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Treatment

Meta-analysis suggests drugs are more effective than psychotherapy for treating combat-related PTSD: PTSD treatment research has made important advances over the years. One of the key questions remaining concerns the relative efficacy of drugs and psychotherapy. There have been very few direct comparisons. The best evidence comes from meta-analyses, which have tended to show larger effects for psychotherapy. Investigators at the University of Michigan recently conducted a meta-analysis of 24 studies to specifically compare the effect of the two modalities on combat-related PTSD. Of the 12 pharmacotherapy studies, 6 tested antidepressants (1 SSRI), 3 tested antipsychotics, and 3 tested mood stabilizers or an anticonvulsant. Of the 12 psychotherapy studies, 1 tested Cognitive Processing Therapy, 1 tested a treatment delivered either individually or in couples or families, and 10 tested group therapy or a program that included group and individual treatment; several of the latter studies were based on evaluation of clinical programs. The pre-post effect sizes were larger in the drug studies than in the psychotherapy studies, although the difference between treatment types was small for both PTSD ($d=.05$) and depression ($d=.16$). So should we start encouraging our patients with combat-related PTSD to consider drugs rather than psychotherapy? In our opinion, the answer is no. It is difficult to draw any conclusions about the relative efficacy of drugs and psychotherapy from this study because almost all of the psychotherapy studies were exclusively or primarily delivered in group format, and several were program evaluations. Data on the relative efficacy of drugs and individual psychotherapy in veterans and nonveterans are needed.

Read the article... <http://www.amsus.org/journal/>

Stewart, C.L., & Wrobel, T.A. (2009). Evaluation of the efficacy of pharmacotherapy in treatment of combat-related post-traumatic stress disorder: A meta-analytic review of outcome studies. *Military Medicine*, 174, 460-469. PILOTS ID 82748.

Neurobiological stress response may predict PTSD treatment outcome: A new study conducted by researchers at Mount Sinai School of Medicine and the Bronx VAMC examined how treatment for PTSD affects cortisol and other measures of the function of the hypothalamic-pituitary-adrenocortical (HPA) system. Cortisol, which has been a particular focus of research, is produced to help regulate the stress response. Some researchers have even suggested that abnormalities in the HPA axis may increase vulnerability to the development of PTSD. But prior to the new study, there had been little evidence about whether the HPA system predicts treatment response or is affected by treatment. Twenty-eight survivors of the 9/11 terrorist attacks in New York City received Prolonged Exposure therapy or supportive counseling; 14 were classified as responders and 14 as nonresponders. The investigators collected 24 hour urinary cortisol along with standard interviews and questionnaires. At baseline, nonresponders had lower levels of the enzyme 5 α -reductase, which helps the body break down cortisol. Lower levels of 5 α -reductase also were correlated with greater avoidance across all subjects. Following treatment, nonresponders had decreases in total glucocorticoids, whereas responders had increases. These findings suggest that neurobiological profiles may prove useful someday in predicting who will benefit from treatment.

Read the article... <http://dx.doi.org/10.1016/j.psyneuen.2009.03.018>

Yehuda, R., Bierer, L.M., Sarapas, C., Makotkine, I., Andrew, R., & Seckl, J.R. (2009). Cortisol metabolic predictors of response to psychotherapy for symptoms of PTSD in survivors of the World Trade Center attacks on September 11, 2001. *Psychoneuroendocrinology*, published online 2 May 2009. PILOTS ID 32288.

Cognitive-behavioral therapy for PTSD improves patients' sense of their physical health: Individuals with PTSD suffer more chronic health concerns and have a poorer perception of their physical health than individuals without PTSD. If PTSD is associated with poor health, it follows that treating PTSD could improve health, but in fact, there is little evidence that this is the case. Prior studies have found no effect of PTSD treatment on physical functioning, although the effect of treatment on symptoms has not been examined until now. Investigators in a new study assessed self-reported physical symptoms in 108 women with PTSD who were treated with one of two evidence-based treatments for PTSD, Cognitive Processing Therapy and Prolonged Exposure. The investigators had previously reported that these treatments were comparably and highly effective in reducing PTSD and related symptoms. Both groups of women reported fewer symptoms after treatment, but the women treated with Cognitive Processing Therapy reported greater improvements than the women treated with Prolonged Exposure. These findings are encouraging because they suggest that effectively treating PTSD can help patients achieve broader gains. Somewhat less encouraging were additional findings on participants' perceptions of sleep quality. Although both groups reported improvements after treatment, neither group attained a level that could be considered to be adequate. There is growing evidence that sleep problems in PTSD patients are especially difficult to treat and may require additional intervention even after a successful course of cognitive-behavioral therapy.

Read the article... <http://dx.doi.org/10.1002/jts.20418>

Galovski, T.E., Monson, C., Bruce, S.E., & Resick, P.A. (2009). Does cognitive-behavioral therapy for PTSD improve perceived health and sleep impairments? *Journal of Traumatic Stress*, 22, 197-204. PILOTS ID 82784.

CBT treatment for substance use and PTSD decreases PTSD, not substance use: An estimated 30-50% of individuals undergoing addiction treatment also have a lifetime diagnosis of PTSD. Several therapies developed to address co-occurring PTSD and substance abuse have been designed as stand-alone treatments. Now researchers at Dartmouth Medical School have developed a cognitive behavioral therapy intended to be integrated with ongoing addiction treatment. Eleven men and women with PTSD who were engaged in intensive outpatient addiction programs participated in the study. Five community therapists delivered 8-12 sessions of the treatment, which focused on cognitive restructuring and did not include in vivo or imaginal exposure. Treatment resulted in a substantial decrease in PTSD: after treatment, only 27% of participants met PTSD criteria. There were no significant changes in urine toxicological outcomes, breathalyzer test, or number of days of alcohol use from before to after treatment, although the severity of alcohol and drug addiction decreased. Fifteen of the 23 patients attended at least 8 sessions of treatment, which indicates that the treatment is acceptable to patients as well. Although this is a small study without a control group, its results are important because they demonstrate the feasibility of delivering effective cognitive-behavioral treatment for PTSD to patients who are being treated for substance abuse.

Read the article... <http://dx.doi.org/10.1016/j.addbeh.2009.03.009>

McGovern, M.P., Lambert-Harris, C., Acquilano, S., Xie, H., Alterman, A.I., & Weiss, R.D. (2009). A cognitive behavioral therapy for co-occurring substance use and posttraumatic stress disorders. *Addictive Behaviors*, available online 14 March 2009. PILOTS ID 32557.

Comorbidity

New findings from the Millennium Cohort Study: Investigators recently took advantage of data available from a unique project underway in the Department of Defense, the Millennium Cohort Study. This is a longitudinal survey of a large sample of active-duty and Reserve/Guard personnel who were enrolled between 2001-2003 and will be followed for the next 21 years. One study examined how current and past PTSD relate to mental and physical functioning. The other examined whether physical and mental functioning predicted PTSD several years later.

The first study focused on 75,156 military personnel who were assessed between July 2001 and June 2003. Investigators measured current PTSD symptoms using the civilian version of the PTSD Checklist and lifetime

PTSD diagnosis using the following question: "Has your doctor or other health professional ever told you that you have any of the following conditions?" Only 0.4% reported a lifetime PTSD diagnosis along with current symptoms, 1.2% reported a lifetime diagnosis without current symptoms, and 2.1% reported current symptoms without reporting a lifetime diagnosis. Veterans with either current symptoms only or current symptoms and a lifetime diagnosis had less favorable physical and mental functional health scores, as compared with Veterans who had neither symptoms or a diagnosis. Veterans with a lifetime diagnosis only were most similar to the Veterans who had neither current symptoms nor a lifetime diagnosis. These findings suggest that recovery from PTSD is associated with improvements in not just mental health but also in physical health. Read the article... <http://dx.doi.org/10.1136/bmj.b1273>

LeardMann, C.A., Smith, T.C., Smith, B., Wells, T.S., & Ryan, M.A.K. (2009). Baseline self reported health and vulnerability to posttraumatic stress disorder after combat deployment: Prospective US military cohort study. *British Medical Journal*, 338, 1273. PILOTS ID 32130.

The other recent study based on the Millennium Cohort data investigated whether baseline functional health status predicted new-onset PTSD symptoms or diagnosis. There were 55,021 participants who completed the first follow-up questionnaires between June 2004 and February 2006 (71% of the original sample). Of these, 40% had been deployed in Iraq or Afghanistan. Researchers assessed PTSD symptoms with the civilian version of the PTSD Checklist and PTSD diagnosis since the last assessment with the question, "In the last 3 years has your doctor or health care professional told you that you have any of the following conditions?" Almost 9% of the sample was identified as having new onset PTSD or new symptoms of PTSD. Participants who scored below the 15th percentile at baseline in mental or physical functioning were at increased risk of developing new symptoms or a diagnosis of PTSD: low mental functioning more than tripled the risk, and low physical functioning more than doubled the risk. The most novel finding of this study is the demonstration of how physical functioning relates to the development of PTSD. Most work on PTSD and physical health had investigated how PTSD relates to the development of physical problems. This study adds to growing evidence that PTSD and physical health may be interdependent. Read the article...<http://www.publichealthreports.org/>

Smith, T.C., Wingard, D.L., Ryan, M.A.K., Kritz-Silverstein, D., Slyman, D.J., & Sallis, J.F. (2009). PTSD prevalence, associated exposures and functional health outcomes in a large population-based military cohort. *Public Health Reports*, 124, 90-124. PILOTS ID 32558.

Gender differences in potential mechanisms of PTSD and substance use comorbidity: Many individuals with PTSD also have a substance use disorder. The two problems are mutually reinforcing. Substance use for self-medication can actually exacerbate PTSD symptoms, creating a cycle that is difficult to break. Furthermore, substance abuse may complicate treatment. Thinking that emotion regulation might play a role in explaining the link between these two disorders, the authors of a new study examined difficulties controlling impulsive behavior when distressed and lack of emotional awareness and clarity in 132 men and 50 women admitted to an inpatient alcohol and drug treatment center in Washington, DC. The findings pointed to the need to consider yet another variable: gender. Although PTSD was similarly associated with both measures of emotion regulation in men and women, there were differences in how the measures mediated the relationship between PTSD and substance use. Among men, lack of emotional awareness and clarity partially mediated the relationship between PTSD and substance use frequency. Among women, difficulty in controlling impulsive behaviors when distressed partially mediated the relationship. These findings suggest that clinicians could optimize treatment for individuals with comorbid PTSD and substance abuse problems by focusing on different aspects of emotion regulation for men and women. It may be most beneficial to help men gain greater awareness about their emotions, whereas for women the focus should be on enhancing behavioral strategies instead. Read the article... <http://dx.doi.org/10.1016/j.addbeh.2009.04.005>

Bornovalova, M.A., Ouimette, P., Crawford, A.V., & Levy, R. (2009). Testing gender effects on the mechanisms explaining the association between posttraumatic stress symptoms and substance use frequency. *Addictive Behaviors*, 34, 685-692. PILOTS ID 32556.

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