

Author Affiliations: Independent data scientist (self-employed), Seattle, Washington (Harding); Department of Physics, Harvard University, Cambridge, Massachusetts (Pompei, Wilson).

Corresponding Author: Richard Wilson, DPhil, Harvard University Department of Physics, 17 Oxford St, Cambridge, MA 02138 (wilson5@fas.harvard.edu).

Conflict of Interest Disclosures: The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Mr Harding reported receiving funding from Exergen Corp for work on this letter; previous consulting for Janssen Pharmaceuticals, Johnson & Johnson Pharmaceuticals, Lifeline Screening, Novartis Pharmaceuticals, and Innovative Science Solutions; previous employment by Innovative Science Solutions; and receiving payment for manuscript editing from Cactus Global. Neither the consulting, employment, or editing pertained to the topics of this letter. Dr Pompei reported being CEO of Exergen Corp, a manufacturer of noninvasive thermometry devices. No other disclosures were reported.

1. Silber JH, Rosenbaum PR, Clark AS, et al. Characteristics associated with differences in survival among black and white women with breast cancer. *JAMA*. 2013;310(4):389-397.
2. Esserman LJ, Thompson IM Jr, Reid B. Overdiagnosis and overtreatment in cancer: an opportunity for improvement. *JAMA*. 2013;310(8):797-798.
3. Marmot MG, Altman DG, Cameron DA, Dewar JA, Thompson SG, Wilcox M. The benefits and harms of breast cancer screening: an independent review. *Br J Cancer*. 2013;108(11):2205-2240.
4. Bleyer A, Welch HG. Effect of three decades of screening mammography on breast-cancer incidence. *N Engl J Med*. 2012;367(21):1998-2005.
5. Albain KS, Unger JM, Crowley JJ, Coltman CA Jr, Hershman DL. Racial disparities in cancer survival among randomized clinical trials patients of the Southwest Oncology Group. *J Natl Cancer Inst*. 2009;101(14):984-992.

In Reply Our study examined all 7375 black women older than 65 years diagnosed with breast cancer between 1991 and 2005 in the Surveillance, Epidemiology, and End Results database. Although Mr Harding and colleagues quote various numbers to illustrate the potential effect of overdiagnosis on racial disparities in breast cancer survival, these are hypothetical.

We matched patients for cancer stage and many other characteristics, in which stage was determined from the database based on chart review. That chart review included information from biopsy and postsurgical pathology. On this basis, patients with ductal carcinoma in situ (DCIS) were excluded from our data set. Although overdiagnosis may lead to unnecessary biopsies or unneeded treatment of patients with DCIS, neither of these possibilities are relevant to our study. Harding and colleagues cite an Editorial by Esserman et al¹ that referred to the problematic diagnosis of DCIS when estimating cancer survival and suggest that premalignant conditions “(eg, ductal carcinoma in situ or high-grade prostatic intraepithelial neoplasia) should not be labeled as cancers or neoplasia, nor should the word ‘cancer’ be in the name.” Harding and colleagues suggest an additional analysis that takes account of breast cancer screening.

As suggested, in each of our 3 matched black and white patient comparisons, we adjusted for the indicator of mammographic screening and obtained results qualitatively similar to those reported in Table 2 of our article. Initially, black and white patients had different survival prospects, but the majority of this difference was removed by comparing black and white women with similar cancers (eg, stage, size, grade, estrogen-receptor status) and similar comorbidities (eg, congestive heart failure, diabetes). Black women received somewhat inferior

cancer treatment, but this explained only a small portion of the disparity in survival. These results are not changed by adjustment for screening.

The adjustment used the Cox proportional hazards model for paired survival data as used several times for other analyses in our study (eg, the adjustment for income). After adjustment for screening, the black-white hazard ratio was 1.41 (95% CI, 1.32-1.50) in the demographic match, 1.11 (95% CI, 1.04-1.18) in the presentation match, and 1.05 (95% CI, 0.98-1.11) in the treatment match. Consistent with Table 2, there is a large initial disparity that is mostly explained by differences in presentation, not differences in treatment.

Discussions of our study by Harding and colleagues and others² have confused 2 different questions. First, does treatment matter for survival? Second, do disparities in treatment explain most of the disparity in survival? To explain the black-white disparity in survival following a diagnosis of breast cancer, treatment would have to matter for survival and also be substantially different for black and white patients with similar disease.

Jeffrey H. Silber, MD, PhD
Paul R. Rosenbaum, PhD
Kevin R. Fox, MD

Author Affiliations: Center for Outcomes Research, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania (Silber); Department of Statistics, University of Pennsylvania, Philadelphia (Rosenbaum); Leonard and Madlyn Abramson Cancer Center, University of Pennsylvania, Philadelphia (Fox).

Corresponding Author: Jeffrey H. Silber, MD, PhD, Children's Hospital of Philadelphia, 3535 Market St, Ste 1029, Philadelphia, PA 19104 (silberj@wharton.upenn.edu).

Conflict of Interest Disclosures: The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

1. Esserman LJ, Thompson IM Jr, Reid B. Overdiagnosis and overtreatment in cancer: an opportunity for improvement. *JAMA*. 2013;310(8):797-798.
2. Mandelblatt JS, Sheppard VB, Neugut AI. Black-white differences in breast cancer outcomes among older Medicare beneficiaries: does systemic treatment matter? *JAMA*. 2013;310(4):376-377.

Therapy for Posttraumatic Stress and Alcohol Dependence

To the Editor In a randomized clinical trial, Dr Foa and colleagues¹ examined prolonged exposure psychotherapy for co-occurring posttraumatic stress disorder (PTSD) and alcohol dependence. Prolonged exposure therapy was studied in relation to supportive counseling, use of naltrexone, and a pill placebo. The article provides an example of how the same findings can be interpreted quite differently when considered from a public health perspective.

Results of the trial were null for prolonged exposure therapy; it did not show a main effect on substance use disorder or on PTSD compared with supportive counseling. Yet the authors concluded simply that prolonged exposure therapy did not exacerbate substance use disorder. Thirty-five studies of PTSD with substance use disorder, ranging from pilot studies to multisite trials, have shown that treating PTSD in the context of substance use disorder does not worsen either disorder.²

From a public health perspective, the novel finding of the study by Foa and colleagues¹ is that supportive counseling, which is a low-cost, easily trainable, and well-tolerated approach, did as well for both PTSD and substance use disorder as prolonged exposure, which is a more expensive, less easily trainable, and less well-tolerated model. Moreover, this is the fourth of 4 randomized clinical trials to show a lack of main effect for PTSD exposure therapy on either PTSD or substance use disorder compared with less emotionally intense therapy at the end of treatment.³⁻⁵

Foa and colleagues¹ also found low attendance at prolonged exposure therapy sessions, which was also a problem in prior studies.³ Yet they concluded that future research should find ways to increase attendance by patients at prolonged exposure therapy sessions. A public health perspective might suggest instead that prolonged exposure therapy is not a strong option for this population.

A decade ago, Foa identified that prolonged exposure therapy is not a first-line treatment for PTSD with substance use disorder.² The evidence now supports that. Clinicians report that patients with PTSD and substance use disorder are more difficult to treat than patients with only PTSD, for example.² In sum, prolonged exposure therapy likely works best with less complex patients.

There is often a rush to label treatments as evidence-based, and prolonged exposure has been widely identified as such.^{1,4,5} The study by Foa et al¹ speaks to the importance of recognizing that for more challenging patients, a therapy such as supportive counseling may be no less powerful than prolonged exposure, yet more sensitive to public health needs.

Lisa M. Najavits, PhD

Author Affiliation: Veterans Affairs Boston Healthcare System, Boston, Massachusetts.

Corresponding Author: Lisa M. Najavits, PhD, VA Boston Healthcare System, 150 S Huntington Ave, Boston, MA 02130 (lisa.najavits@va.gov).

Conflict of Interest Disclosures: The author has completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and reported being director of Treatment Innovations, which provides training, consultation, and materials related to psychotherapies.

1. Foa EB, Yusko DA, McLean CP, et al. Concurrent naltrexone and prolonged exposure therapy for patients with comorbid alcohol dependence and PTSD: a randomized clinical trial. *JAMA*. 2013;310(5):488-495.
2. Najavits LM, Hien DA. Helping vulnerable populations: a comprehensive review of the treatment outcome literature on substance use disorder and PTSD. *J Clin Psychol*. 2013;69(5):433-479.
3. Mills KL, Teesson M, Back SE, et al. Integrated exposure-based therapy for co-occurring posttraumatic stress disorder and substance dependence: a randomized controlled trial. *JAMA*. 2012;308(7):690-699.
4. van Dam D, Ehring T, Vedel E, Emmelkamp PM. Trauma-focused treatment for posttraumatic stress disorder combined with CBT for severe substance use disorder: a randomized controlled trial. *BMC Psychiatry*. 2013;13(1):172.
5. Sannibale C, Teesson M, Creamer M, et al. Randomized controlled trial of cognitive behaviour therapy for comorbid post-traumatic stress disorder and alcohol use disorders. *Addiction*. 2013;108:1397-1410.

In Reply Dr Najavits states that our findings would be interpreted differently if considered from a public health perspective, noting that results of this trial were null for pro-

longed exposure therapy. In truth, our results showed that prolonged exposure therapy, especially when combined with naltrexone, significantly reduced alcohol craving and alcohol relapse, findings that are relevant to public health. In addition, a significantly greater proportion of patients who received prolonged exposure therapy (vs those who did not) had minimal PTSD symptoms 6 months after treatment discontinuation.

The critique by Najavits dismisses the important finding that delivering prolonged exposure therapy within the first week of detox did not exacerbate alcohol use or craving. There has been a widespread belief that implementing exposure in the early months of fragile sobriety is harmful, a belief that constituted a major barrier to treating PTSD in individuals with alcohol dependence. Our study showed that patients can benefit from unmodified prolonged exposure therapy immediately after detox and while working on sobriety. Thus, prolonged exposure therapy is a strong option for this population.

It is true that there was no significant main effect for prolonged exposure therapy combined with counseling vs counseling alone for PTSD during acute treatment. It is also true that other treatments for PTSD and substance abuse, such as seeking safety,¹ have not been shown to reduce substance abuse or PTSD symptoms more than education. However, in our study in the long run, supportive counseling was less effective for alcohol abuse and PTSD. Although supportive counseling may be less costly and more easily trainable, from a public health perspective, investments should be made in treatments that promote long-term wellness rather than focusing on short-term effects.

As Najavits correctly points out, a decade ago Foa questioned whether prolonged exposure therapy should be delivered to patients with PTSD and substance use disorder. However, clinical impressions should be submitted to rigorous investigation. Our results demonstrate that Foa's original view was incorrect because prolonged exposure therapy has been found to be effective in reducing PTSD and minimizing risk of alcohol relapse.

The efficacy of prolonged exposure therapy has been established in many studies by independent research groups, including studies with complex populations.² Therefore, the comment by Najavits that there is a rush to label prolonged exposure therapy as evidence-based is unfounded and potentially harmful to the greater public health because it can discourage the use of an effective treatment for PTSD among patients with alcohol dependence.

The results of our study are by no means the final answer to the issue of how best to treat those with both PTSD and alcohol dependence, but we assert that this randomized clinical trial meaningfully informs treatment standards for this debilitated clinical population.

Edna B. Foa, PhD
Carmen P. McLean, PhD
David Yusko, PsyD

Author Affiliations: Center for the Treatment and Study of Anxiety, University of Pennsylvania, Philadelphia.