receive the intervention, and the impact of phone contacts after the intervention (i.e., percentage of veterans receiving outpatient mental health services within 6 months or psychiatric services within 14 days). Acceptance of SAFE VET was high among urgent care mental health providers and emergency departments, as well as among patients (ex., 93% of veterans agreed to receive the intervention). **The authors believe that the initial evaluation of this intervention design and implementation showed that the model could be adapted to VA and non-VA settings, such as community emergency departments or other urgent care locations.** Future research directions include a quasi-experimental study comparing the effectiveness of SAFE VET to traditional enhance care.

CITATION

Knox, K. L., Stanley, B., Currier, G. W., Brenner, L., Ghahramanlou-Holloway, M., & Brown, G. (2011). An emergency department-based brief intervention for veterans at risk for suicide (SAFE VET). *American Journal of Public Health, 102*(S1), S33-S37.

ARTICLE 4: BRIEF INTERVENTION AND CONTACT FOR SUICIDE ATTEMPTERS

SUMMARY

The goal of this study is to assess the effectiveness of a brief intervention in reducing suicide mortality among suicide attempters in low and middle-income countries. Because of the statistical rareness of completed suicides, large numbers of suicide attempters are needed to demonstrate the effectiveness of an intervention in terms of a reduction of completed suicides. The authors addressed this challenge by combining data from different sites that had used the same research protocol. Medical staff in emergency units in eight hospitals located in Brazil, India, Sri Lanka, Iran, and China identified suicide attempters (N= 1867) between 2002 and 2005 and randomly assigned them to a control (treatment as usual) or intervention group (treatment as usual with a brief intervention and contact (BIC), with patient education and follow-up).

The intervention relied on research demonstrating, first, **that it is possible to reduce suicide rate in populations at risk by staying in touch regularly and in the long term with patients,** and second, that alcohol-related interventions were efficient when including information, feedback, health education and practical advice to raise awareness and impact change. A questionnaire—translated, culturally adapted and pilot-tested for content validity—was also used to assess participants across all sites. It contained sociodemographic items, information about the current suicide attempt, a set of clinical information (i.e., mental and physical health status, traumatic experiences, alcohol and drug use) and a series of self-reported scales.

A total of 91% of participants completed the study, and the outcome measure was death from suicide at 18-month follow-up. **The BIC group reported significantly fewer deaths from suicide (0.2% in the BIC group and 2.2% in the control group).** The findings showed that the brief intervention, followed by systematic long-term contact after discharge from emergency departments can positively influence and prevent subsequent death from suicide after 18 months. In this case, **the authors believe that BIC functions like psycho-social counseling, in that it provides temporary social support for those who do not have a support network.**

The authors report several limitations in the study: i) the taboo of suicide led to prompt departures of individuals from the emergency department before their case was open, ii) there were differences in sample sizes across sites, iii) alternative sources (ex., official mortality statistics) were not available in all sites and researchers relied on reports by informants, and iv) the original program design did not include a cost effectiveness component, which would have allowed researchers to track services and resources used by study participants. Despite these limitations, the authors conclude that this intervention, brief and low-cost, could be crucial in suicide prevention programs for low- and middle-income countries.

CITATION

Fleischmann, A., Bertolote, J. M., Wasserman, D., De Leo, D., Bolhari, J., Botega, N. & Schlebusch, L. (2008). Effectiveness of brief intervention and contact for suicide attempters: a randomized controlled trial in five countries. *Bulletin of the World Health Organization*, 86, 703-709.

ARTICLE 5: COMPARISON OF TWO BRIEF INTERVENTIONS FOR SUICIDAL INDIVIDUALS

SUMMARY

The authors of this article started by presenting a disparity: **the fact that non-treatment-engaged individuals with suicidal thoughts are often overlooked in the intervention literature, even though the literature also shows that most individuals who die by suicide were not involved in any treatment before their death.** Because the individuals recruited for intervention studies tend to already be engaged with treatment providers, the authors posit that other individuals may therefore be neglected and represent a group that could benefit from more empirical work. Here, the authors conducted a randomized clinical trial comparing a single-session dialectical behavior therapy skills-based intervention to a relaxation training control condition with 93 non-treatment-engaged participants.

The study consisted of one in-person assessment, an intervention protocol, and a three month-long period of phone interviews to measure suicidal ideation, emotional dysregulation, and coping skills. Both interventions were administered by three masters' level therapists on a one-on-one basis. **The Dialectical Behavior Therapy Brief Suicide Intervention (DBT-BSI) lasted 45-60 minutes and presented participants with five DBT skills: mindfulness, mindfulness of**

current emotions, opposite-to-emotion action, distraction, pace of breathing, and progressive muscle relaxation. Strategies were explained to the participant and sometimes practiced during the session. The control, Relaxation Training (RT), lasted 45-60 minutes and provided immediate reduction in distress through relaxation practices.

Outcome measures for the study included suicidal ideation, emotional dysregulation, skills use, depression, anxiety, treatment utilization, and self-injurious behaviors. Overall, 83% of the DBT-BSI group and 68% of the RT group completed the study. Although no significant differences were noted between the two groups, **the results showed that the two conditions significantly reduced levels of suicidal ideation, depression, and anxiety.** About 51% of the participants contacted mental health services, and 23% started psycho- or pharmacotherapy during follow-up.

Some limitations are mentioned by the authors, namely that the similarity between both interventions rendered the detection of differences between conditions difficult with the sample size researchers used. Nonetheless, one encouraging fact was that half of the subjects reached out to other mental health services during follow-up--which suggests, to the authors, that brief interventions can be promising when dealing with a population that is difficult to reach because uninterested or unengaged with mental health treatment. The authors recommend investigating long-term change through longer interventions in the future.

CITATION

Ward-Ciesielski, E. F., Tidik, J. A., Edwards, A. J., & Linehan, M. M. (2017). Comparing brief interventions for suicidal individuals not engaged in treatment: A randomized clinical trial. *Journal of Affective Disorders, 222*, 153-161.

CONCLUSION

Suicide is a major public health challenge that affects the entire world. This review of research presented five empirical articles that offered a number of perspectives on the outcomes and effectiveness of suicide prevention programs and brief interventions. First, Cross et al (2010) evaluated a gatekeeper training program—currently one of the most popular initiatives for suicide prevention—finding that the training increased participants’ skills and knowledge and attitudes around suicide prevention. Second, Gysin-Maillart and colleagues (2016) investigated

the effectiveness of a brief intervention that emphasizes “early therapeutic alliance,” finding that the low-cost intervention reduced the rate of suicide attempts. Third, responding to a critical need across the U.S., Knox et al (2011) described how a brief intervention may support suicidal veterans. This study demonstrated that the model could be adapted in VA and non-VA settings. Fourth, Fleischmann and colleagues (2008) conducted a multi-site study of a brief intervention, finding that this information, feedback, and advice is a crucial element in suicide prevention programs for low and middle-income countries. Finally, Ward-Cieselski et al (2017) explored the effectiveness of a skills-based intervention, finding that it was effective in reducing suicide ideation, depression, and anxiety.

AUTHOR INFORMATION

Benjamin Gleason, PhD is the Director of Applied Research for the Prospectus Group. He earned a PhD in Educational Psychology & Educational Technology from Michigan State University, researching how to best support communities of learners through educational technology. Before academia, Benjamin has worked in youth and adult-serving learning spaces for almost fifteen years, from designing youth-initiated community service projects and teaching high school in Richmond, California, to working as a university instructor in Guatemala. Benjamin is also a founder of the Prospectus Group.

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