at home and risk of suicide: a study of protective factors in a nationally representative sample. *J Epidemiol Community Health.* 2004;58(10):841–848.

52. Kapusta ND, Etzersdorfer E, Krall C, Sonneck G. Firearm legislation reform in the European Union: impact on firearm availability, firearm suicide and homicide rates in Austria. *Br J Psychiatry*. 2007; 191:253–257.

53. Marinho de Souza MF, Macinko J, Alencar AP, Malta DC, de Morais Neto OL. Reductions in firearm-related mortality and hospitalizations in Brazil after gun control. *Health Aff (Millwood)*. 2007;26(2):575–584. Rich CL, Young JG, Fowler RC, Wagner J, Black NA. Guns and suicide: possible effects of some specific legislation. *Am J Psychiatry*, 1990;147(3):342–346.

 Goldney RD. Suicide in Australia: some good news. *Med J Aust.* 2006;185(6):304.
Beautrais AL, Fergusson DM,

Horwood LJ. Firearms legislation and reductions in firearm-related suicide deaths in New Zealand. *Aust N Z J Psychiatry*. 2006;40(3):253–259.

57. Ajdacic-Gross V, Killias M, Hepp U, et al. Changing times: a longitudinal analysis of international firearm suicide data. Am J Public Health. 2006;96(10): 1752–1755.

58. Ludwig J, Cook PJ. Homicide and suicide rates associated with implementation of the Brady Handgun Violence Prevention Act. *JAMA*. 2000;284 (5):585–591.

59. Conner KR, Zhong Y. State firearm laws and rates of suicide in men and women. *Am J Prev Med.* 2003;25(4): 320–324.

60. Stone DH, Jeffrey S, Dessypris N, et al. Intentional injury mortality in the European Union: how many more lives

could be saved? *Inj Prev.* 2006;12(5): 327–332.

61. Papadopoulos FC, Skalkidou A, Sergentanis TN, Kyllekidis S, Ekselius L, Petridou ET. Preventing suicide and homicide in the United States: the potential benefit in human lives. *Psychiatry Res.* 2009;169(2):154–158.

62. Kaplan MS, McFarland BH, Huguet N. Characteristics of adult male and female firearm suicide decedents: findings from the National Violent Death Reporting System. *Inj Prev.* 2009;15(5):322–327.

Using Science to Improve Communications About Suicide Among Military and Veteran Populations: Looking for a Few Good Messages

Concern about suicide in US military and veteran populations has prompted efforts to identify more effective prevention measures.

Recent expert panel reports have recommended public communications as one component of a comprehensive effort. Messaging about military and veteran suicide originates from many sources and often does not support suicide prevention goals or adhere to principles for developing effective communications.

There is an urgent need for strategic, science-based, consistent messaging guidance in this area. Although literature on the effectiveness of suicide prevention communications for these populations is lacking, this article summarizes key findings from several bodies of research that offer lessons for creating safe and effective messages that support and enhance military and veteran suicide prevention efforts. (Am J Public Health. 2013;103:31-38. doi:10.2105/ AJPH.2012.300905)

Linda Langford, ScD, David Litts, OD, and Jane L. Pearson, PhD

FROM 2006 TO 2010, THERE

were more than 1300 suicide deaths among members of the United States military, with increasing rates in the Marines and Army.^{1,2} Some studies also suggest that suicide rates are higher among veterans than among the general population, although findings are mixed.3,4 In response, various expert panels have conducted reviews and released reports with recommendations for strengthening suicide prevention efforts among military and veteran populations.^{1,5,6} Citing the multifactorial causality of suicidal behavior and the evidence that comprehensive interventions can successfully reduce suicide,^{7,8} these reports advocate for multiple, coordinated interventions to reduce risk, promote protective factors, and enhance overall wellness, skills, and resiliency.

Each of these reports emphasizes the importance of public communications (i.e., messaging). For example, two of the 18 recommendations issued in the 2010 report of the Department of Defense (DoD) Task Force on the Prevention of Suicide by Members of the Armed Forces include messaging components: "develop strategic communications that promote life, normalize help-seeking behaviors, and support DoD suicide prevention strategies" and "reduce stigma and overcome military and cultural leadership barriers to seeking help."¹ Similarly, one of the eight findings outlined in the 2008 report of the US Department of Veterans Affairs (VA) Blue Ribbon Work Group on Suicide Prevention in the Veteran Population is as follows: "The VA should continue to pursue opportunities for outreach to enrolled and eligible veterans, and to disseminate messages to reduce risk behavior associated with suicidality."6

These reports also describe deficiencies in communications efforts. The DoD report revealed that messaging often fails to promote effective solutions and may contribute to the problem:

Messages from senior leaders regarding suicide, suicide prevention, resilience, health, and readiness frequently do not sufficiently support—and sometimes significantly detract from—suicide prevention efforts. The news media commonly report on suicide in ways that contribute to suicide risk.¹

Specific problems include using talking points that suggest military suicides are more common than they actually are, that reflect a sense of hopelessness about solutions, and that miss opportunities to promote positive prevention messages.

According to the VA report, "Efforts to improve accurate media coverage and disseminate universal messages to shift normative behaviors to reduce population suicide risk behavior are not being fully pursued."⁶ Specifically, the authors noted that media coverage may unintentionally discourage veterans from seeking services. Although little research has analyzed this message content

systematically, one study in which newspaper reports on military and civilian suicide deaths were compared showed that articles about military or veteran suicides were more likely to mention failed psychological treatment.⁹

Importantly, the DoD and VA create only a small proportion of messages disseminated about military and veteran suicide. The news media are important message sources. Communications are created by each service, suicide prevention coordinators, and other veteran- and military-related organizations. Still other materials and messages are conveyed by civilian entities operating at multiple levels.

Given this landscape, there is a need for dissemination of research-based messaging guidance that all stakeholders can use to improve military and veteran suicide communications. Although research on message effectiveness for these audiences is lacking, a robust science base exists that can inform these efforts. We provide an overview of findings from four areas of research that can guide messaging efforts: suicide-related and mental health-related campaigns, effective health communications, mental illness stigma, and safe messaging for suicide prevention.

SUICIDE- AND MENTAL HEALTH-RELATED CAMPAIGNS

Evaluations of mental health– related and suicide-related awareness and information campaigns are relatively rare and generally methodologically weak. Reviews indicate that some campaigns achieve short-term improvements in knowledge and attitudes but show limited behavioral changes when used alone.^{10–12} Better results occur when media are combined with other programs.^{10,13,14} For example, implementation of a four-level intervention that combined media with training and service components was associated with reductions in suicide in two German cities.¹⁵

Greater success also is associated with repeated exposure to messages through multiple types of media and with locally organized efforts that tailor messages to homogeneous populations.¹⁰ Dumesnil and Verger noted that some campaigns are too ambitious, targeting entire populations, addressing many types of disorders, and pursuing numerous objectives.10 They recommended focusing campaign goals, using diagnostic surveys and theoretical models to guide planning, increasing the specificity and clarity of messages, and using appropriate indicators to assess impact.

Some evidence suggests that informational messages promoting relatively straightforward actions can change behavior in broad populations.16 Two local US campaigns publicizing crisis lines saw concomitant increases in call volume, although they were unable to verify whether the additional calls resulted from the campaign or represented high-risk individuals.^{17,18} More complex messages may be effective under certain circumstances. In one study, emergency department personnel exposed to a poster and two-page triage guide increased selfreported knowledge and skills with respect to detecting and managing suicide risk. Importantly, the content was carefully designed and tested with the audience to be highly relevant and actionable in that context, rather than providing general information.19

Several reviews recommend that suicide-related messaging efforts be guided by the broader literature on health communications and social marketing.^{10,12,14,20,21} The next section provides an overview of lessons from that research.

PRINCIPLES OF EFFECTIVE HEALTH COMMUNICATIONS

An extensive literature describes key lessons for effectively using communications to influence health. A 2006 review concluded that well-designed campaigns can yield small to moderate effects across large populations "*on the condition* that principles of campaign design are attended to."^{22(p24)} These principles provide guidance about the process required to create effective messages as well as important considerations at each stage.

Strategic Planning

Communications are not a strategy, but rather a set of tools that can be used to support suicide prevention goals in numerous ways. Systematic planning is essential to ensure that messaging is used strategically and effectively.^{20,23–25} In addition to diverse messengers, there is considerable heterogeneity between and within military and veteran populations.^{26–29} Planning enables messages to be tailored to specific goals, audiences, and contexts.

Numerous communications planning models exist, each outlining a similar set of sequential steps.^{23,30–33} Key tasks involve analyzing the situation, deciding how communications can support overall goals, defining specific audiences and behaviors, creating tailored messages, disseminating messages effectively, and conducting assessments. Using research to inform planning decisions at each stage (known as formative research) is essential.^{22,23,34,35} Although planning may be more extensive for large-scale campaigns, these steps represent a set of strategic questions for any messaging effort. The answers will vary according to message developer, scope of the effort, goals, and other factors.

Analysis and Goal Setting

The initial strategy development stage often is overlooked. More effective communications are grounded in broad-based analyses that define the problem to be addressed, outline its causes and effective solutions, and identify existing efforts and gaps.20,23,24 Research has shown that messages are more successful when they are developed as part of an overall prevention plan and work in sync with broader change goals.^{24,36} Military and veteran suicide prevention encompasses many goals, for example increasing life skills and resiliency, promoting social connectedness, increasing help seeking, identifying and assisting individuals at risk, providing crisis services, increasing access to care, providing evidence-based care, and restricting access to lethal means.^{1,5-7} Such analyses help to clarify priority goals and identify the changes needed to accomplish them.

Communication objectives should support these same goals and changes. Because more successful messages often work in sync with other programmatic efforts, a key question for message planners is, Which goals and activities can be enhanced by messaging?^{23,24,36} Objectives should be specific and measurable.^{23,35} Many campaigns seek to "raise

awareness" of suicide; however, as noted, such a vaguely defined objective is ambiguous and unlikely to result in behavior change. Objectives should be closely tied to a specific behavior and its determinants (e.g., to promote help seeking, "increase the belief that counseling will help rather than hurt one's career").

One consideration is how best to leverage change. Many media campaigns target individuals' knowledge, attitudes, and behaviors. However, communications can also promote health by altering environmental factors such as public policies or organizational structures.^{23,24,37} For example, messages could be used to build support for a policy designed to increase prevention funding¹⁴ or to promote an organization's capacity to serve veterans. In addition, communications can enhance specific programs. For example, gatekeeper training could be augmented by messaging that reiterates the training content, provides supplemental resources, or cues participants to act. For example, the Army distributes ACE wallet cards that summarize the actions (Ask, Care, Escort) taught in the training. The VA and other services use similar approaches; for example, Navy cards reinforce their ACT (Ask, Care, Treat) mnemonic. Ideally, communications should support evidence-based programs and services.

Messaging decisions will be shaped by the scope of the organization's work. For example, the VA funded a campaign to promote the availability of the Veterans Crisis Line, a national hotline and chat service that provides crisis intervention and serves as a conduit to care. A local behavioral health clinic conducting a similar analysis might decide to change its communications objective from increasing knowledge about suicide to publicizing the availability and efficacy of its evidence-based treatments. Before promoting a program or service, planners should ensure that it has the capacity to meet the resulting demand.³⁸

Target Audiences and Behaviors

The next step is to define who needs to act and what they need to do.²⁵ The choice of audience is defined by who is well positioned to take action to achieve the established goals and objectives. Some messages take a direct approach (e.g., targeting veterans to call the VA). The best route of influence, though, may be indirect, for example targeting service members' or veterans' behavior through intermediaries such as friends, family members, coworkers, supervisors, or providers, or using messaging to prompt constituents to call policymakers.^{37,39,40} In this case, the target audience is the intermediary (e.g., supervisors), and the desired behavior change must be appropriate to that audience (e.g., recognize and address early signs of stress in subordinates).

Messages are more effective when they are directed to well-defined audience "segments" rather than the general public.^{22,23,30,41} Segments should be relatively homogeneous in their knowledge, attitudes, values, motivations, and other factors related to the desired behavior, and they should be reachable through similar media or other channels. The analysis often will suggest potential audience segments that can be refined and prioritized after additional audience research (as described in the next step). For military or veteran populations, possible segmentation factors include service branch, service era, deployment or postdeployment

stage, rank, or location. Again, the deciding question is whether subgroup differences suggest the need for unique messages or channels.

It is also important to articulate the desired behavior change. If audiences are unwilling to engage in a behavior or the determinants are difficult to change, it may be advisable to choose a different behavior rather than seeking more persuasive ways to sell an unrealistic action.³⁰ Not all problems can be fixed by messaging.

Audience Research

Before developing messages, it is critical to conduct research to understand the problem and desired behavior from the audience's perspective. Methods include literature reviews, surveys, focus groups, and interviews.²³ The social marketing literature stresses the importance of highlighting benefits valued by the "customer" (the intended audience) that offset the tangible or intangible costs of taking action.^{30,42} Other factors to explore include the audience's current beliefs and attitudes about the problem and the behavior, their general values and interests, and their perceptions of how others view the behavior.^{23,34} It is the audience's current beliefs and perceptions-whether accurate or inaccurate-that shape their behavior. More effective messaging uses formal behavior change theories as an analytic framework to identify a full range of behavioral influences.^{43–47} For example, the DoD-funded Real Warriors Campaign used the Health Belief Model, a theory that describes factors influencing health behavior, to guide its research about barriers to and motivators of help seeking in military populations.48

Message developers should also identify the audience's usual and

trusted information sources and media usage. When multiple audiences are targeted, each audience and behavior should be analyzed separately.²³ Even if funds are lacking, planners should pursue creative ways to learn about and obtain feedback from audiences. Examples might include conducting intercept interviews at public places, speaking to existing groups, adding questions to surveys, or soliciting feedback through personal contacts.

Creative Brief and Evaluation Plan

The previous steps lay the groundwork for designing and implementing effective concepts, messages, and materials.23,31-33,49 Experts recommend summarizing the background work into a communication strategy statement or creative brief that identifies the intended audience and behavior, the audience's perceived benefits and barriers, and supportive statements that make the benefits credible. It also lists possible settings, channels, and activities and describes the most appealing tone, look, and feel for that audience.^{23,24,31} Program evaluation is a particular gap in the suicide messaging field.^{10,14,20} Thus, the plan should also describe how the messaging will be assessed, including measurement of process, outcomes, and possible negative effects.^{20,23,31,35}

Design and Delivery of Messages and Materials

Messages and materials should carry out the strategy and promote action.⁵⁰ Message content should be relevant, credible, and culturally appropriate for the target audience.^{22,23,31} More effective materials include a "call to action" highlighting the desired behavior, why it is being

advocated,⁵¹ and the information needed to act.

More persuasive messages use the formative research to motivate action by conveying personally meaningful incentives to the audience. A common motivational approach emphasizes the dire negative consequences of inaction. However, experts caution that fear appeals can backfire.⁵² Similarly, there is no evidence that statistics about the problem motivate behavior change. Recommended approaches include persuading the audience that they can perform the recommended action and that the action will be effective (efficacy messages), reducing perceived barriers to the behavior, promoting personally valued benefits of acting, and modeling needed skills.^{23,29,31} Images, sounds, and spokespersons should appeal to the audience and match message objectives.53

Channels, or the means used to convey the message, should correspond to the nature of the message and behavior, available resources, channel strengths and weaknesses, and audience preferences.^{22-24,31} For example, although 99% of younger veterans use the Internet, this percentage drops to 34% to 46% among those serving in 1955 or earlier.⁵⁴ Thus, reaching older veterans would require additional channels, such as mass media or organizations. Some channels may be unsuitable for certain efforts. For example, texting or e-mail might pose confidentiality concerns, whereas message boards require resources to monitor for crisis communications.⁵⁵ More effective campaigns achieve sufficient and repeated exposure to messages through a mix of channels.^{22,24,56} Core messages should be consistent and reinforced across channels.23,31

Pretesting at Each Stage

It is essential to test concepts, messages, and materials with the audience before finalizing them to assess whether they accurately convey the intended meaning.^{22,23,42} Although audience input is invaluable, experts caution against taking all feedback uncritically, noting that focus groups may favor approaches that are not supported by research.^{24,53} Similarly, professional designers unfamiliar with behavior change research may create materials that undermine the message.^{24,53} Pretesting assesses whether messages and materials are understood by the audience and accomplish the communications objectives.

In addition to these general principles, there are unique considerations associated with suicide messaging. Two such considerations are stigma and safety issues.

STIGMA

Because mental illness stigma is a barrier to treatment use, some communications efforts aim to reduce stigma.⁸ These messages should be informed by the literature on stigma and related interventions. This research shows that stigma is multifaceted. For example, Corrigan et al. described cognitive, emotional, and behavioral components of stigma as follows.⁵⁷⁻⁵⁹

Stereotypes are collectively shared beliefs about a group (e.g., individuals with mental illness are unemployable). Prejudice occurs when people endorse a stereotype and generate negative reactions (yes, they are weak and unreliable). Discrimination is the associated behavioral response (I won't hire them). There are three main forms of stigma. Public stigma refers to beliefs, attitudes, and behaviors in the broader population, whereas self-stigma is the internalization of negative beliefs by group members, resulting in a diminished selfconcept and failure to pursue goals. Label avoidance occurs when individuals do not acknowledge symptoms or seek services to avoid the negative consequences of being labeled with a diagnosis.⁵⁹

Studies involving military and veteran populations underscore the multifaceted nature of stigma. For example, Hoge et al. found that service members who met criteria for a mental disorder were more likely than service members who did not meet these criteria to endorse barriers to service seeking, including several stigma-related factors.60 Some barriers reflected attitudes (e.g., "I would be seen as weak"), whereas others signaled fear of discrimination (e.g., "It would harm my career"). Notably, many barriers reflected not stigma but logistical or structural issues (e.g., difficulty getting time off from work or scheduling an appointment). Subsequent studies have differentiated between stigma and barriers to care, which is a critical distinction in implementing appropriate interventions.61-63 Other research describes help-seeking behavior as a multistage process: recognizing the need for help, believing symptoms are treatable, weighing costs and benefits of help-seeking, seeking care, and persisting with treatment. At each stage, behavior is influenced by both stigma-related and other factors, including beliefs about treatment effectiveness, availability and logistics of treatment, and others.64-66

Stigma interventions have taken 3 main forms: protest, education, and contact.⁵⁷ Protest, or criticizing problematic representations of mental illness, can alter corporate or media behavior but may lead to "rebound" and worsening of prejudicial attitudes. Education challenges inaccurate stereotypes with factual information. Outcomes from education alone typically are limited to short-term attitudinal changes.^{58,67} Contact approaches involve face-to-face interaction with individuals in the stigmatized group (e.g., those using psychological services). Of the three approaches, contact appears to involve the greatest likelihood of sustained attitude and behavior change, although more testing of media-based interventions is needed.^{57,68,69}

As with communications generally, experts recommend that anti-stigma messages address defined audiences with tailored messages.⁶⁷ While working through the strategic planning process described earlier, planners can use the stigma literature as a framework for deconstructing this concept and identifying specific stigma reduction goals. Again, these decisions are shaped by organizational context and mission and current efforts. One organization might address workplace discrimination against veterans with real or perceived mental health issues, whereas another might target families of service members in the "label avoidance" category with information about symptoms and skills to encourage seeking help.

Once planners have established a goal, audience, and behavior, the stigma literature can help pinpoint specific barriers to action and guide effective interventions. For example, if research showed that supervisors were concerned about the combat readiness of personnel receiving counseling, messaging might convey stories of individuals whose work performance improved after receiving help. Messaging to address label avoidance should deemphasize psychiatric diagnoses and jargon, for example by creating messages in which individuals describe in their own words their symptoms

and the benefits of treatment. The VA's recently launched Make the Connection campaign uses this approach, featuring veterans telling their stories about acknowledging and receiving help with mental health and other issues.

SAFE MESSAGING FOR SUICIDE PREVENTION

Careful planning of suicide messaging is particularly critical because of the potential for harm. Research has shown that certain types of media coverage of individual suicides may spur imitative effects or "contagion" among vulnerable individuals by modeling or glamorizing suicidal behavior.70-72 Increased risk is associated with the amount, duration, and prominence of coverage; details about suicide methods or locations: stories about well-known individuals; simplistic explanations; and information that encourages identification with the decedent.⁷²⁻⁷⁵ One Austrian study revealed that newspaper articles emphasizing suicide research and statistics, which included characterizing suicide as an epidemic and reporting myths, were positively associated with suicide rates.⁷⁶ To address this problem, countries including the United States have created recommendations for media reporting on suicide, and evidence suggests that these recommendations can improve reporting practices.^{70,77-79} Recommendations should be shared with news outlets and used when crafting talking points about military and veteran suicide.

Experts have translated these media recommendations into a list of dos and don'ts for information and educational materials about suicide.⁸⁰ Practices that may be harmful in suicide materials ("don'ts") include the following: "normalizing" suicide by presenting it as a common event, glorifying or romanticizing people who have died by suicide, focusing on personal details of people who have died by suicide, presenting overly detailed descriptions of suicide methods, and presenting suicide as inexplicable or resulting from stress only. (The full document, including a list of "dos," is available at the Suicide Prevention Resource Center's Web site.⁸⁰)

The recommendation to avoid normalizing suicide bears some elaboration. Social norms are unspoken rules about what is "normal" in a given social context.44 The literature differentiates between descriptive norms, or perceptions of what most people do (behaviors), and injunctive norms, which describe perceptions about what the majority finds acceptable (attitudes). People often misperceive norms, overestimating unhealthy behaviors and attitudes and underestimating healthy norms.⁸¹ Messages may contribute to problems by reinforcing misperceptions; conversely, they can convey existing healthy norms to correct misperceptions and support positive behavior.

Messaging about military and veteran suicides often conveys problematic norms. News is a story-driven medium, and many of the current narratives portray intractable problems, failed interventions, and individual suicides.⁸² Educational messages frequently emphasize the extent of the problem. Although suicide is unquestioningly devastating, disproportionate attention to negative stories may normalize suicidal behavior and create hopelessness about solutions, thereby reinforcing the perception among distressed individuals that suicide is the only answer and leaving potential

helpers discouraged or uncertain about what to do. 72,83

Notably, these guidelines address public messaging, or content that will be seen by audiences that include individuals at risk for suicide. Some messages are aimed more narrowly at decision makers, for example policymakers or providers. In these contexts, it may make sense to convey the tragedy of suicide or provide statistics about suicidal behavior among constituents or patients. However, it is advisable to weigh the potential benefit against the possibility that the messages will be viewed by individuals at risk or disseminated more broadly.

As mentioned, the don'ts of safe messaging are matched by a corresponding list of dos, that is, content that may be helpful in designing prevention materials.⁸⁰ This list reflects general types of content supportive of prevention goals, such as providing information about available help and emphasizing the effectiveness of treatment. As noted, this content should be tailored to specific audiences and goals.

To our knowledge, only one study has assessed whether certain media content is associated with a reduced risk of suicide. In the earlier-mentioned Austrian study of newspaper stories, the "mastery of crisis" category-describing individuals with suicidal ideation who adopted coping strategies other than suicidal behavior-was negatively associated with suicide rates, although these articles also involved the least harmful reporting practices.⁷⁶ Surprisingly, the "expert opinion" category, which included stories providing contact information for services, was positively associated with suicide. However, these articles also tended to include harmful content, such as stating that suicide-related

societal problems are increasing.⁷⁶ More research is needed to clarify these relationships; it is plausible that resources would be protective when coupled with mastery of crisis stories that model coping. One implication is that experts should avoid diluting helpful information with harmful messaging.

TOWARD MORE STRATEGIC AND EFFECTIVE MESSAGING

Fortunately, the problem of military and veteran suicide is mobilizing broad-based responses across governments, organizations, and communities. All stakeholders must see themselves as messengers and engage in careful communications planning based on the best available science. Existing research suggests guidance for developing messages that are more likely to contribute positively to military and veteran suicide prevention efforts and less likely to be counterproductive or harmful.

Systematic planning is essential. Message developers who are unfamiliar with the principles of effective communications can use the excellent step-by-step planning guides that exist.^{23,31,32} The principles can help guide decision making regardless of the scope, budget, or level of the communications effort. Any messaging can benefit from establishing specific and realistic communications goals and articulating how these efforts complement or reinforce other program components; selecting a target audience and identifying a call to action; designing messages based on the audience's current behaviors, beliefs, values, and barriers to action; pretesting messages and materials; ensuring adequate exposure to messages; and assessing results.

During this process, message developers should attend to unique suicide messaging issues. The stigma literature can help planners select specific stigma reduction goals, audiences, and behaviors and identify stigmarelated and non-stigma-related barriers to action. Avoiding clinical diagnoses in favor of lay language may be important when addressing label avoidance. Antistigma efforts can employ contact approaches-real stories of help and coping. This approach also avoids linking military or veteran populations with suicide. These associations may inadvertently increase stigma, which can feed discrimination and discourage help seeking. Similarly, rather than reiterating the extent to which stigma is a problem, we recommend focusing on solutions to stigma, such as countering barriers and promoting audience-identified benefits of acting. Accordingly, anti-stigma messages may never mention the word "stigma."

All suicide prevention communications should avoid potentially harmful content, including explicitly or implicitly characterizing suicide as a typical response to depression, stress, or other challenges service members and veterans may face. In fact, coping in ways other than attempting suicide is far more common. Other problematic content includes stories of individual suicides, details about suicide means or locations, romanticized or simplistic explanations, and presenting suicide as inexplicable or unpreventable. Messages can be accurate and honest about the prevalence of military and veteran suicide while avoiding descriptions suggesting the problem is uncontrollable or hopeless.

When appropriate, messages should provide concrete resources

coupled with stories of individuals who struggled, reached out, and are now thriving, as well as accounts of individuals, groups, and leaders who are working proactively to increase their mental, physical, spiritual, and relational wellness. These messages acknowledge the thousands of service members and veterans who are finding ways to adaptively cope with the stresses of military service, including multiple combat deployments, to convey how truly common those behaviors are.

A comprehensive approach will include working with the news media. It is possible to educate journalists about media guidelines for safely reporting suicide, especially when they are approached as partners.^{84,85} Providing the media with contacts and source materials they need to tell personal stories about early intervention, recovery, and resiliency may help create a more balanced picture of the mental health of military and veteran populations. Recognizing that stories about system failures and unsuccessful help seeking may be easier to find, we recommend that stakeholders proactively identify positive stories of effective actions by individuals and systems so that responses to media requests can include these examples along with available resources.

Communications are an important set of tools that, when used effectively, can advance and support research-based suicide prevention goals. Research will continue to build our knowledge about the effectiveness of specific messages for particular audiences and goals, but the information needed to plan safer and more effective communications efforts is already available. We owe it to service members and veterans to apply it.

About the Authors

Linda Langford and David Litts are with the Suicide Prevention Resource Center, Education Development Center Inc., Waltham, MA. Jane L. Pearson is with the National Institute of Mental Health, Bethesda, MD.

Correspondence should be sent to Linda Langford, ScD, Suicide Prevention Resource Center, EDC, 43 Foundry Ave, Waltham, MA 02453 (e-mail: llangford@edc.org). Reprints can be ordered at http://www.ajph.org by clicking on the "Reprints" link.

This commentary was accepted May 14, 2012.

Contributors

L. Langford reviewed the communications, safe messaging, and stigma research and wrote the initial draft. D. Litts provided military- and veteran-specific research and message considerations and made extensive revisions. J. L. Pearson helped conceptualize the article, contributed insights from research on military and veteran suicide, and suggested revisions.

Acknowledgments

The work of the Suicide Prevention Resource Center is supported by the Substance Abuse and Mental Health Services Administration. Jane L. Pearson's time was supported by the National Institute of Mental Health.

We thank the anonymous reviewers for their thoughtful feedback. Linda Langford and David Litts thank Reingold Inc. and Pat Corrigan for the opportunity to collaborate on and learn from the development of the Make the Connection campaign, funded by the US Department of Veterans Affairs.

Note. The views expressed in this article do not necessarily represent the views of the Substance Abuse and Mental Health Services Administration, the National Institute of Mental Health, the National Institutes of Health, the Department of Health and Human Services, or the United States government.

Human Participant Protection

No protocol approval was needed because no human subjects were involved.

References

1. Department of Defense Task Force on the Prevention of Suicide by Members of the Armed Forces. The challenge and the promise: strengthening the force, preventing suicide and saving lives. Available at: http://www.health.mil/dhb/ downloads/Suicide%20Prevention% 20Task%20Force%20final%20report% 208-23-10.pdf. Accessed September 10, 2012. 2. Kinn JT, Luxton DD, Reger MA, et al. Department of Defense suicide event report (DoDSER): calendar year 2010 annual report. Available at: http://t2health. org/sites/default/files/dodser/DoDSER_ 2010_Annual_Report.pdf. Accessed September 10, 2012.

 Bossarte RM, Claassen CA, Knox KL. Evaluating evidence of risk for suicide among veterans. *Mil Med.* 2010;175(10): 703–704.

4. Miller M, Barber C, Azrael D, et al. Suicide among US veterans: a prospective study of 500,000 middle-aged and elderly men. *Am J Epidemiol.* 2009;170(4): 494–500.

5. Ramchand R, Acosta J, Burns RM, Jaycox LH, Pernin CG. The war within: preventing suicide in the U.S. military. Available at: http://www.dticmil/cgi-bin/ GetTRDoc?AD=ADA537090&Location= U2&doc=GetTRDocpdf. Accessed September 10, 2012.

6. US Dept of Veterans Affairs. Report of the Blue Ribbon Work Group on Suicide Prevention in the Veteran Population. Available at: http://www.mentalhealth.va. gov/suicide_prevention/Blue_Ribbon_ Report-FINAL_June-30-08.pdf. Accessed September 10, 2012.

7. Knox KL, Litts DA, Talcott WG, Feig JC, Caine ED. Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: cohort study. *BMJ.* 2003;327 (7428):1376–1378.

8. US Dept of Health and Human Services. National strategy for suicide prevention: goals and objectives for action. Available at: http://www. sprc.org/sites/sprc.org/files/library/ nsspsummary.pdf. Accessed September 10, 2012.

9. Edwards-Stewart A, Kinn JT, June JD, Fullerton NR. Military and civilian media coverage of suicide. *Arch Suicide Res.* 2011;15(4):304–312.

10. Dumesnil H, Verger P. Public awareness campaigns about depression and suicide: a review. *Psychiatr Serv.* 2009;60(9):1203–1213.

11. Francis C, Pirkis J, Dunt D, Blood RW, Davis C. Improving mental health literacy: a review of the literature. Available at: http://www.health.gov.au/internet/ main/publishing.nsf/content/6A5554955 150A9B9CA2571FF0005184D/\$File/ literacy.pdf. Accessed September 10, 2012.

12. Kelly CM, Jorm AF, Wright A. Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *Med J Aust.* 2007;187 (7):S26–S30.

13. Hegerl U, Dietrich S, Pfeiffer-Gerschel T, Wittenburg L, Althaus D. Education and awareness programmes for adults:



selected and multilevel approaches in suicide prevention. In: Wasserman D, Wasserman C, eds. *The Oxford Textbook of Suicidology and Suicide Prevention: A Global Perspective*. Oxford, England: Oxford University Press; 2009:495–500.

14. Pearson JL. Challenges in US suicide prevention public awareness programmes. In: O'Connor RC, Platt S, Gordon J, eds. *International Handbook of Suicide Prevention: Research, Policy and Practice.* New York, NY: John Wiley & Sons Inc; 2011: 577–590.

15. Hegerl U, Mergl R, Havers I, et al. Sustainable effects on suicidality were found for the Nuremberg Alliance Against Depression. *Eur Arch Psychiatry Clin Neurosci.* 2010;260(5): 401–406.

16. Hornik R. Introduction: public health communication: making sense of contradictory evidence. In: Hornik R, ed. *Public Health Communication: Evidence for Behavior Change*. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:1–19.

17. Jenner E, Jenner LW, Matthews-Sterling M, Butts JK, Williams TE. Awareness effects of a youth suicide prevention media campaign in Louisiana. *Suicide Life Threat Behav.* 2010; 40(4):394–406.

 Oliver RJ, Spilsbury JC, Osiecki SS, et al. Brief report: preliminary results of a suicide awareness mass media campaign in Cuyahoga County, Ohio. *Suicide Life Threat Behav.* 2008;38(2): 245–249.

19. Currier GW, Litts D, Walsh P, et al. Evaluation of an emergency department educational campaign for recognition of suicidal patients. *West J Emerg Med.* 2012;13(1):41–50.

20. Chambers DA, Pearson JL, Lubell K, et al. The science of public messages for suicide prevention: a workshop summary. *Suicide Life Threat Behav.* 2005;35(2): 134–145.

21. Suicide Prevention Resource Center. Charting the future of suicide prevention: a 2010 progress review of the national strategy and recommendations for the decade ahead. Available at: http://www. sprc.org/sites/sprc.org/files/library/ ChartingTheFuture_Fullbook.pdf. Accessed September 10, 2012.

22. Noar SM. A 10-year retrospective of research in health mass media campaigns: where do we go from here? *J Health Commun.* 2006;11(1):21–42.

23. National Cancer Institute. Making health communication programs work. Available at: http://www.cancer.gov/ pinkbook. Accessed September 10, 2012. 24. DeJong W. The role of mass media campaigns in reducing high-risk drinking among college students. *J Stud Alcohol Suppl.* 2002;14:182–192.

25. Salmon CT, Atkin C. Using media campaigns for health promotion. In: Thompson TL, Dorsey AM, Miller KI, Parrott R, eds. *Handbook of Health Communication*. Mahwah, NJ: Lawrence Erlbaum Associates; 2003:449–472.

26. Kaplan MS, McFarland BH, Huguet N, Valenstein M. Suicide risk and precipitating circumstances among young, middle-aged, and older male veterans. *Am J Public Health.* 2012;102(suppl 1): S131–S137.

27. McCarthy JF, Blow FC, Ignacio RV, et al. Suicide among patients in the Veterans Affairs health system: rural-urban differences in rates, risks, and methods. *Am J Public Health.* 2012;102(suppl 1): S111–S117.

 Lindley S, Cacciapaglia H, Noronha D, Carlson E, Schatzberg A. Monitoring mental health treatment acceptance and initial treatment adherence in veterans. *Ann N Y Acad Sci.* 2010;1208(1): 104–113.

29. Milliken CS, Auchterlonie JL, Hoge CW. Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *JAMA*. 2007;298(18): 2141–2148.

 Grier S, Bryant CA. Social marketing in public health. *Annu Rev Public Health*. 2005;26:319–339.

31. O'Sullivan GA, Yonkler JA, Morgan W, Merritt AP. A field guide to designing a health communication strategy. Available at: http://www.jhuccp.org/sites/all/files/A%20Field%20Guide%20to% 20Designing%20Health%20Comm% 20Strategy.pdf. Accessed September 10, 2012.

32. US Centers for Disease Control and Prevention. CDCynergy planning tool. Available at: http://www.cdc.gov/ healthcommunication/CDCynergy/. Accessed September 10, 2012.

33. Communications Resource Center, Substance Abuse and Mental Health Services Administration. Strategic communication planning: a workbook for Garrett Lee Smith Memorial Act state, tribal, and campus grantees. Available at: http:// www.sprc.org/sites/sprc.org/files/library/ GLSWorkbook.pdf. Accessed September 10, 2012.

34. Atkin C, Freimuth V. Formative evaluation research in campaign design. In: Rice RE, Atkin CK, eds. *Public Communication Campaigns*. 3rd ed. Thousand Oaks, CA: Sage Publications; 2001:125– 145. 35. Flay BR. Evaluation of the development, dissemination and effectiveness of mass media health programming. *Health Educ Res.* 1987;2(2):123–129.

36. Wallack L, DeJong W. Mass media and public health: moving the focus from the individual to the environment. In: Martin SE, Mail P, eds. *Effects of the Mass Media on the Use and Abuse of Alcohol.* Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism; 1995:253– 268. NIH publication 95-3743.

37. Abroms LC, Maibach EW. The effectiveness of mass communication to change public behavior. *Annu Rev Public Health*. 2008;29:219–234.

 Boeke M, Griffin T, Reidenberg DJ. The physician's role in suicide prevention: lessons learned from a public awareness campaign. *Minn Med.* 2011; 94(1):44–46.

39. Atkin C. Theory and principles of media health campaigns. In: Rice RE, Atkin CK, eds. *Public Communication Campaigns*. 3rd ed. Thousand Oaks, CA: Sage Publications; 2001: 49–68.

40. Hornik R, Yanovitzky I. Using theory to design evaluations of communications campaigns: the case of the National Youth Anti-Drug Media Campaign. *Commun Theory.* 2003;13(2): 204–224.

41. Backer TE, Rogers EM, Sopory P. Designing Health Communication Campaigns: What Works? Thousand Oaks, CA: Sage Publications; 1992.

42. Gordon R, McDermott L, Stead M, Angus K. The effectiveness of social marketing interventions for health improvement: what's the evidence? *Public Health*. 2006;120(12):1133–1139.

43. Fishbein M, Cappella JN. The role of theory in developing effective health communications. *J Commun.* 2006;56 (suppl 1):S1–S17.

44. Glanz K, Rimer BK, Viswanath K. Health Behavior and Health Education: Theory, Research, and Practice. 4th ed. San Francisco, CA: Jossey-Bass; 2008.

45. Wright K, Sparks L, O'Hair D. *Health Communication in the 21st Century*. Oxford, England: Blackwell Publishing; 2008.

46. Shemanski Aldrich R, Cerel J. The development of effective message content for suicide intervention: theory of planned behavior. *Crisis.* 2009;30(4):174–179.

47. Stecker T, Fortney J, Hamilton F, Sherbourne CD, Ajzen I. Engagement in mental health treatment among veterans returning from Iraq. *Patient Prefer Adherence*. 2010;4:45–49.

48. Defense Centers of Excellence for Psychological Health & Traumatic Brain Injury. Real Warriors Campaign presentation. Available at: http://www.dcoe.health.mil/ Content/navigation/documents/SPC2010/ Jan11/Real%20Warriors%20Campaign/ DCoE_Comms_SuicidePrevention_%20 Presentation_20100111_v9_Final.pdf. Accessed September 10, 2012.

49. Cho H, Salmon CT. Unintended effects of health communication campaigns. *J Commun.* 2007;57(2):293–317.

50. Goodman A. Why bad ads happen to good causes. Available at: http://www. agoodmanonline.com/bad_ads_good_ causes/. Accessed September 10, 2012.

51. Murray-Johnson L, Witte K. Looking toward the future: health message design strategies. In: Thompson TL, Dorsey AM, Miller KI, Parrott R, eds. *Handbook of Health Communication*. Mahwah, NJ: Lawrence Erlbaum Associates; 2003: 473–496.

52. Soames Job RF. Effective and ineffective use of fear in health promotion campaigns. *Am J Public Health*. 1988;78 (2):163–167.

53. Russell CA, Clapp JD, DeJong W. Done 4: analysis of a failed social norms marketing campaign. *Health Commun.* 2005;17(1):57–65.

54. Westat. National survey of veterans, active duty service members, demobilized National Guard and Reserve members, family members, and surviving spouses. Available at: http:// www.va.gov/vetdata/docs/Surveys AndStudies/NVSSurveyFinalWeighted Report.pdf. Accessed September 10, 2012.

55. Luxton DD, June JD, Kinn JT. Technology-based suicide prevention: current applications and future directions. *Telemed J E Health*. 2011;17(1):50–54.

56. Snyder LB, Hamilton MA. A meta-analysis of U.S. health campaign effects on behavior: emphasize enforcement, exposure, and new information, and beware the secular trend. In: Hornik R, ed. *Public Health Communication: Evidence for Behavior Change*. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:357–383.

57. Corrigan PW, Shapiro JR. Measuring the impact of programs that challenge the public stigma of mental illness. *Clin Psychol Rev.* 2010;30(8): 907–922.

58. Corrigan P. How stigma interferes with mental health care. *Am Psychol.* 2004;59(7):614–625.

59. Ben-Zeev D, Corrigan PW, Britt TW, Langford L. Stigma of mental illness and service use in the military. *J Ment Health.* 2012;21(3):264–273.

60. Hoge CW, Castro CA, Messer SC, et al. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. N Engl J Med. 2004;351(1): 13–22.

61. Kim PY, Thomas JL, Wilk JE, Castro CA, Hoge CW. Stigma, barriers to care, and use of mental health services among active duty and National Guard soldiers after combat. *Psychiatr Serv.* 2010;61(6): 582–588.

62. Pietrzak RH, Johnson DC, Goldstein MB, Malley JC, Southwick SM. Perceived stigma and barriers to mental health care utilization among OEF-OIF veterans. *Psychiatr Serv.* 2009;60(8): 1118–1122.

63. Vogt D. Mental health-related beliefs as a barrier to service use for military personnel and veterans: a review. *Psychiatr Serv.* 2011;62(2):135–142.

64. Greene-Shortridge TM, Britt TW, Castro CA. The stigma of mental health problems in the military. *Mil Med.* 2007;172(2):157–161.

65. Eisenberg D, Downs MF, Golberstein E, Zivin K. Stigma and help seeking for mental health among college students. *Med Care Res Rev.* 2009;66(5): 522–541.

 Dickstein BD, Vogt DS, Handa S, Litz BT. Targeting self-stigma in returning military personnel and veterans: a review of intervention strategies. *Mil Psychol.* 2010;22(2):224–236.

67. Martin N, Johnston V. A time for action: tackling stigma and discrimination. Available at: http://www.mentalhealthcommission.ca/ SiteCollectionDocuments/Anti-Stigma/ TimeforAction_Eng.pdf. Accessed September 10, 2012.

68. Corrigan P, Gelb B. Three programs that use mass approaches to challenge the stigma of mental illness. *Psychiatr Serv.* 2006;57(3):393–398.

69. Corrigan PW. Where is the evidence supporting public service announcements to eliminate mental illness stigma? *Psychiatr Serv.* 2012;63(1): 79–82.

70. Pirkis J, Blood RW, Beautrais A, Burgess P, Skehan J. Media guidelines on the reporting of suicide. *Crisis.* 2006;27 (2):82–87.

71. Stack S. Media coverage as a risk factor in suicide. *J Epidemiol Community Health.* 2003;57(4):238–240.

72. Gould M, Jamieson P, Romer D. Media contagion and suicide among the young. *Am Behav Sci.* 2003;46(9):1269– 1284.

73. Stack S. Suicide in the media: a quantitative review of studies based on non-fictional stories. *Suicide Life Threat Behav.* 2005;35(2):121–133.

74. Stack S. Media coverage as a risk factor in suicide. *Inj Prev.* 2002;8(suppl 4):iv30–iv32.

75. Gould MS. Suicide and the media. Ann NY Acad Sci. 2001;932:200– 224.

 Niederkrotenthaler T, Voracek M, Herberth A, et al. Role of media reports in completed and prevented suicide: Werther v. Papageno effects. *Br J Psychiatry.* 2010;197(3):234–243.

77. Recommendations for reporting on suicide. Available at: http:// reportingonsuicide.org/. Accessed September 10, 2012.

 Pirkis J, Dare A, Blood RW, et al. Changes in media reporting of suicide in Australia between 2000/01 and 2006/ 07. *Crisis*. 2009;30(1):25–33.

79. Niederkrotenthaler T, Sonneck G. Assessing the impact of media guidelines for reporting on suicides in Austria: interrupted time series analysis. *Aust N Z J Psychiatry.* 2007;41(5):419–428.

80. Suicide Prevention Resource Center. Safe and effective messaging for suicide prevention. Available at: http://www. sprc.org/sites/sprc.org/files/library/ SafeMessagingrevised.pdf. Accessed September 10, 2012.

81. Borsari B, Carey KB. Descriptive and injunctive norms in college drinking: a meta-analytic integration. *J Stud Alcohol.* 2003;64(3):331–341.

82. Kline KN. A decade of research on health content in the media: the focus on health challenges and sociocultural context and attendant informational and ideological problems. *J Health Commun.* 2006;11(1):43–59.

83. Langford L, Gould MS, Norton K. Webinar: suicide narratives in the news media: what effect might they have and what can we do? Available at: http://sprc.org/training-institute/ r2p-webinars/suicide-narratives-newsmedia-what-effect-might-they-haveand-what-1. Accessed September 10, 2012.

84. Collings SC, Kemp CG. Death knocks, professional practice, and the public good: the media experience of suicide reporting in New Zealand. *Soc Sci Med.* 2010;71(2):244–248.

85. Au JSK, Yip PSF, Chan CLW, Law YW. Newspaper reporting of suicide cases in Hong Kong. *Crisis*. 2004;25(4):161– 168.