

Background

- The military Services have been actively engaged in developing policies, programs, and campaigns designed to reduce stigma and increase Service Members' help-seeking behavior. However, there has been no comprehensive assessment of these efforts' effectiveness and the extent to which they align with Service Members' needs or evidence-based practices.
- In examining these stigma reduction efforts, the portfolio of these programs can be strengthened by building the evidence base for their effectiveness by collecting data from their performance metrics.
- Effectiveness measures can quantitatively and qualitatively assess the degree and extent to which a stigma reduction effort has achieved its intended results come by evaluation.
- Additionally, evaluations in stigma reduction programs have been limited in the military, highlighting a need for further investigation (Acosta et al., 2014) and determination of effectiveness measures.

Methodology

- A literature review (2014-2018) was performed, focusing on peer-reviewed journal articles as well as qualitative information gathered on current military stigma reduction efforts' effectiveness measures
- Inclusion criteria: empirically tested or described military (active, guard, reserve and veterans) effort designed to reduce MH stigma or encourage help-seeking behavior
- Exclusion criteria: advisory teams, working groups, task forces, committees, and conference papers.
- Articles were reviewed by subject matter experts (SMEs) of Doctoral- and Master's-level professionals, who reached consensus in categorizing stigma reduction efforts by:
 - Type of effort
 - Effectiveness measures
 - Targeted MH stigma/Barrier to care outcome

Learning Objectives

- Define and identify effectiveness measures that are used stigma reduction programs to increase help seeking behavior.
- Categorize different types of effectiveness measures used in stigma reduction efforts employed by the military.
- Describe the limitations of effectiveness measures in stigma reduction programs.

Results

Table 1: Stigma reduction efforts identified in the literature by type of effort and effectiveness measures

Type of Effort	Definition	Effectiveness Measures from Literature	MH Stigma/Barrier to Care Outcome
Psychoeducation	Provide general information about MH topics such as prevalence rates, risk factors, and common symptoms to increase MH literacy	<ul style="list-style-type: none"> Stigma reduction item bank response scales Satisfaction surveys and review Self report and knowledge data Measure to determine whether awareness has been improved after enrollment in an anti-stigma program Process measures 	<ul style="list-style-type: none"> Attitudes towards seeking MH services Attitudes towards persons with MH disorders (PWMHD) MH literacy Perceived institutional stigma
Contact Interventions	Use personal contact with persons with MH disorders to reduce internalized stigma, challenge assumptions about people with MH disorders, and educate personnel about MH disorders	<ul style="list-style-type: none"> Social Distance Scale at pretest, immediately following intervention, and posttest Retrospective measures of contact to investigate its impact on stigma and attitudes toward mental health disorders (MHDs) Percent increase in number of provider encounters 	<ul style="list-style-type: none"> Attitudes towards seeking MH services Attitudes towards people with MH disorders (PWMHD) MH literacy Perceived institutional stigma
Institutional Programs (e.g., EBH, COSC)	Promote MH literacy and support assessments, short-term treatment, and referrals for MH concerns. These programs support all personnel in an organizational unit and are efforts to make the act of seeking care less stigmatizing	<ul style="list-style-type: none"> Pre/post test follow up to measure changes in attitude, knowledge, and beliefs to treatment Descriptive, bivariate, and multivariate data analyses to determine intervention effectiveness Self report measures Treatment retention rates Face-to-face assessments with provider Percent increase in number of provider encounters 	<ul style="list-style-type: none"> Attitudes towards seeking MH services MH literacy Perceived institutional stigma Treatment and service utilization
Campaigns (e.g., Real Warriors Campaign)	Publicly available web-based platforms that feature written or video testimonials of persons who have had positive experiences with MH treatment; with the intended goal to dispel myths about MH treatment, encourage help-seeking, and educate Service Members and military leaders to improve their mental health literacy	<ul style="list-style-type: none"> Website traffic Process metrics Self report data Key Performance Indicators 	<ul style="list-style-type: none"> Attitudes towards seeking MH services MH literacy Perceived public stigma Knowledge change towards help seeking behavior
Trainings	Provide skills or strategies to personnel about MH topics, such as how to identify at-risk personnel, how to make MH referrals, common coping mechanisms, and stress management	<ul style="list-style-type: none"> Mental Health Knowledge Schedule Pre-post knowledge change test 	<ul style="list-style-type: none"> Attitudes towards seeking MH services Attitudes towards PWMHD Attitudes about stress and PTSD MH literacy Treatment utilization Command leadership knowledge change towards recognizing MH symptoms

Limitations in Effectiveness Measures:

- Due to the complexity of stigma, the evidence base for effectiveness needs to be built on both reach across all levels of stigma and behavioral health impact of the Service Member when seeking treatment.
- Effectiveness measures reported do not accurately confirm if the effort is working to decrease stigma over time. Effectiveness across interventions varied based on type of intervention strategy and by type of MHDs (e.g., schizophrenia versus PTSD), and several of the interventions discussed demonstrated only short-term impacts, or evaluators measured impacts only over the short term.
- Effectiveness measures can imply the success of these stigma reduction efforts but might not give reasonable validation to a provider that a patient will continue seeking care.
- Although the programs collect data on the metrics, the metrics are largely process measures, such as website traffic or satisfaction surveys.
- Effectiveness measures reported can not measure behavioral health outcomes, such as symptom reduction, but whether one's likelihood to seek treatment is increased.

Limitations of Studies:

- Program evaluations conducted on many of these programs lacked the rigor, comprehensiveness, and specificity needed to determine whether these programs are effective.
- Most institutional programs are not being evaluated for their effectiveness and few strategies are aimed at measuring effectiveness that target the military institutional context.
- Effectiveness measurements ranged from investigating study-specific items to validated instruments, which limit the ability to measure stigma related outcomes over
- The majority of the literature is made up of studies that assessed intervention effectiveness with limited or no long-term follow-up.

Conclusions and Implications

- The military utilizes a multi-method approach to reduce MH stigma and encourage help-seeking on a number of levels.
- Currently, tracking efforts for stigma happens annually or less often. Hence, development of common measures for tracking stigma and other barriers to care should be implemented regularly in order to improve the prevalence of stigma.
- Interventions should consider developing behavioral impact measures that can be used for evaluation of stigma reduction programs, as well as other programs that promote help-seeking
- Improve the evaluation of these programs, by ensuring that all applicable programs are using behavioral impact measures to assess and imply the effectiveness of their stigma reduction program.
- The majority of efforts designed to evaluate training interventions use outcome measures that focus on short-term, immediate, program effects on attitudinal domains.
- Identify additional program metrics that may translate effectively to the military context and adapt them for use within the military to complement existing efforts to increase help-seeking behavior.
- Estimating costs resulting from stigma, such as treatment costs, costs of lost productivity, and loss of life from suicide attempts and deaths by suicide might measure the magnitude of stigma and effect of treatment seeking behavior.

Key Literature Findings:

- The vast majority of evaluations of large multicomponent or mass media interventions have employed original, often single-item measures without psychometric validation. These provide little insight into how stigma is being shifted by interventions and how meaningful these changes are.
- Measures for behavioral impact include changes in the initiation of treatment or treatment adherence, not just changes in knowledge, attitudes, beliefs, or intentions, which is likely to yield more-compelling evidence to support the effectiveness of interventions.
- Although research assessing the effectiveness of these multilevel interventions presents a complex challenge, future studies should be sure to consider both the cumulative effects of interventions at all levels and the specific impacts of each intervention.