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Commentary

From Treatment to Healing: The Promise of Trauma-Informed Primary Care

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In August 2013, a national strategy group convened in Washington, DC to clarify a framework for trauma-informed primary care (TIPC) for women. The group was motivated by an increasing body of research and experience revealing that people from all races, ethnicities, and socioeconomic backgrounds come to primary care with common conditions (e.g., heart, lung, and liver diseases, obesity, diabetes, depression, substance use, and sexually transmitted infections) that can be traced to recent and past trauma. These conditions are often stubbornly refractory to treatment, in part because we are not addressing the trauma and posttraumatic stress disorder (PTSD) that underlie and perpetuate them. The purpose of the strategy group was to review the evidence linking trauma to health and provide practical guidance to clinicians, researchers, and policymakers about the core components of an effective response to recent and past trauma in the setting of primary care. We describe the results of this work and advocate for the adoption of TIPC as a practical and ethical imperative for women's health and well-being.

An Unrecognized Opportunity

Janice[1] is a 45-year-old woman with poorly controlled diabetes, obesity, and alcoholism. She feels ashamed about her alcohol use and about her body. She fears that her clinician will be angry with her for not checking her blood sugar, not losing weight, and for missing multiple gynecology appointments. Janice's clinician has worked with her for over a year and is frustrated by their inability to make progress together on her health issues. Janice has never revealed to any of her clinicians that she was sexually abused during childhood nor that she is currently experiencing severe emotional abuse by her husband.

For many people like Janice and her provider, understanding the connection between traumatic experiences and health can be transformative and healing. When patients understand that childhood and adult trauma underlie many illnesses and unhealthy behaviors, they often stop blaming themselves, feel more self-acceptance, and make progress toward health and well-being. Providers who understand this connection are able to create clinical environments that are less triggering for both patients and staff, identify referrals to appropriate trauma-specific services, and develop more effective therapeutic alliances and treatment plans with their patients.

Our strategy group worked to clarify a practical framework for TIPC, a patient-centered approach that acknowledges and addresses the broad impact of both recent and lifetime trauma on health behaviors and outcomes. The goal of TIPC is to improve the efficacy and experience of primary care for both patients and providers by integrating an evidence-based response to this key social determinant of health.

The Link between Trauma and Poor Health

The Substance Abuse and Mental Health Services Administration defines trauma as "an event, series of events, or set of circumstances [e.g., childhood and adult physical, sexual, and emotional abuse; neglect; loss; community violence; structural violence] that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse

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[1] Janice represents a composite of cases seen in our clinics.

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effects" (Substance Abuse and Mental Health Services Administration, 2014b).

Childhood and adult trauma have been shown to be major risk factors for the most common causes of adult illness, death, and disability in the United States. The seminal Adverse Childhood Experiences (ACE) study found remarkably high rates of childhood physical and sexual abuse, neglect, and household dysfunction among 17,000 predominately white, middle-class adults (Centers for Disease Control and Prevention Division of Violence Prevention, 2014a; ACE Study–Health Presentations, 2014). The study calculated an ACE Score (0–10) based on how many categories of childhood abuse individuals had experienced: 64% reported at least one ACE category, and one in six reported four or more. Women were 50% more likely than men to have experienced six or more categories of ACEs. Notably, 25% of women and 16% of men reported having experienced childhood sexual abuse. The study also revealed a strong dose–response relationship between childhood trauma and adult heart, lung, and liver disease, obesity, diabetes, depression, substance abuse, sexually transmitted infection risk, and intimate partner violence (IPV). For example, individuals who reported four or more ACE categories had twice the rates of lung and liver disease, 3 times the rate of depression, at least 3 times the rate of alcoholism, 11 times the rate of intravenous drug use, and 14 times the rate of attempting suicide than those who reported ACE scores of 0.

Similarly, trauma in adulthood is common, linked with poor health, and often undiagnosed. More than one-third of U.S. women experience stalking, physical violence, and/or rape from an intimate partner during their lifetime (Black et al., 2011). Work over the course of many years has demonstrated that both IPV and PTSD are correlated strongly with most of the same illnesses and unhealthy coping strategies as childhood trauma (Centers for Disease Control and Prevention Division of Violence Prevention, 2014b; U.S. Department of Veterans Affairs National Center for PTSD, 2014).

The mechanisms by which trauma affects adult health are still being studied, but likely include 1) neuroendocrine, inflammatory, and epigenetic changes that affect the brain and body, 2) psychological and social factors such as persistent anxiety and stigma, and 3) adaptive but unhealthy coping behaviors (Bowes & Jaffee, 2013; Moffitt & The Klaus-Grawe 2012 Think Tank, 2013; Substance Abuse and Mental Health Services Administration, 2014b). In fact, many people experience prolonged, repeated episodes of childhood and adult trauma. Such complex trauma can lead to complex PTSD (Cloitre et al., 2012; Herman, 1997), which has a profound effect on emotional regulation, self-perception, and relationships with others and helps to explain many of the reactions and coping behaviors seen among trauma survivors.

Many prominent stakeholders have called for a trauma-informed approach to primary care. The American Medical Association called for addressing domestic violence as early as 1992 (American Medical Association, 1992). More recently, the U.S. Preventive Services Task Force found that screening for IPV increases its identification, is not harmful, and that effective interventions exist to reduce repeat victimization. They now call for clinicians to screen women for IPV and "provide or refer women who screen positive to intervention services" (Nelson, Bougatsos, & Blazina, 2012). The Institute of Medicine and the Agency for Healthcare Research and Quality have also called for the integration and evaluation of a response to trauma in primary care (Carey et al., 2010; Institute of Medicine Committee on Preventive Services for Women, 2011).

Recent calls for trauma-informed services have been particularly eloquent from clinicians, researchers, and advocates working with women living with human immunodeficiency virus (HIV), among whom rates of IPV and PTSD are estimated to be 55% and 30%, respectively (Machtinger, Wilson, Haberer, & Weiss, 2012b). Participants in a 2010 forum sponsored by the U.S. Office on Women's Health and the Joint United Nations Programme on HIV/AIDS identified practical opportunities to integrate services for HIV and gender-based violence and described this integration as fundamental to achieving and building on the goals of the National HIV/AIDS Strategy (Forbes, Bowers, Langhorne, Yakovchenko, & Taylor, 2011; Wyatt et al., 2011). In 2013, a presidential working group that was convened to address the intersection of violence and HIV among women found that childhood and adult trauma are key drivers of HIV infection and poor health outcomes among women living with HIV, and called for organizations to "develop, implement, and evaluate models that integrate trauma-informed care into services for women living with HIV" (White House Interagency Federal Working Group, 2013).

A number of effective interventions exist to address trauma (Substance Abuse and Mental Health Services Administration, 2014a, 2014b). However, a practical approach to incorporating interventions for both IPV and the impacts of lifelong trauma into primary care is needed.

A Practical Approach to Trauma-informed Primary Care

Our efforts to respond to trauma in a more comprehensive way began after more fully clarifying the devastating impact of trauma on the lives of women living with HIV (Machtinger, Haberer, Wilson, & Weiss, 2012a; Machtinger et al., 2012b). A review of patient deaths at the Women's HIV Program (WHP) at the University of California, San Francisco, revealed that most were not from HIV, but rather from trauma—directly through murders and indirectly through depression, suicide, and addiction. These deaths occurred in a clinic that already had integrated physical, mental health and social services. Positive Women's Network—USA (PWN-USA) had also noted the pervasive impact of trauma among its national network of women living with HIV. Together, we looked for ways to address trauma in a clinic setting and found that, despite national calls to action, there was a lack of guidance about the core components of a practical approach to addressing recent and past traumatic experiences within adult primary health care settings.

To address this gap, WHP and PWN-USA convened a strategy group of 27 leading policymakers, trauma experts, and advocates from the government, military, academia, clinics, and community organizations (National Strategy Group to Develop a Model of Trauma-informed Primary Care for Women Living with HIV, 2013). The group identified existing evidence-based strategies and frameworks to use as building blocks for an approach to TIPC. These frameworks and strategies included the patient-centered medical home (Agency for Healthcare Research and Quality, n.d.), trauma-informed care (Bloom, 2013; Harris & Fallot, 2001; Substance Abuse and Mental Health Services Administration, 2014b), longstanding and effective efforts to address IPV (Bair-Merritt et al., 2014; García-Moreno et al., 2014; Ghandour, Campbell, & Lloyd, 2014; MacMillan et al., 2009; Miller et al., 2011; Ramsay, Rivas, & Feder, 2005); successful treatments for PTSD and complex PTSD (Cloitre et al., 2012; Engel et al., 2008; U.S. Department of Veterans Affairs National Center for PTSD, 2015; van der Kolk et al., 2014); interventions with adults to ameliorate the impact of adverse childhood experiences (Sikkema et al.,

2007; Toussaint, VanDeMark, Bornemann, & Graeber, 2007), and models of trauma-informed care in other settings and with other populations (Gilbert et al., 2009; Morrissey et al., 2005). Based on a review of the literature and input by experts from the national strategy group, we developed an approach to TIPC that defines trauma broadly, addresses both recent and lifelong trauma, and includes an essential focus on provider support and well-being (Figure 1). This approach has four core components: environment, screening, response, and a robust organizational foundation.

Environment

A TIPC practice is designed to reduce trauma-related triggers and promote healing. All staff and providers receive training about the impact of trauma on health, available trauma-specific services, and trauma-informed practices for use with both patients and one another. The physical space provides opportunities for privacy, confidentiality, and community. Where possible, providers work as an interdisciplinary team to ensure that existing services are trauma-informed and well-coordinated. Outreach is offered to encourage access and connection to trauma-informed services. Power differentials among staff and between patients and providers are acknowledged and minimized. The environment also supports providers, many of whom may have experienced trauma themselves, and/or may experience vicarious trauma by working with affected patients.

Screening

TIPC practices routinely and universally inquire about trauma, ideally as part of an ongoing relationship. Screening is normalized and patients are educated in a variety of ways about the links between trauma and health. In general, TIPC practices screen for 1) recent abuse, including IPV, 2) lifetime trauma, and 3) the emotional and physical consequences of trauma, including PTSD, depression, suicidality, substance use, and chronic pain. Trauma-related information and interventions can be offered to patients, regardless of whether they choose to disclose their trauma.

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Figure 1. A framework for trauma-informed primary care.

Response

A patient's disclosure of recent or past abuse is, in itself, potentially therapeutic. Provider responses to trauma disclosures are empathetic and supportive; validate individuals' experiences, choices, and autonomy; and build on patient strengths. Practices determine which responses will be provided through linkages with community partners and which will be available on site.

Specific responses to recent trauma may include safety planning; danger assessments (Campbell, Webster, & Glass, 2009); referrals for safe housing, legal, police and other community resources; individual and/or group therapy; and peer support. Practices respond to lifelong trauma and its consequences by ensuring that existing services are trauma-informed, by building strong community partnerships, and by facilitating referrals to trauma-specific group and/or individual therapy and peer support.

Foundation

The effectiveness and sustainability of TIPC depend on an organizational foundation that includes a core set of trauma-informed values that inform the clinic's physical setting, activities, and relationships: safety, collaboration, trustworthiness, empowerment, and respect for patient choice (Harris & Fallot, 2001). The foundation also includes clinic champion(s); "buy-in" from clinic leadership; partnerships with trauma-informed community organizations and municipal agencies; support for providers and staff; and ongoing monitoring and evaluation.

How to Start

This approach to TIPC is aspirational; it is possible and likely beneficial to implement its elements incrementally. A first step is for every member of the practice (e.g., receptionists, medical assistants, administrators, and clinicians) to participate in one or more of the many existing trainings to learn about the impact of trauma on the health of patients and on the well-being of caregivers, and to develop trauma-informed skills to communicate more effectively with patients and each other. Over time, clinic champion(s) can be identified, partnerships can be made with local trauma and service organizations, and protocols for screening and response can be developed. The initial cost of introducing TIPC is relatively modest (e.g., a half-day training for all staff and providers). Its full implementation, however, requires genuine commitment, resources, and support from clinic/institutional leadership. This effort is facilitated by policy directives and mandated reimbursement for addressing interpersonal violence and abuse by the Affordable Care Act (Dawson & Kates, 2014), the Joint Commission on Accreditation of Healthcare Organizations (2002), and many state regulations, as well as emerging incentives in accountable care organizations. Exceptionally good quality practical resources and technical assistance are available to guide each element of TIPC

(Bott, Guedes, Claramunt, & Guezmes, 2004; Community Connections, 2009; Futures Without Violence, 2013; LEAP, 2015; Substance Abuse and Mental Health Services Administration, 2014a; The Sanctuary Model, n.d.; U.S. Department of Veteran's Affairs, 2015).

Conclusion

After learning about trauma-informed care, Janice's clinician explains to her that people sometimes use alcohol or food to cope with difficult experiences. Janice's clinician asks how her husband treats her and whether he has ever hit, hurt, or threatened her. Janice reveals that when her husband criticizes her harshly, she drinks heavily. Over time, Janice reveals that she began overeating in response to childhood sexual abuse. After sharing, Janice feels relieved, less ashamed, and more hopeful. Janice's clinician sees that emphasizing Janice's strengths allows them to make slow but steady improvements in her health. Eventually, Janice accepts referrals to an outpatient alcohol treatment program and to group therapy, both of which are trauma-informed.

There has been a groundswell of interest in addressing the health impacts of recent and past trauma and in improving the efficacy and experience of primary care for both patients and providers. Many physicians, organizations, foundations, and governmental bodies are just starting to approach these issues with the goal of implementing and evaluating responses to trauma in primary care. In addition, financial incentives are moving health care systems away from hospitalizations and procedures toward prevention, in part through the integration of behavioral health, case management, and care coordination services into primary care. These new services, however, will have limited efficacy if they do not address the widespread and profound impacts of childhood and adult trauma.

At its core, TIPC is good patient-centered care. Helping women heal from trauma and its consequences will inevitably lead to healthier and less traumatic environments for their children, families, and communities. Implementing TIPC is also a powerful opportunity to change the care-giving experience for providers and staff, who cannot help patients heal from trauma and become healthy if they themselves are working in chaotic, stressful, and unsupportive environments. For both patients and providers, moving toward TIPC has the potential to transform the experience and efficacy of primary care from treatment to genuine healing.

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More information about the Strategy Group and links to key resources about how to begin realizing each component of TIPC are available online at: whp.ucsf.edu/tipc.

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References

ACE Study–Health Presentations (2014). Adverse Childhood Experiences Study. Available: http://acestudy.org. Accessed January 28, 2015.

American Medical Association. (1992). American Medical Association diagnostic and treatment guidelines on domestic violence. *Archives of Family Medicine*, 1(1), 39–47.

Agency for Healthcare Research and Quality. (n.d.). Patient-centered medical home resource center: Defining PCMH. Available: http://pcmh.ahrq.gov/page/defining-pcmh. Accessed March 14, 2015.

Bair-Merritt, M. H., Lewis-O'Connor, A., Goel, S., Amato, P., Ismailji, T., Jelley, M., … Cronholm, P. (2014). Primary care-based interventions for intimate partner violence: A systematic review. *American Journal of Preventive Medicine*, 46(2), 188–194.

Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., Chen, J., & Stevens, M. R. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report*. Atlanta: Centers for Disease Control and Prevention National Center for Injury Prevention and Control.

Bloom, S. (2013). *Creating Sanctuary: Toward the Evolution of Sane Societies (revised edition)*. New York: Taylor & Francis.

Bott, S., Guedes, A., Claramunt, M. C., & Guezmes, A. (2004). *Improving the Health Sector Response to Gender-Based Violence: A Resource Manual for Health Care Professionals in Developing in Countries*. New York: International Planned Parenthood Federation / Western Hemisphere Region.

Bowes, L., & Jaffee, S. R. (2013). Biology, genes, and resilience: Toward a multidisciplinary approach. *Trauma, Violence, & Abuse*, 14(3), 195–208.

Campbell, J. C., Webster, D. W., & Glass, N. (2009). The Danger Assessment: Validation of a lethality risk assessment instrument for intimate partner femicide. *Journal of Interpersonal Violence*, 24(4), 653–674.

Carey, T. S., Crotty, K. A., Morrissey, J. P., Jonas, D. E., Viswanathan, M., Thaker, S., Ellis, A. R., Woodell, C., & Wines, C. (2010). *Future research needs for the integration of mental health/substance abuse and primary care: Identification of future research needs from evidence. Report/technology assessment No. 173 Future Research Needs Papers*. Rockville, MD: Agency for Healthcare Research and Quality. Available: http://www.ncbi.nlm.nih.gov/books/NBK51247/. Accessed March 24, 2014.

Centers for Disease Control and Prevention Division of Violence Prevention (2014a). Adverse Childhood Experiences Study. Available: http://www.cdc.gov/violenceprevention/acestudy. Accessed January 28, 2015.

Centers for Disease Control and Prevention Division of Violence Prevention. (2014b). Intimate partner violence. Available: http://www.cdc.gov/violenceprevention/intimatepartnerviolence/. Accessed January 28, 2015.

Cloitre, M., Courtois, C. A., Ford, J. D., Green, B. L., Alexander, P., Briere, J., Herman, J. L., Lanius, R., Stolback, B. C., Spinazzola, J., Van der Kok, B. A., & Van der Hart, O. (2012). The ISTSS Expert Consensus Treatment Guidelines for Complex PTSD in Adults. Available: http://www.istss.org. Accessed March 24, 2014.

Community Connections. (2009). *Creating cultures of trauma-informed care*. Washington, DC: Community Connections.

Dawson, L., & Kates, J. (2014). HIV, intimate partner violence, and women: New opportunities under the Affordable Care Act (ACA). In The Henry J. Kaiser Family

Foundation. (Ed.), *Issue Brief*. Menlo Park: The Henry J. Kaiser Family Foundation. Available: http://files.kff.org/attachment/hiv-intimate-partner-violence-and-women-new-opportunities-under-the-aca. Accessed March 14, 2015.

Engel, C. C., Oxman, T., Yamamoto, C., Gould, D., Barry, S., Stewart, P., … Dietrich, A. J. (2008). RESPECT-Mil: Feasibility of a systems-level collaborative care approach to depression and post-traumatic stress disorder in military primary care. *Military Medicine*, 173(10), 935.

Forbes, A., Bowers, M., Langhorne, A., Yakovchenko, V., & Taylor, S. (2011). Bringing it back home: Making gender central in the domestic US AIDS response. *Women's Health Issues*, 21(6), S221–S226.

Futures Without Violence. (2013). IPV Screening and Counseling Toolkit. Available: http://www.healthcaresaboutipv.org/. Accessed March 12, 2015.

García-Moreno, C., Hegarty, K., d'Oliveira, A. F. L., Koziol-MacLain, J., Colombini, M., & Feder, G. (2014). The health-systems response to violence against women. *Lancet*. http://dx.doi.org/10.1016/S0140-6736(14)61837-7.

Ghandour, R. M., Campbell, J. C., & Lloyd, J. (2014). Screening and counseling for intimate partner violence: A vision for the future. *Journal of Women's Health*, 24(1), 57–61.

Gilbert, R., Kemp, A., Thoburn, J., Sidebotham, P., Radford, L., Glaser, D., & Macmillan, H. L. (2009). Recognising and responding to child maltreatment. *Lancet*, 373(9658), 167–180.

Harris, M., & Fallot, R. D. (Eds.). (2001). *Using trauma theory to design service systems*, Vol. 89. San Francisco: Jossey-Bass.

Herman, J. L. (1997). *Trauma and recovery: The aftermath of violence from domestic abuse to political terror*. New York: Basic Books.

Institute of Medicine Committee on Preventive Services for Women. (2011). *Clinical preventive services for women: Closing the gaps*. Washington, DC: The National Academies Press. Available: http://www.nap.edu/openbook.php?record_id=13181. Accessed January 16, 2015.

Joint Commission on Accreditation of Healthcare Organizations. (2002). *How to recognize abuse and neglect*. Oak Brook, IL: Joint Commission Resources.

LEAP (2015). LEAP: Look to End Abuse Permanently. Available: www.leapsf.org. Accessed March 13, 2015.

Machtinger, E. L., Haberer, J. E., Wilson, T. C., & Weiss, D. S. (2012a). Recent trauma is associated with antiretroviral failure and HIV transmission risk behavior among HIV-positive women and female-identified transgenders. *AIDS and Behavior*, 16(8), 2160–2170.

Machtinger, E. L., Wilson, T. C., Haberer, J. E., & Weiss, D. S. (2012b). Psychological trauma and PTSD in HIV-positive women: A meta-analysis. *AIDS and Behavior*, 16(8), 2091–2100.

MacMillan, H. L., Wathen, C. N., Jamieson, E., Boyle, M. H., Shannon, H. S., Ford-Gilboe, M., … McNutt, L. A. (2009). Screening for intimate partner violence in health care settings: A randomized trial. *Journal of the American Medical Association*, 302(5), 493–501.

Miller, E., Decker, M. R., McCauley, H. L., Tancredi, D. J., Levenson, R. R., Waldman, J., … Silverman, J. G. (2011). A family planning clinic partner violence intervention to reduce risk associated with reproductive coercion. *Contraception*, 83(3), 274–280.

Moffitt, T. E., & The Klaus-Grawe 2012 Think Tank (2013). Childhood exposure to violence and lifelong health: Clinical intervention science and stress-biology research join forces. *Development and Psychopathology*, 25(4pt2), 1619–1634.

Morrissey, J. P., Jackson, E. W., Ellis, A. R., Amaro, H., Brown, V. B., & Najafits, L. M. (2005). Twelve-month outcomes of trauma-informed interventions for women with co-occurring disorders. *Psychiatric Services*, 56(10), 1213–1222.

National Strategy Group to Develop a Model of Trauma-informed Primary Care for Women Living with HIV. (2013). *Executive summary: Strategy meeting on trauma-informed primary care for U.S. women living with HIV*. Oakland, CA: Positive Women's Network - USA. Available: https://pwnusa.wordpress.com/policy-agenda/violence-against-women/strategy-meeting-tipc/. Accessed January 28, 2015.

Nelson, H. D., Bougatsos, C., & Blazina, I. (2012). Screening women for intimate partner violence: A systematic review to update the U.S. Preventive Services Task Force recommendation. *Annals of Internal Medicine*, 156(11), 796–808, W-279, W-280, W-281, W-282.

Ramsay, J., Rivas, C., & Feder, G. (2005). *Interventions to reduce violence and promote the physical and psychosocial well-being of women who experience partner violence: A systematic review of controlled evaluations: Final report*. London: Barts and the London, Queen Mary's School of Medicine and Dentistry.

Sikkema, K. J., Hansen, N. B., Kochman, A., Tarakeshwar, N., Neufeld, S., Meade, C. S., & Fox, A. M. (2007). Outcomes from a group intervention for coping with HIV/AIDS and childhood sexual abuse: Reductions in traumatic stress. *AIDS and Behavior*, 11(1), 49–60.

Substance Abuse and Mental Health Services Administration. (2014a). National registry of evidence-based programs and practices. Available: www.nrepp.samhsa.gov. Accessed March 24, 2014.

Substance Abuse and Mental Health Services Administration. (2014b). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. Rockville, MD: SAMHSA. Available: http://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf. Accessed March 1, 2015.

Toussaint, D. W., VanDeMark, N. R., Bornemann, A., & Graeber, C. J. (2007). Modifications to the Trauma Recovery and Empowerment Model (TREM) for substance-abusing women with histories of violence: Outcomes and lessons learned at a Colorado substance abuse treatment center. *Journal of Community Psychology*, 35(7), 879–894.

The Sanctuary Model. (n.d.). The Sanctuary Model: An Integrated Theory. Available: www.sanctuaryweb.com. Accessed March 31, 2015.

U.S. Department of Veterans Affairs National Center for PTSD. (2015). Available: http://www.ptsd.va.gov/. Accessed March 3, 2015.

U.S. Department of Veterans Affairs National Center for PTSD. (2014). Co-occurring conditions. Available: http://www.ptsd.va.gov/professional/co-occurring/. Accessed January 28, 2015.

van der Kolk, B. A., Stone, L., West, J., Rhodes, A., Emerson, D., Suvak, M., & Spinazzola, J. (2014). Yoga as an adjunctive treatment for posttraumatic stress disorder: A randomized controlled trial. *Journal of Clinical Psychiatry*, 75(6), e559–e565.

White House Interagency Federal Working Group on the Intersection of HIV/AIDS, Violence Against Women and Girls, and Gender-Related Health Disparities. (2013). Addressing the intersection of HIV/AIDS, violence against women and girls, & gender-related health disparities. Available: http://www.whitehouse.gov/sites/default/files/docs/vaw-hiv_working_group_report_final_-_9-6–2013.pdf. Accessed January 16, 2015.

Wyatt, G. E., Hamilton, A. B., Myers, H. F., Ullman, J. B., Chin, D., Sumner, L. A., … Liu, H. (2011). Violence prevention among HIV-positive women with histories of violence: Healing women in their communities. *Women's Health Issues*, 21(6), S255–S260.

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