NCTSN The National Child Traumatic Stress Network

# December, 2012 PILOTS Topic Alert

Allen, B., A. Oseni, et al. (2012). "The evidence-based treatment of chronic posttraumatic stress disorder and traumatic grief in an adolescent: a case study." Psychological Trauma: Theory, Research, Practice, and Policy 4(6): 631-639.

This case study describes the successful application of an adaptation of Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT) for a 16-year-old presenting with chronic PTSD related to traumatic grief, anxiety, depression, anger, and somatic complaints. TF-CBT is a manualized intervention with demonstrated efficacy in numerous clinical trials for children and adolescents who experienced various traumatic events. In the current study, an adapted form of TF-CBT for use with traumatic grief is utilized and other evidence-based practices are integrated into treatment in light of clinical events.

Babugura, A. A. (2008). "Vulnerability of children and youth in drought disasters: a case study of Botswana." Children, Youth and Environments 18(1): 126-157.

Throughout southern Africa, millions of people, especially children and youth, are affected by drought. Though young people are usually the most affected, they are rarely given the opportunity to voice their concerns and experiences with drought disasters. This study explores the vulnerabilities of children and youth during drought in Botswana, which is highly susceptible to drought disasters. Using face-to-face interviews and participatory rural appraisal (picture drawing and story telling) the researcher collected data from adult caregivers and 30 young people (ages 10-18). The study demonstrates that the needs of children and youth during drought go well beyond physical survival. Children also experience emotional distress during times of disaster, which emerges from fears of being separated from family, the loss of educational opportunities, mounting tensions and pressures within the household, a lack of emotional support at the family level, and increased workloads. Gender, age, family structure, and roles within the household all affect children's vulnerability and the ways that they cope with drought disaster as well as other stresses related to poverty and HIV/AIDS.

Batten, S. V., V. M. Follette, et al. (2002). "Physical and psychological effects of written disclosure among sexual abuse survivors." Behavior Therapy 33(1): 107-122.

Although numerous studies demonstrate the efficacy of writing about stressful events on measures of participants' health, most studies have included psychologically and physically healthy participants. The purpose of the current study was to determine whether writing about stressful or traumatic events would have the same effect with participants who had experienced a significant trauma. The physical and psychological impact of writing about child sexual abuse (CSA) experiences or time management was examined in 61 women (mean age 35.0) who reported a CSA history.

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Participants completed biweekly telephone interviews for 12 weeks after writing, as well as 12-week follow-up questionnaires. The results indicate that writing about CSA history alone is not sufficient to provide psychological or physical health benefits. As these results diverge from the extant literature, possible reasons for these findings are discussed, along with implications for writing interventions with survivors of significant traumas.

Bennett, S. M., B. T. Litz, et al. (2005). "The scope and impact of perinatal loss: current status and future directions." Professional Psychology: Research and Practice 36(2): 180-187.

The loss of an expected child can be devastating and traumatizing for parents, placing them at risk for postloss mental health complications, such as complicated or traumatic grief. The authors review the psychological and social impacts of perinatal loss and describe the standard care provided in the hospital. The authors review studies that examine the efficacy of standard care and highlight the need for empirical evidence confirming the efficacy of these current interventions. The authors provide recommendations for health care professionals in contact with the perinatally bereaved and suggest areas for future research.

Berntsen, D., K. B. Johannessen, et al. (2012). "Peace and war: trajectories of posttraumatic stress disorder symptoms before, during, and after military deployment in Afghanistan." Psychological Science 23(12): 1557-1565.

In the study reported here, we examined PTSD symptoms in 746 Danish soldiers measured on five occasions before, during, and after deployment to Afghanistan. Using latent class growth analysis, we identified six trajectories of change in PTSD symptoms. Two resilient trajectories had low levels across all five times, and a new-onset trajectory started low and showed a marked increase of PTSD symptoms. Three temporary-benefit trajectories, not previously described in the literature, showed decreases in PTSD symptoms during (or immediately after) deployment, followed by increases after return from deployment. Predeployment emotional problems and predeployment traumas, especially childhood adversities, were predictors for inclusion in the nonresilient trajectories, whereas deployment-related stress was not. These findings challenge standard views of PTSD in two ways. First, they show that factors other than immediately preceding stressors are critical for PTSD development, with childhood adversities being central. Second, they demonstrate that the development of PTSD symptoms shows heterogeneity, which indicates the need for multiple measurements to understand PTSD and identify people in need of treatment.

Betancourt, T. S., E. A. Newnham, et al. (2012). "Trauma history and psychopathology in war-affected refugee children referred for trauma-related mental health services in the United States." Journal of Traumatic Stress 25(6): 682-690.

There is an increasing need to deliver effective mental health services to refugee children and adolescents across the United States; however, the evidence base needed to guide the design and delivery of services is nascent. We investigated the trauma history profiles, psychopathology, and associated behavioral and functional indicators among war-affected refugee children presenting for psychological treatment. From the National Child Traumatic Stress Network's Core Data Set, 60

war-affected refugee children were identified (51.7% males, mean age = 13.1 years, SD = 4.13). Clinical assessments indicated high rates of probable PTSD (30.4%), generalized anxiety (26.8%), somatization (26.8%), traumatic grief (21.4%), and general behavioral problems (21.4%). Exposure to war or political violence frequently co-occurred with forced displacement; traumatic loss; bereavement or separation; exposure to community violence; and exposure to domestic violence. Academic problems and behavioral difficulties were prevalent (53.6% and 44.6%, respectively); however, criminal activity, alcohol/drug use, and self-harm were rare (all < 5.45%). These findings highlight the complex trauma profiles, comorbid conditions, and functional problems that are important to consider in providing mental health interventions for refugee children and adolescents. Given the difficulties associated with access to mental health services for refugees, both preventive and community-based interventions within family, school, and peer systems hold particular promise.

Brand, S. R., S. M. Engel, et al. (2006). "The effect of maternal PTSD following in utero trauma exposure on behavior and temperament in the 9-month-old infant." Annals of the New York Academy of Sciences 1071: 454-458.

INTRODUCTION: In view of evidence of in utero glucocorticoid programming, and our prior observation of lower cortisol levels in 9-month-old infants of mothers with PTSD compared to mothers without PTSD, we undertook an examination of the effect of in utero maternal stress, as determined by PTSD symptom severity, and maternal cortisol levels on behavioral outcomes in the infant. METHODS: 98 pregnant women directly exposed to the World Trade Center (WTC) collapse on 9/11 provided salivary cortisol samples and completed a PTSD symptom questionnaire and a behavior rating scale to measure infant temperament, including distress to limitations, and response to novelty. RESULTS: Mothers who developed PTSD in response to 9/11 had lower morning and evening salivary cortisol levels, compared to mothers who did not develop PTSD. Maternal morning cortisol levels were inversely related to their rating of infant distress and response to novelty (i.e., loud noises, new foods, unfamiliar people). Also, mothers who had PTSD rated their infants as having greater distress to novelty than did mothers without PTSD ($t = 2.77$, $df = 61$, $P = 0.007$). CONCLUSION: Longitudinal studies are needed to determine how the association between maternal PTSD symptoms and cortisol levels and infant temperament reflect genetic and/or epigenetic mechanisms of intergenerational transmission.

Carlson, E. B., E. Newman, et al. (2003). "Distress in response to and perceived usefulness of trauma research interviews." Journal of Trauma and Dissociation 4(2): 131-142.

Because studying trauma often involves asking about upsetting experiences, it is important for researchers to study the effects of such interviews on research participants, particularly those who may be more vulnerable. In a study of psychiatric inpatients that included a structured interviews for PTSD and childhood physical and sexual assault experiences, participants rated how upsetting and how helpful or useful they found the interview. Of the 223 participants for whom we knew level of distress, 70% experienced relatively low levels of distress, and 51% found participation to be useful in some way. Level of upset was moderately to strongly related to levels of past trauma

and current symptoms, while perceived usefulness was not significantly related to any experiences or symptoms.

Chemtob, C. M., J. P. Nakashima, et al. (2002). "Brief treatment for elementary school children with disaster-related posttraumatic stress disorder: a field study." Journal of Clinical Psychology 58(1): 99-112.

Effective psychological intervention is needed to help children recover from disaster-related PTSD. This controlled study evaluated the effectiveness of a brief intervention for disaster-related PTSD. At one-year follow-up of a prior intervention for disaster-related symptoms, some previously treated children were still suffering significant trauma symptoms. Using a randomized lagged-groups design, we provided three sessions of Eye Movement Desensitization and Reprocessing (EMDR) treatment to 32 of these children who met clinical criteria for PTSD. The Children's Reaction Inventory (CRI) was the primary measure of the treatment's effect on PTSD symptoms. Associated symptoms were measured using the Revised Children's Manifest Anxiety Scale (RCMAS) and the Children's Depression Inventory (CDI). Treatment resulted in substantial reductions in both groups' CRI scores and in significant, though more modest, reductions in RCMAS and CDI scores. Gains were maintained at six-month follow-up. Health visits to the school nurse were significantly reduced following treatment. Psychosocial intervention appears useful for children suffering disaster-related PTSD. Conducting controlled studies of children's treatment in the postdisaster environment appears feasible.

Cloitre, M., K. C. Koenen, et al. (2002). "Skills training in affective and interpersonal regulation followed by exposure: a phase-based treatment for PTSD related to childhood abuse." Journal of Consulting and Clinical Psychology 70(5): 1067-1074.

58 women with PTSD related to childhood abuse were randomly assigned to a 2-phase cognitive-behavioral treatment or a minimal attention wait list. Phase 1 of treatment included 8 weekly sessions of skills training in affect and interpersonal regulation; Phase 2 included 8 sessions of modified prolonged exposure. Compared with those on wait list, participants in active treatment showed significant improvement in affect regulation problems, interpersonal skills deficits, and PTSD symptoms. Gains were maintained at 3- and 9-month follow-up. Phase 1 therapeutic alliance and negative mood regulation skills predicted Phase 2 exposure success in reducing PTSD, suggesting the value of establishing a strong therapeutic relationship and emotion regulation skills before exposure work among chronic PTSD populations.

Cohen, J. A., J. M. Perel, et al. (2002). "Treating traumatized children: clinical implications of the psychobiology of posttraumatic stress disorder." Trauma, Violence, and Abuse: A Review Journal 3(2): 91-108.

There is growing evidence that child maltreatment and PTSD result in numerous neurobiological alterations in children and adolescents, including abnormalities in brain structure and functioning. This article reviews several psychobiological systems with regard to their functioning under normal stress and in the presence of PTSD, with a focus on recent research findings in

children and adolescents, and the implications these findings have on clinical intervention for traumatized children. The importance of early identification and treatment of traumatized children and the need to empirically evaluate psychopharmacological interventions for childhood PTSD are discussed in detail. Research and policy priorities are also addressed.

Donley, S., L. Habib, et al. (2012). "Civilian PTSD symptoms and risk for involvement in the criminal justice system." Journal of the American Academy of Psychiatry and the Law 40(4): 522-529.

PTSD has received considerable attention with regard to the ongoing wars in Iraq and Afghanistan. In studies of veterans, behavioral sequelae of PTSD can include hostile and violent behavior. Rates of PTSD found in impoverished, high-risk urban populations within U.S. inner cities are as high as in returning veterans. The objective of this study was to determine whether civilian PTSD is associated with increased risk of incarceration and charges related to violence in a low-income, urban population. Participants (n = 4,113) recruited from Grady Memorial Hospital in Atlanta, Georgia, completed self-report measures assessing history of trauma, PTSD symptoms, and incarceration. Both trauma exposure and civilian PTSD remained strongly associated with increased risk of involvement in the criminal justice system and charges of a violent offense, even after adjustment for sex, age, race, education, employment, income, and substance abuse in a regression model. Trauma and PTSD have important implications for public safety and recidivism.

Ellis, B. H., J. M. Fogler, et al. (2012). "Trauma systems therapy: 15-month outcomes and the importance of effecting environmental change." Psychological Trauma: Theory, Research, Practice, and Policy 4(6): 624-630.

This study tracked the clinical course of 124 children receiving trauma systems therapy (TST). In addition, exploratory analyses compared hospitalization rates before and after implementation of the model and comparative cost savings were estimated. Children ages 3-20 who experienced potentially traumatic events received TST intervention. Measures of clinical course, children's psychiatric and psychosocial functioning, and social-environmental stability were taken at intake, 4-6 months, and 12-15 months. Exploratory analyses of cost savings were evaluated by comparing pre- and post-implementation hospitalization rates and lengths of stay for children under the care of the county mental health department. Emotion regulation, social-environmental stability, and child functioning/strengths improved significantly with treatment. Improvement in child functioning/strengths and in social-environmental stability significantly contributed to overall improvement in emotion regulation. Children who became stable enough to transition to office-based services during early treatment tended to stay in treatment and continued to improve. The number of children needing crisis-stabilization services at 15 months was reduced more than half for those who completed treatment. Poorer baseline emotion regulation was associated with hospitalization, and poorer social-environmental stability predicted fewer days-to-hospitalization. Exploratory analyses show that post-implementation hospitalization rates dropped 36% and average length of stay decreased by 23%, suggesting that further exploration of potential cost savings is warranted. These findings underscore the clinical importance of intervention and long-term treatment to stabilize the social environment of children and adolescents with posttraumatic stress, and emphasize the

potential cost effectiveness of an intensive, community-based treatment approach at the county level.

Fehon, D. C., C. M. Grilo, et al. (2005). "A comparison of adolescent inpatients with and without a history of violence perpetration: impulsivity, PTSD, and violence risk." Journal of Nervous and Mental Disease 193(6): 405-411.

How childhood maltreatment and violence victimization contributes to subsequent violent behavior remains an understudied area. We examined 130 psychiatrically hospitalized adolescents and compared those with a history of perpetrating violence to those without a history of violence perpetration. Perpetrators of physical violence were significantly more likely to have been a victim and/or witness to family and community violence and also reported significantly higher levels of a broad range of psychopathology than nonperpetrators. Correlational analyses with the study group of violence perpetrators revealed that higher levels of impulsivity, dissociation, and PTSD were significantly associated with higher levels of violence. Furthermore, multiple regression analysis showed that symptoms of impulsivity and PTSD contributed significantly to the prediction of violence risk. Our findings demonstrate that violence exposure and childhood maltreatment are indeed common negative life events among adolescent inpatients, and that symptoms of PTSD may predispose traumatized youth toward impulsive violent behavior.

Fontana, A. and R. A. Rosenheck (2005). "The role of war-zone trauma and PTSD in the etiology of antisocial behavior." Journal of Nervous and Mental Disease 193(3): 203-209.

Historically, successful reintegration of war veterans into civilized society has been an enduring concern of nations. Data from the National Vietnam Veterans Readjustment Study (NVVRS) were used to develop and evaluate an etiological model of postwar antisocial behavior. Two initial models specified causal paths among five sets of variables, ordered according to their historical occurrence: (a) premilitary risk factors, (b) military traumas and disciplinary actions, (c) the homecoming reception, (d) postmilitary PTSD and substance abuse, and (e) postmilitary antisocial behavior. PTSD and substance abuse were omitted in one model and included in the other. The initial models were refined and then cross-validated, leading to the specification of replicated models with highly satisfactory fit and parsimony. Comparison of the two models suggested that (1) premilitary experiences and behavior exert the largest effects on postmilitary antisocial behavior, and that (2) PTSD plays a necessary mediational role for the effects of war-zone traumatic exposure on postmilitary antisocial behavior.

Friedman, M. J., E. B. Foa, et al. (2003). "Toward evidence-based early interventions for acutely traumatized adults and children [editorial]." Biological Psychiatry 53(9): 765-768.

Introduces many of the papers presented at a conference focused on early interventions for adults and children acutely exposed to catastrophic events held in June 2002 in this special issue. Also presents current knowledge and research needs.

Friedman, M. J., S. Wang, et al. (2005). "Thyroid hormone alterations among women with posttraumatic stress disorder due to childhood sexual abuse." Biological Psychiatry 57(5): 1186-1192.

BACKGROUND: Research on thyroid activity among male combat veterans with PTSD has consistently shown elevations in total triiodothyronine (TT3) and inconsistent elevations of other thyroid variables. This study is the first large scale investigation of thyroid function in women with PTSD. METHODS: Thyroid function was measured in 63 women with PTSD due to childhood sexual abuse (PTSD-CSA) in comparison with a community sample of 42 women without current PTSD-CSA. Clinical measures included the Clinician Administered PTSD Scale (CAPS), the Evaluation of Lifetime Stressors, the Trauma Assessment for Adults, and the Beck Depression Inventory. RESULTS: Women with PTSD-CSA showed significant elevations in Total T3 and the TT3/free thyroxine (TT3/FT4) ratio, the FT3/TT3 ratio, and modest reductions in thyroid stimulating hormone relative to our community sample. These findings could not be explained by the influence of prior trauma, lifetime PTSD, or depressive symptoms. CONCLUSIONS: Altered thyroid activity, especially elevated Total T3 levels, was found in women with PTSD associated with childhood sexual abuse.

Gewirtz, A. H., D. S. DeGarmo, et al. (2011). "Effects of mother's parenting practices on child internalizing trajectories following partner violence." Journal of Family Psychology 25(1): 29-38.

Studies of children's functioning following exposure to a traumatic event rarely have investigated change over the weeks following the event, but examining recovery in the short aftermath of a traumatic event is important for understanding vulnerability to subsequent disorder, as well as the potential utility of preventive interventions. Data are reported from a short-term longitudinal study of 35 mother-child dyads over 14 weeks following exposure to an incident of severe intimate partner violence. Using a developmental-ecological framework, we proposed that maternal parenting practices would be associated with children's recovery, and that maternal distress would be associated with her parenting practices. Consistent with hypotheses, observed parenting practices at baseline predicted the trajectory of children's self-reported internalizing problems over the study period. Maternal mental health problems were associated with child depression symptoms, but not with overall child internalizing symptoms. Parenting was not associated with maternal mental health symptoms. Further studies should pay closer attention to the role of parenting in children's adjustment in the aftermath of a traumatic event.

Gibson, K., M. Morgan, et al. (2011). "Growing up at Centrepoint: retrospective accounts of childhood spent at an intentional community." Journal of Child Sexual Abuse 20(4): 413-434.

A qualitative analysis of the accounts of 29 adults who grew up in a controversial New Zealand community identified positive and negative experiences and their psychological implications. In addition to highly publicized child sexual abuse that occurred at Centrepoint, children also experienced parental neglect, psychological manipulation, illegal drug use, and stigma from the broader society. These factors created an adverse matrix that facilitated sexual abuse. Positive experiences included support for vulnerable families and children, recreational activities, and the opportunity to develop communication skills. While there may be positive experiences for children

living in intentional communities such as this one, it is important to be aware of the potential for psychological harm to children in communities with powerful, shared systems of belief, skepticism about the broader society, and strong dynamics of dependence. These findings may have implications for other similar communities operating elsewhere in the world.

Gleiser, K. (2003). "Psychoanalytic perspectives on traumatic repetition." Journal of Trauma and Dissociation 4(2): 27-47.

Much research has explored processes of repetition in trauma survivors, from early notions of repetition compulsion to recent path analytic models of revictimization. However, a rift exists in the current literature: a tendency for empirical and social/cognitive theoretical perspectives to dismiss or neglect psychoanalytic and psychodynamic theories, while psychoanalytic theorists tend to eschew empirical validation. This paper reviews psychoanalytic perspectives on repetition and re-enactment in the hopes of achieving a deeper understanding of repeated patterns in trauma survivors. The paper focuses on the well-documented phenomenon in which survivors of childhood sexual abuse are frequently sexually revictimized in adolescence and adulthood, exploring ways in which psychoanalytic perspectives may inform and complement existing theories and empirical models. Particular emphasis is placed on the role of dissociation. Finally, the paper highlights several possible avenues where future attempts at theoretical integration may lead to fruitful research.

Gray, M. J. and R. E. Acierno (2002). "Symptom presentations of older adult crime victims: description of a clinical sample." Journal of Anxiety Disorders 16(3): 299-309.

Psychological sequelae of interpersonal violence in older adults remain understudied. Existing investigations focused on the clinical presentation of older adults who were traumatized as young adults (e.g., combat veterans). Consequently, little is known about the clinical correlates of trauma in recently victimized older adults. This descriptive study attempts to fill this void by documenting the symptom status and demographic features of 36 treatment-seeking older adult crime victims. Results indicated that older adult crime victims who seek services are a multiply traumatized group. They experienced significant financial, educational, medical, and social stressors that may complicate their clinical picture and treatment progress. Additionally, older adult crime victims experienced moderate-to-severe levels of psychopathology as evidenced by symptoms endorsed on an array of structured clinical interviews and paper-and-pencil measures designed to measure symptoms of PTSD, depression, and panic.

Haller, M. and L. Chassin (2012). "A test of adolescent internalizing and externalizing symptoms as prospective predictors of type of trauma exposure and posttraumatic stress disorder." Journal of Traumatic Stress 25(6): 691-699.

The present study utilized longitudinal data from a high-risk community sample (N = 377; 166 trauma-exposed; 202 males; 175 females; 73% non-Hispanic Caucasian) to test pretrauma measures of adolescent internalizing and externalizing symptoms as unique prospective predictors of type of trauma exposure and PTSD over and above the influence of correlated family adversity (a composite of family conflict, stress, and parental psychopathology). Data were analyzed with logistic

and multinomial logistic regressions. Results indicated that females, but not males, with higher levels of internalizing (OR = 2.91) and externalizing (OR = 2.37) symptoms during adolescence were significantly more likely to be exposed to assaultive violence (over and above family adversity). In fact, males with higher levels of internalizing symptoms were significantly less likely to be exposed to assaultive violence (OR = 0.54). Neither internalizing nor externalizing symptoms uniquely predicted exposure to traumatic events that did not involve assaultive violence. Among trauma-exposed participants, the unique association between internalizing symptoms and later PTSD yielded an odds ratio of 1.79 (p = .07) over and above the influences of family adversity, type of trauma exposure, and gender. Assaultive violence exposure fully mediated the association between females' externalizing symptoms and future PTSD. Findings may help inform the prevention of both assaultive violence exposure and PTSD.

Jankowski, M. K., H. Leitenberg, et al. (2002). "Parental caring as a possible buffer against sexual revictimization in young adult survivors of child sexual abuse." Journal of Traumatic Stress 15(3): 235-244.

This study examined whether parental caring provided a buffer against the revictimization effect. 974 undergraduate women provided information about child sexual abuse, physical abuse, and whether they witnessed violence between their parents during childhood. They also reported whether they had ever been the victim of sexual assault in adulthood, and offered their perceptions of the degree of care they received as a child from each parent. Results indicated that women who had been sexually abused in childhood were twice as likely to be sexually assaulted in adulthood and that women with 2 or more types of childhood trauma were 3 times as likely to be sexually revictimized. Parental caring was not found to buffer against the revictimization effect.

King, D. W., L. A. King, et al. (2006). "Characterizing time in longitudinal trauma research." Journal of Traumatic Stress 19(2): 205-215.

Despite the proliferation of longitudinal trauma research, careful attention to timing of assessments is often lacking. Patterns in timing of assessments, alternative time structures, and the treatment of time as an outcome are discussed and illustrated using trauma data.

Lamoureux, B. E., P. A. Palmieri, et al. (2012). "Child sexual abuse and adulthood-interpersonal outcomes: examining pathways for intervention." Psychological Trauma: Theory, Research, Practice, and Policy 4(6): 605-613.

We examined a dual pathway, longitudinal mediational model in which child sexual abuse (CSA) influences adulthood-interpersonal functioning and sexual risk through its impact on resiliency resources and psychological distress. Women were recruited from two obstetrics and gynecological clinics serving primarily low-income, inner-city women (N = 693) and interviewed at pretest (Time 1) and 6-month follow-up (Time 2). The proposed mediators were resiliency resources (i.e., self-esteem and self-efficacy) and psychological distress (i.e., depressive and posttraumatic stress symptoms). The interpersonal outcomes were general interpersonal problems (measured via recent loss of interpersonal resources, lack of perceived current social support, and recent social conflict) and

HIV/sexual risk (measured via lack of confidence asserting safe-sex practices, intimate-partner risk, and perceived barriers to safe sex). A respecified, partial structural equation model implying full mediation supported our hypotheses. Model fit was assessed using the chi-square goodness-of-fit statistic, comparative-fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR; CFI = .96, RMSEA = .05, SRMR = .04). The impact of CSA on interpersonal problems was mediated through its effect on psychological distress, whereas the impact of CSA on HIV/sexual risk was mediated through its effect on resiliency resources. Implications for intervention are discussed.

Lindley, S. E., E. B. Carlson, et al. (2004). "Basal and dexamethasone suppressed salivary cortisol concentrations in a community sample of patients with posttraumatic stress disorder." Biological Psychiatry 55(9): 940-945.

BACKGROUND: PTSD has been associated with lower concentrations of cortisol and enhanced suppression of cortisol by dexamethasone, although discrepancies exist among reports. The objective of the study was to determine the pattern of cortisol responses in patients seeking treatment for PTSD resulting from a variety of traumatic experiences and to test whether cortisol responses are significantly related to childhood trauma, severity of symptoms, or length of time since trauma. METHODS: Salivary cortisol was measured at 8 am, 4 pm, and 10 pm on 2 consecutive days before and after a 10 pm dose of .5 mg dexamethasone in 17 psychotropic medication and substance-free subjects with PTSD and 17 matched control subjects. RESULTS: Repeated-measures analysis of variance (ANOVA) of the baseline salivary cortisol concentrations demonstrated a significant effect for group with higher concentrations in the PTSD group but no significant differences in responses to dexamethasone. The presence of childhood abuse did not significantly affect salivary cortisol concentrations, and there was no correlation between predexamethasone cortisol and either the severity of PTSD symptoms or the time since the index trauma. CONCLUSIONS: Neither low basal concentrations nor enhanced suppression of cortisol are consistent markers of a PTSD diagnosis.

Lipschitz, D. S., L. M. Mayes, et al. (2005). "Baseline and modulated acoustic startle responses in adolescent girls with posttraumatic stress disorder." Journal of the American Academy of Child and Adolescent Psychiatry 44(8): 807-814.

OBJECTIVE: To assess baseline and modulated acoustic startle responses in adolescent girls with PTSD. METHOD: 28 adolescent girls with PTSD and 23 healthy control girls were recruited for participation in the study. Acoustic stimuli were bursts of white noise of 104 dB presented biaurally through headphones. Baseline startle responses as well as prepulse inhibition, a 1,000-Hz prestimulation tone presented 120 milliseconds before the startle stimulus for 30 milliseconds, and prepulse facilitation, a 1000-Hz prestimulation tone presented continuously for 2,000 milliseconds before the startle stimulus, were compared in these two groups of girls. RESULTS: At baseline and under neutral testing conditions, the magnitude of the startle response (eye blink) did not differ significantly between girls with PTSD and healthy control girls. There were no significant differences in the degree of prepulse inhibition or facilitation between the two groups of girls. CONCLUSIONS:

Unlike combat veterans with PTSD, adolescent girls with PTSD who report exaggerated startle may not have exaggerated baseline acoustic startle responses in the laboratory. Further research should explore whether girls with PTSD demonstrate altered startle responses under stress and/or evidence of other types of psychophysiological abnormalities.

Lipschitz, D. S., C. A. Morgan, et al. (2002). "Neurobiological disturbances in youth with childhood trauma and in youth with conduct disorder." Journal of Aggression, Maltreatment and Trauma 6(1): 149-174.

Traumatized children often present with symptoms of behavioral dyscontrol (aggression, impulsivity, and hyperactivity). There is some symptom overlap between childhood PTSD and the disruptive behavioral spectrum disorders (ADHD, ODD, CD). To date, there are two separate and emerging bodies of literature that describe underlying neurobiological abnormalities in traumatized youth and in youth with conduct disorder/juvenile delinquency. In this article we first review and contrast some of the neurobiological mechanisms associated with disordered arousal (these include basal cortisol and cortisol reactivity to stress, psychophysiological parameters, and catecholamine studies) in each of these two groups. Next, we attempt to integrate some of these neurobiological findings and make recommendations for future studies.

Lipschitz, D. S., A. M. Rasmusson, et al. (2003). "Posttraumatic stress disorder and substance use in inner-city adolescent girls." Journal of Nervous and Mental Disease 191(11): 714-721.

The purpose of this study is to examine rates of nicotine, marijuana, and alcohol use as well as patterns of problematic substance use and PTSD symptoms in inner-city adolescent girls. 104 adolescents who obtained medical care at a hospital-based adolescent clinic were systematically surveyed for trauma exposure, posttraumatic stress symptoms, and substance use. A subset (N = 54, 52%) of girls completed a semistructured psychiatric diagnostic interview (K-SADS-PL) to ascertain timing of PTSD symptoms relative to substance use. Compared with traumatized girls without PTSD, girls with full and partial PTSD were significantly more likely to use nicotine, marijuana, and/or alcohol on a regular basis. 15 girls met criteria for both PTSD and a substance-use disorder. For 80% of these girls, the age of onset of PTSD was either before or concurrent with the onset of their substance-use disorder. Inner-city adolescent girls with PTSD exhibit problematic substance use and may be at high risk of developing a comorbid substance-use disorder.

Lipschitz, D. S., A. M. Rasmusson, et al. (2003). "Salivary cortisol responses to dexamethasone in adolescents with posttraumatic stress disorder." Journal of the American Academy of Child and Adolescent Psychiatry 42(11): 1310-1317.

OBJECTIVE: Previous studies of adults with PTSD have found various abnormalities in the regulation of the hypothalamic-pituitary-adrenal axis, including enhanced suppression of cortisol following low-dose dexamethasone. The purpose of the present study was to investigate salivary cortisol responses to low-dose dexamethasone in adolescents with PTSD. METHOD: 48 adolescents (20 with current PTSD, 9 trauma controls without PTSD, and 19 healthy nontraumatized controls) were enrolled in the study. On day 1, baseline saliva samples were obtained at 8 a.m. and 0.5 mg of

dexamethasone was administered at 11 p.m. Cortisol and dexamethasone levels were assessed at 8 a.m. the following day. RESULTS: Adolescents with current PTSD showed no difference in the suppression of salivary cortisol in response to low-dose (0.5 mg) dexamethasone compared to trauma controls without PTSD and nontraumatized controls. More severely affected PTSD subjects with co-occurring major depression showed higher pre- and post-dexamethasone salivary cortisol levels compared to controls. CONCLUSIONS: The present study did not find evidence for enhanced suppression of salivary cortisol at 8 a.m. following low-dose dexamethasone in multiply traumatized adolescents with PTSD. This result differs from findings in adults with PTSD. Further investigations of hypothalamic-pituitary-adrenal axis abnormalities in traumatized children and adolescents are needed.

McDonagh, A., M. J. Friedman, et al. (2005). "Randomized trial of cognitive-behavioral therapy for chronic posttraumatic stress disorder in adult female survivors of childhood sexual abuse." Journal of Consulting and Clinical Psychology 73(3): 515-524.

The authors conducted a randomized clinical trial of individual psychotherapy for women with PTSD related to childhood sexual abuse (n = 74), comparing cognitive-behavioral therapy (CBT) with a problem-solving therapy (present-centered therapy; PCT) and to a wait-list (WL). The authors hypothesized that CBT would be more effective than PCT and WL in decreasing PTSD and related symptoms. CBT participants were significantly more likely than PCT participants to no longer meet criteria for a PTSD diagnosis at follow-up assessments. CBT and PCT were superior to WL in decreasing PTSD symptoms and secondary measures. CBT had a significantly greater dropout rate than PCT and WL. Both CBT and PCT were associated with sustained symptom reduction in this sample.

McMackin, R. A., M. B. Leisen, et al. (2002). "The relationship of trauma exposure to sex offending behavior among male juvenile offenders." Journal of Child Sexual Abuse 11(2): 25-40.

The most common type of adult and juvenile sex offender treatment utilizes a Relapse Prevention (RP) model. In RP clients learn about their offense cycle with an emphasis on recognizing high-risk situations and negative emotional states that can be precursors or triggers to offending behavior. This study identifies ways that traumatic experiences and trauma-associated feelings can be offense triggers for juvenile sex offenders. Researchers interviewed the treating clinicians of 40 male juvenile sex offenders who received at least six months of RP sex offender treatment. Results showed that 95% of the youths had experienced a PTSD Criterion A traumatic event and that 65% met criteria for PTSD based on clinician judgments. Overall, clinicians identified prior trauma exposure as being related to the offense triggers in 85% of offenders. Specifically, the following trauma-related feelings were identified as offense triggers: intense fear in 37.5% of sex offenders, helplessness in 55%, and horror in 20%. Implications for sex offender treatment programs are discussed.

McMackin, R. A., M. B. Leisen, et al. (2002). "Preliminary development of trauma-focused treatment groups for incarcerated juvenile offenders." Journal of Aggression, Maltreatment and Trauma 6(1): 175-199.

Most male juvenile offenders have been exposed to trauma. Many juvenile offenders have experienced both acute and chronic trauma. Trauma exposure among offenders is closely linked to their criminal behavior, yet few protocols have been developed to treat posttraumatic sequelae in a delinquent population. This article describes initial efforts to develop group therapy services for incarcerated male juvenile offenders who have histories of significant trauma exposure and current symptoms of PTSD. Four separate pilot groups were conducted in two Massachusetts Department of Youth Service secure residential facilities. The treatment included trauma psychoeducation (including the relationship between trauma and offending), therapeutic trauma exposure through discussion and expressive arts, and coping skill development. The treatment development and initial implementation as well as directions for future research are discussed.

Mouchenik, Y., V. Gaboulaud, et al. (2010). "Questionnaire Guide d'Évaluation des difficultés psychologiques de jeunes enfants pris en charge par la Protection de l'Enfance = Questionnaire Guiding the Evaluation of psychological disorders in young children protected by a welfare system." Enfance 62(2): 143-166.

For children protected by welfare systems, the evaluation of psychological disorders and mental health is now an international key issue. Placements in foster care have dramatically increased around the world. Better attention is needed to children's mental health and to the quality of services provided in out-of-home care. The aim of this paper is to present the first results of a validation procedure concerning a new screening tool, the QGE (Questionnaire Guiding the Evaluation of psychological disorders in young children). The QGE was used for the assessment of psychological disorders in young children displaced in three residential homes and foster care of the Parisian Area Child Agency. The QGE scores are compared to LCE (list of child behaving), the French validated version of the Achenbach Child Behavior Check List (CBCL). The QGE is a hetero-evaluation rating scale for children aged 4 to 6 years, filled by parents or child welfare workers. One of its specificity is to assess PTSD in case of traumatic events in the child's life. The QGE appears to be useful to collect caretakers' perceptions about the child and sounds promising to address children's psychological needs. The first results highlight the metrological sensitivity of the tool.

Newman, E., D. G. Kaloupek, et al. (2003). "Posttraumatic stress disorder among criminally involved youth [letter]." Archives of General Psychiatry 60(8): 849-850.

Discusses the omission of PTSD in a study of youth involved in the juvenile justice system.

Peltonen, K., S. R. Qouta, et al. (2012). "Effectiveness of school-based intervention in enhancing mental health and social functioning among war-affected children." Traumatology 18(4): 37-46.

This study examines the effectiveness of the School Mediation Intervention (SMI) in preventing mental health problems and promoting social functioning among children living in armed conflict. The participants were 225 Palestinian children in the Gaza Strip, divided into the

intervention group (n = 141) from schools where the SMI was implemented and the control group (n = 84) from a school with no SMI implementation. The SMI aimed at improving pupils' social functioning through methods of problem solving, conflict resolution, and dialogue skills and at enhancing mental health through caring for peers and preventing disruptive and aggressive behavior. Older students acted as responsible school mediators and teachers as supervisors. Participants reported symptoms of PTSD, depression (CDI), psychological distress (SDQ), and quality of friendship, prosocial behavior, and aggressiveness at baseline at the beginning of school year (T1) and at postintervention 8 months later (T2). The results defeated the hypothesis that participating in SMI would decrease symptoms and increase friendship quality and prosocial and nonaggressive behavior. Instead, SMI was effective only in limiting the deterioration of friendships and prosocial behavior across the intervention period. The results are discussed in regard to interventions tailored for children traumatized in armed conflicts.

Pine, D. S., K. Mogg, et al. (2005). "Attention bias to threat in maltreated children: implications for vulnerability to stress-related psychopathology." American Journal of Psychiatry 162(2): 291-296.

OBJECTIVE: Previous research in adults implicates attention bias in PTSD. To study attention bias in children, the authors used picture-based versions of the visual-probe attention bias task previously used with adults. They tested the hypothesis that attention bias to threatening facial photographs is associated with maltreatment and PTSD. METHOD: A visual-probe task that manipulated threat levels was used to test 34 children who had been maltreated and 21 children who had not been maltreated. The visual-probe task involved showing photographs of actors with faces depicting neutral, angry/threatening, or happy expressions for 500 msec each. RESULTS: Attention bias away from threat was associated with severity of physical abuse and diagnosis of PTSD. This association reflected the tendency for high levels of abuse or PTSD to predict attention avoidance of threatening faces. CONCLUSIONS: Previous studies examined the engagement of specific brain regions associated with attention orientation to angry/threatening faces. The current study used similar methods to document associations between attention bias and maltreatment in children. This sets the stage for studies examining relationships in children among perturbed brain function, psychopathology, attention bias, and maltreatment.

Reyes-Rodríguez, M. L., A. Von Holle, et al. (2011). "Posttraumatic stress disorder in anorexia nervosa." Psychosomatic Medicine 73(6): 491-497.

OBJECTIVES: Comorbidity among eating disorders, traumatic events, and PTSD has been reported in several studies. The main objectives of this study were to describe the nature of traumatic events experienced and to explore the relationship between PTSD and anorexia nervosa (AN) in a sample of women. METHODS: 824 participants from the National Institutes of Health-funded Genetics of Anorexia Nervosa Collaborative Study were assessed for eating disorders, PTSD, and personality characteristics. RESULTS: From a final sample of 753 women with AN, 13.7% (n = 103) met DSM-IV criteria for PTSD. The sample mean age was 29.5 (standard deviation = 11.1) years. In pairwise comparisons across AN subtypes, the odds of having a PTSD diagnosis were significantly lower in individuals with restricting AN than individuals with purging AN without binge

eating (odds ratio = 0.49, 95% confidence interval = 0.30-0.80). Most participants with PTSD reported the first traumatic event before the onset of AN (64.1%, n = 66). The most common traumatic events reported by those with a PTSD diagnosis were sexually related traumas during childhood (40.8%) and during adulthood (35.0%). CONCLUSIONS: AN and PTSD do co-occur, and traumatic events tend to occur before the onset of AN. Clinically, these results underscore the importance of assessing trauma history and PTSD in individuals with AN and raise the question of whether specific modifications or augmentations to standard treatment for AN should be considered in a subgroup to address PTSD-related psychopathology.

Saxe, G. N., N. Chawla, et al. (2003). "Child Stress Disorders Checklist: a measure of ASD and PTSD in children." Journal of the American Academy of Child and Adolescent Psychiatry 42(8): 972-978.

OBJECTIVE: To assess the psychometric properties of the Child Stress Disorders Checklist (CSDC), a 36-item observer-report instrument that measures acute stress and posttraumatic symptoms in children. METHOD: The CSDC was administered to parents of 43 children with acute burns and 41 children who had experienced a traffic crash. This instrument was also administered to the burned children's primary nurse to estimate interrater reliability. The CSDC was completed again by parents of burned children, 2 days and 3 months later. Convergent validity was determined by correlating scores on the CSDC with scores on instruments of known validity for assessing PTSD in children. Concurrent validity was determined through an examination of the relationship between CSDC scores and an index of trauma severity (percentage of body surface area burned). Discriminant validity was assessed by administering the Child Behavior Checklist (CBCL): it was hypothesized that PTSD symptoms would be more closely related to the PTSD scale of the CBCL than the Thought Problems scale of the CBCL. RESULTS: The CSDC has reliable and valid psychometric properties. CONCLUSIONS: The CSDC, an observer-report instrument of ASD and PTSD in children, has important utility in clinical and research settings.

Smith, A. K., K. N. Conneely, et al. (2011). "Differential immune system DNA methylation and cytokine regulation in post-traumatic stress disorder." American Journal of Medical Genetics Part B (Neuropsychiatric Genetics) 156(6): 700-708.

DNA methylation may mediate persistent changes in gene function following chronic stress. To examine this hypothesis, we evaluated African American subjects matched by age and sex, and stratified into four groups by PTSD diagnosis and history of child abuse. Total Life Stress (TLS) was also assessed in all subjects. We evaluated DNA extracted from peripheral blood using the HumanMethylation27 BeadChip and analyzed both global and site-specific methylation. Methylation levels were examined for association with PTSD, child abuse history, and TLS using a linear mixed model adjusted for age, sex, and chip effects. Global methylation was increased in subjects with PTSD. CpG sites in five genes (TPR, CLEC9A, APC5, ANXA2, and TLR8) were differentially methylated in subjects with PTSD. Additionally, a CpG site in NPFFR2 was associated with TLS after adjustment for multiple testing. Notably, many of these genes have been previously associated with inflammation. Given these results and reports of immune dysregulation associated with trauma history, we compared plasma cytokine levels in these subjects and found IL4, IL2, and TNFalpha

levels associated with PTSD, child abuse, and TLS. Together, these results suggest that psychosocial stress may alter global and gene-specific DNA methylation patterns potentially associated with peripheral immune dysregulation. Our results suggest the need for further research on the role of DNA methylation in stress-related illnesses.

Snyder, F. J., Y. H. Roberts, et al. (2012). "Exposure to traumatic events and the behavioral health of children enrolled in an early childhood system of care." Journal of Traumatic Stress 25(6): 700-704.

Children may be exposed to numerous types of traumatic events that can negatively affect their development. The scope to which studies have examined an array of events among young children has been limited, thereby restricting our understanding of exposure and its relationship to behavioral functioning. The current cross-sectional study describes traumatic event exposure in detail and its relationship to behavioral health among an at-risk sample of young children (N = 184), under 6 years of age, upon enrollment into an early childhood, family-based, mental health system of care. Caregivers completed home-based semistructured interviews that covered children's exposure to 24 different types of traumatic events and behavioral and emotional functioning. Findings indicated that nearly 72% of young children experienced 1 or more types of traumatic events. Multiple regression model results showed that exposure was significantly associated with greater behavioral and emotional challenges with children's age, gender, race/ethnicity, household income, and caregiver's education in the model. These findings highlight the prevalence of traumatic exposures among an at-risk sample of young children in a system of care and suggest that this exposure is associated with behavioral and emotional challenges at a young age.

Sullivan, T. P., D. C. Fehon, et al. (2006). "Differential relationships of childhood abuse and neglect subtypes to PTSD symptom clusters among adolescent inpatients." Journal of Traumatic Stress 19(2): 229-239.

This article investigates whether childhood abuse and neglect subtypes (i.e., physical, sexual, and emotional abuse, and physical and emotional neglect) differentially predict the severity of individual PTSD symptom clusters and overall posttraumatic stress. 89 patients admitted to the short-term adolescent treatment unit of a psychiatric hospital completed a battery of psychological assessments. Findings of multiple regression analyses showed that emotional and sexual abuse rather than physical abuse, emotional neglect, or physical neglect is related to individual symptom cluster severity and overall posttraumatic stress. Results suggested that a greater level of specificity is necessary when assessing child abuse and posttraumatic stress because each level provides more specific information about how to intervene to reduce the risk of negative outcomes.]

Vaage, A. B., P. H. Thomsen, et al. (2011). "Paternal predictors of the mental health of children of Vietnamese refugees." Child and Adolescent Psychiatry and Mental Health 5: Article 2.

BACKGROUND: Intergenerational transmission of trauma as a determinant of mental health has been studied in the offspring of Holocaust survivors and combat veterans, and in refugee families. Mainly negative effects on the children are reported, while a few studies also describe resilience and a possible positive transformation process. A longitudinal prospective cohort study of

Vietnamese refugees arriving in Norway in 1982 reports a 23 years follow-up, including spouses and children born in Norway, to study the long-term effects of trauma, flight, and exile on the offspring of the refugees. OBJECTIVES OF THE STUDY: (1) To study the association between the psychological distress of Vietnamese refugee parents and their children after 23 years resettlement. (2) To analyse paternal predictors for their children's mental health. METHODS: Information from one or both parents at arrival in 1982 (T1), at follow-up in 1985 (T2), and 23 years after arrival (T3) was included. The mental health was assessed by the Global Severity Index (GSI) of the self-report Symptom Check List-90-R (SCL-90-R) for parents (n = 88) and older children (age 19-23 years, n = 12), while children aged 4-18 (n = 94) were assessed using the Strengths and Difficulties Questionnaire (SDQ). RESULTS: 30% of the families had one parent with a high psychological distress score ("probable caseness" for a mental disorder), while only 4% of the children aged 10-23 years were considered as probable cases. In spite of this, there was an association between probable caseness in children and in fathers at T3. A significant negative paternal predictor for the children's mental health at T3 was the father's PTSD at arrival in Norway, while a positive predictor was the father's participation in a Norwegian network three years after arrival. CONCLUSIONS: Children of refugees cannot be globally considered at risk for mental health problems. However, the preceding PTSD in their fathers may constitute a specific risk for them.

Waite, R., P. Gerrity, et al. (2012). "Assessment for and response to adverse childhood experiences." Journal of Psychosocial Nursing and Mental Health Services 48(12): 51-61.

Literature strongly suggests that early exposure to adverse childhood experiences (ACEs) disrupts crucial normal stages of childhood development and predisposes these individuals to subsequent psychiatric sequelae. Even with these data, little is found in nursing literature that discusses ACEs and their impact on adult mental health. Therefore, the purpose of this article is to address how nurses approach communication with clients about and assess for traumatic life experiences. In addition, screening measures for ACEs will be presented, along with discussion about ethical responsibilities of health professionals and researchers in asking about abuse.

Yasik, A. E., P. A. Saigh, et al. (2012). "Self-reported anxiety among traumatized urban youth." Traumatology 18(4): 47-55.

This study compared the Revised Children's Manifest Anxiety Scale (RCMAS) scores of traumatized youth with or without PTSD to the scores of a nonclinical comparison group. Child diagnostic interviews identified children with PTSD (28), traumatized children without PTSD (63), and a nonclinical comparison group (41). In the absence of major comorbid disorders, children with PTSD had significantly higher RCMAS total scores and significantly higher scores on the RCMAS Physiological Anxiety, Worry/Oversensitivity, and Social Concern/Concentration subscales. Nonsignificant differences were observed between groups on the RCMAS Lie subscale. The RCMAS scores of the traumatized PTSD negatives and controls did not significantly differ. Implications for research and practice are considered.