



EMDR And The Military In Action

A monthly newsletter to keep you informed.

This is a monthly e-newsletter created primarily for our colleagues trained in Eye Movement Desensitization and Desensitization (EMDR) who work with military, veterans, and their families. The purpose of EMDR And The Military In Actionis to promote continued dialogue regarding the efficacy and current developments with EMDR and its use with these special populations.

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Citations Of The Month - PTSD & Cardiac Events

Dong, M., Giles, W.H., Felitti, V.J., Dube, S.R., Williams, J.E., Champan, D.P., & Anda, R.F. (2004, September).

Insights into causal pathways for ischemic heart disease: Adverse childhood experiences study. Circulation, 110(13), 1761-6.



Background: The purpose of this study was to assess the relation of adverse childhood experiences (ACEs), including abuse, neglect, and household dysfunction, to the risk of ischemic heart disease (IHD) and to examine the mediating impact on this relation of both traditional IHD risk factors and psychological factors that are associated with ACEs.

Methods and Results: Retrospective cohort survey data were collected from 17,337 adult health plan members from 1995 to 1997. Logistic regression adjusted for age, sex, race, and education was used to estimate the strength of the ACE-IHD relation and the mediating impact of IHD risk factors in this relation. Nine of 10 categories of ACEs significantly increased the risk of IHD

by 1.3- to 1.7-fold versus persons with no ACEs. The adjusted odds ratios for IHD among persons with > or =7 ACEs was 3.6 (95% CI, 2.4 to 5.3). The ACE-IHD relation was mediated more strongly by individual psychological risk factors commonly associated with ACEs than by traditional IHD risk factors. We observed significant association between increased likelihood of reported IHD (adjusted ORs) and depressed affect (2.1, 1.9 to 2.4) and anger (2.5, 2.1 to 3.0) as well as traditional risk factors (smoking, physical inactivity, obesity, diabetes and hypertension), with ORs ranging from 1.2 to 2.7. **Conclusions:** We found a dose-response relation of ACEs to IHD and a relation between almost all individual ACEs andIHD. Psychological factors appear to be more important than traditional risk factors in mediating the relation of ACEs to the risk of IHD. These findings provide further insights into the potential pathways by which stressful childhood experiences may increase the risk of IHD in adulthood.

Edmondson, D., Richardson, S., Falzon, L., Davidson, K. W., Mills, M. A., & Nervia, Y. (2012).

Posttraumatic stress disorder prevalence and risk of recurrence in acute coronary syndrome patients: A meta-analytic review. PLoS ONE 7(6), e38915.

Background: Acute coronary syndromes (ACS; myocardial infarction or unstable angina) can induce posttraumatic stress disorder (PTSD), and ACS-induced PTSD may increase patients' risk for subsequent cardiac events and mortality.

Objective: To determine the prevalence of PTSD induced by ACS and toquantify the association between ACS-induced PTSD and adverse clinical outcomes using systematic review and meta-analysis.

Data Sources: Articles were identified by searching Ovid MEDLINE, PsycINFO, and Scopus, and through manual search of reference lists. Methodology/Principal Findings: Observational cohort studies that assessed PTSD with specific reference to an ACS event at least 1 month prior. We extracted estimates of the prevalence of ACS-induced PTSD and associations with clinical outcomes, as well as study characteristics. We identified 56 potentially relevant articles, 24 of which met our criteria (N = 2383). Meta-analysis yielded an aggregated prevalence estimate of 12% (95% confidence interval [CI], 9%-16%) for clinically significant symptoms of ACS-induced PTSD in a random effects model. Individual study prevalence estimates varied widely (0%-32%), with significant heterogeneity in estimates explained by the use of a screening instrument (prevalence estimate was 16% [95% CI, 13%-20%] in 16 studies) vs a clinical diagnostic interview (prevalence estimate was 4% [95% CI, 3%-5%] in 8 studies). The aggregated point estimate for the magnitude of the relationship between ACS-induced PTSD and clinical outcomes (ie, mortality and/or ACS recurrence) across the 3 studies that met our criteria (N = 609) suggested a doubling of risk (risk ratio, 2.00; 95% CI, 1.69-2.37) in ACS patients with clinically significant PTSD symptoms relative to patients without PTSD symptoms. Conclusions/Significance: This meta-analysis suggests that clinically

significant PTSD symptoms induced by ACS are moderately prevalent and are associated with increased risk for recurrent cardiac events and mortality. Further tests of the association of ACS-induced PTSD and clinical outcomes are needed.

Cohen, B.E., Marmar, C.R., Neylan, T.C., Schiller, N.B., Ali S., & Whooley, M.A. (2009).

Posttraumatic stress disorder and health-related quality of life in patients with coronary heart disease: findings from the Heart and Soul Study. Archives of General Psychiatry, 66(11), 1214-20.

Context: Posttraumatic stress disorder (PTSD) is increasingly recognized as a cause of substantial disability. In addition to its tremendous mental health burden, PTSD has been associated with worse physical health status and an increased risk of cardiovascular disease.

Objective: To determine whether PTSD is associated with cardiovascular health status in patients with heart disease and whether this association is independent of cardiac function.

Design: Cross-sectional study.

Setting: The Heart and Soul Study, a prospective cohort study of psychological factors and health outcomes in adults with stable cardiovascular disease.

Participants: One thousand twenty-two men and women with coronary heart disease.

Main Outcome Measures: Posttraumatic stress disorder was assessed using the Computerized Diagnostic Interview Schedule for DSM-IV. Cardiac function was measured using left ventricular ejection fraction, treadmill exercise capacity, and inducible ischemia on stress echocardiography. Disease-specific health status was assessed using the symptom burden, physical limitation, and quality of life subscales of the Seattle Angina Questionnaire. We used ordinal logistic regression to evaluate the association of PTSD with health status, adjusted for objective measures of cardiac function.

Results: Of the 1022 participants, 95 (9%) had current PTSD. Participants with current PTSD were more likely to report at least mild symptom burden (57% vs 36%), mild physical limitation (59% vs 44%), and mildly diminished quality of life (62% vs 35%) (all P < or = .001). When adjusted for cardiovascular risk factors and objective measures of cardiac function, PTSD remained independently associated with greater symptom burden (odds ratio, 1.9; 95% confidence interval, 1.2-2.9; P = .004); greater physical limitation (odds ratio, 2.2; 95% confidence interval, 1.4-3.6; P = .001); and worse quality of life (odds ratio, 2.5; 95% confidence interval, 1.6-3.9; P < .001). Results

were similar after excluding participants with depression.

Conclusions: Among patients with heart disease, PTSD is more strongly associated with patient-reported cardiovascular health status than objective measures of cardiac function. Future studies should explore whether assessing and treating PTSD symptoms can improve function and quality of life in patients with heart disease.

Arabia, E., Manca, M. L., & Solomon, R. M. (2011). **EMDR for survivors of** <u>**life-threatening cardiac events: Results of a pilot study.</u> Journal of EMDR Practice and Research, 5(1), 2-13. doi:10.1891/1933-3196.5.1.2</u>**

This pilot study evaluated the effectiveness of eye movement desensitization and reprocessing (EMDR) in treating posttraumatic stress disorder (PTSD) symptoms and concomitant depressive and anxiety symptoms in survivors of life-threatening cardiac events. Forty-two patients undergoing cardiac rehabilitation who (a) qualified for the PTSD criterion "A" in relation to a cardiac event and (b) presented clinically significant PTSD symptoms were randomized to a 4-week treatment of EMDR or imaginal exposure (IE). Data were gathered on PTSD, anxiety, and depressive symptoms at pretreatment, posttreatment, and 6-month follow-up. EMDR was effective in reducing PTSD, depressive, and anxiety symptoms and performed significantly better than IE for all variables. These findings provide preliminary support for EMDR as an effective treatment for the symptoms of PTSD, depression, and anxiety that can follow a life-threatening cardiac event.

Turner, J., Neylan, T., Schiller, N., Li, Y., & Cohen, B. (2013). <u>Objective</u> <u>evidence of myocardial ischemia in patients with posttraumatic stress</u> <u>disorder.</u> Biological Psychiatry, 74 (11), 861-866.

Outpatients from two Veterans Affairs Medical Centers were enrolled from 2008 to 2010. Of the 663 participants with complete data, ischemia was present in 17% of patients with PTSD versus 10% of patients without PTSD. Posttraumatic stress disorder was associated with ischemic changes on exercise treadmill tests independent of traditional cardiac risk factors, C-reactive protein, and several health behaviors and psychosocial risk factors, suggesting additional mechanisms linking PTSD and ischemia should be explored. The association of PTSD and ischemia among patients without known cardiovascular disease highlights an opportunity for early interventions to prevent progression of cardiovascular disease.

EMDR In The News

Pittman, G. (2012, December 25). One in 12 in military has clogged heart arteries. Chicago Tribune.

Just over one in 12 U.S. service members who died in the Iraq and Afghanistan wars had plaque buildup in the arteries around their hearts - an early sign of heart disease, according to a new study.

National Institutes of Health. (June 25, 2013).

