

U.S. Department of Health and Human Services (DHHS)

National Institutes of Health (NIH)

IMPACT OF TRAUMA

The mission of the National Institutes of Health (NIH) is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability. As the federal government's main funder of research, NIH must address the full range of conditions, disorders and diseases affecting Americans. Research funded by NIH is informing the public how trauma changes the brain and alters behavior. In addition, NIH-funded research is underscoring the importance of trauma-informed care for the survivors and importance of tailoring the care for women as well as men because of unique needs of each, all to ensure that trauma is recognized and treated and that survivors are not re-victimized when they seek care. Many NIH Institutes place trauma and the ways to address it on their list of top research priorities as part of their strategic planning.

How a Trauma-Informed Approach Can Make a Difference

Several Institutes within NIH are promoting discoveries within the brain and behavioral sciences in order to better understand the functioning of the brain that can be translated to the study of mental disorders, including the role of trauma. More specifically, NIH is making strides in its efforts to understand how changes in behavior and environment can lead to changes in the brain and, in turn, how changes in the brain can lead to mental illness. In addition, NIH is focusing on understanding how these changes can inform (and be informed by) fundamental research to understand the trajectories of trauma across the lifespan and across diverse populations. By learning more about the trajectories by which trauma develops, NIH is aiming at stimulating innovative psychosocial and biomedical approaches that can prevent or change these trajectories before the consequences of the trauma occur. Furthermore, NIH is placing a strong focus on public health impact by aiming to create better methods for ensuring that its funded research reaches all whose lives are affected by trauma, as well as those who are dedicated to their care.



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Major Accomplishments 2010-2013

NIH-funded research has made significant progress in identifying a wide array of genetic, neurobiological, and behavioral factors that affect many mental disorders, including trauma. Studies have shown that genetic variations can increase risk for developing a mental disorder.

Environmental and experiential influences, such as traumatic stress, have been shown to interact with specific genetic variations during sensitive periods of development, often in gender-specific ways, compounding risk for mental disorders by altering the structure and function of neural pathways.

A significant development in health care over the past several decades is the recognition that a history of serious traumatic experiences plays an often-unrecognized role in women's and girls' physical and mental health problems (Felitti et al, 1998; Messina & Grella, 2006). The inter-relationship between substance abuse and trauma in women's lives indicates the need for a multi-focused approach to services. The National Institute on Drug Abuse funded a randomized controlled trial of a brief intervention used to prepare women and girls for the procedures of a medical rape exam. Post-rape forensic exams may exacerbate traumatic distress because they include cues that may serve as reminders of the assault. A video was developed to minimize anxiety/discomfort during examinations, and prevent increased substance use and abuse following sexual assault. Among women who reported marijuana use prior to the

assault, those randomly assigned to view the video reported a significantly lower frequency of marijuana at 1.5, 3 and 6 months post-assault, a pattern that remained stable over time (Resnick et al., 2007; 2012).

New Directions and Collaborations

NIH public access database with listings for multiple categories of injury; traumatic brain injury; violence; and violence against women.

http://report.nih.gov/categorical_spending.aspx

NIH web portal www.nih.gov

Main website for the Office of Research on Women's Health <http://orwh.od.nih.gov/>

NIH National Library of Medicine Women's Health Resources, Violence and Abuse
<http://www.womenshealthresources.nlm.nih.gov/healthtopics.html#b019>

Additional Resources

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Felitti, V.J. et al (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, 14 (4): 245–58.

Messina, N. & Grella C. (2006). Childhood trauma and women's health outcomes: A California prison population. *American Journal of Public Health*, 96 (10):1842-48.

Resnick, H. S. et al (2007). An acute post-sexual assault intervention to prevent drug abuse: Updated findings. *Addictive Behaviors*, 32, 2032–2045.

Resnick, H.S. et al (2012). Assault related substance use as a predictor of substance use over time within a sample of recent victims of sexual assault. *Addictive Behaviors*, 37, 914-921.