

January 2015 Pilots Topic Alert

Aakvaag, H. F., S. Thoresen, et al. (2014). "Shame and guilt in the aftermath of terror: the Utoya Island study." *Journal of Traumatic Stress* 27(5): 618-621.

In recent years, there has been increased interest in trauma-related shame and guilt and their relationship to mental health. Little is known, however, about shame and guilt following mass traumas, such as terrorism. This study investigates the potential associations of trauma-related shame and guilt with posttraumatic stress (PTS) reactions after the terrorist attack of July 22, 2011 on Utøya Island in Norway. Interviews were conducted with 325 of the 490 survivors 4 to 5 months after the event. Multiple linear regression analyses were employed to investigate associations. In the month previous to the interview, 44.1% (n = 143) of participants had experienced at least some guilt for what happened during the attack, and 30.5% (n = 99) had experienced at least some shame. Shame and guilt were both uniquely associated with PTS reactions after adjusting for terror exposure, gender, and other potential confounders (frequent shame: B = 0.54, frequent guilt: B = 0.33). We concluded that trauma-related shame and guilt are related to mental health after mass trauma. [Author Abstract]

Adams, Z. W., J. A. Sumner, et al. (2014). "Prevalence and predictors of PTSD and depression among adolescent victims of the spring 2011 tornado outbreak." *Journal of Child Psychology and Psychiatry* 55(9): 1047-1055.

BACKGROUND: Relatively few studies have examined prevalence and predictors of posttraumatic stress disorder (PTSD) or major depressive episode (MDE) in disaster-affected adolescents. Fewer still have administered diagnostic measures or studied samples exposed to tornadoes, a common type of disaster. Further, methodologic problems limit the generalizability of previous findings. This study addressed prevalence estimates and risk factors for PTSD and MDE among adolescents exposed to the Spring 2011 tornado outbreak in Alabama and Joplin, Missouri. **METHODS:** A large (N = 2000), population-based sample of adolescents and caregivers, recruited randomly from tornado-affected communities, participated in structured telephone interviews. PTSD and MDE prevalence were estimated for the overall sample, by gender, and by age. Hierarchical logistic regression was used to identify risk factors for PTSD and MDE. **RESULTS:** Overall, 6.7% of adolescents met diagnostic criteria for PTSD and 7.5% of adolescents met diagnostic criteria for MDE since the tornado. Girls were significantly more likely than boys to meet diagnostic criteria for MDE, and older adolescents were more likely than younger adolescents to report MDE since the tornado. Female gender, prior trauma exposure, and an injured family member were associated with greater risk for PTSD and MDE. Specific incident characteristics (loss of services, concern about others' safety) were associated with greater PTSD risk; prior disaster exposure was associated with lower MDE risk. **CONCLUSIONS:** However, most adolescents were resilient following tornado

exposure, roughly 1 in 15 developed PTSD, 1 in 13 developed MDE, and many more endorsed subclinical mental health problems. Information regarding specific risk factors can guide early screening, prevention, and intervention efforts in disaster-affected communities. [Author Abstract]

KEY WORDS: disaster; adolescents; PTSD; depression; tornadoes

Agorastos, A., J. O. E. Pittman, et al. (2014). "The cumulative effect of different childhood trauma types on self-reported symptoms of adult male depression and PTSD, substance abuse and health-related quality of life in a large active-duty military cohort." *Journal of Psychiatric Research* 58: 46-54.

History of childhood trauma (CT) is highly prevalent and may lead to long-term consequences on physical and mental health. This study investigated the independent association of CT with symptoms of adult depression and posttraumatic stress disorder (PTSD), mental and physical health-related quality of life (HRQoL), as well as current tobacco consumption and alcohol abuse in a large homogenous cohort of 1254 never-deployed, young male Marines enrolled in the Marine Resiliency Study. Independent effects of CT history, number and type of CT on outcomes were analyzed using hierarchical multivariate logistic regression models. Our results suggested dose-dependent negative effect of an increasing number of trauma types of CT on depression, PTSD and HRQoL. Experience of single CT type demonstrated overall weak effects, while history of multiple CT types distinctively increased the likelihood of adult PTSD symptomology (OR: 3.1, 95% CI: 1.5-6.2), poor mental (OR: 2.3, 95% CI: 1.7-3.1) and physical HRQoL (OR: 1.4, 95% CI: 1.1-1.9). Risk for depression symptoms was similar for both single and multiple CT (OR: 2.2, 95% CI: 1.3-3.8 and OR: 2.1, 95% CI: 1.2-3.5 respectively). CT history had no effects on current tobacco use and alcohol abuse. Our study thus provides evidence for substantial additive effect of different CT types on adult mental and physical health with increasing levels of exposure. [Author Abstract] KEY WORDS: childhood trauma; PTSD; depression; health-related quality of life (HRQoL); mental health; substance abuse

Armour, C. and E. Sleath (2014). "Assessing the co-occurrence of intimate partner violence domains across the life-course: relating typologies to mental health." *European Journal of Psychotraumatology* 5.

BACKGROUND: The inter-generational transmission of violence (ITV) hypothesis and polyvictimisation have been studied extensively. The extant evidence suggests that individuals from violent families are at increased risk of subsequent intimate partner violence (IPV) and that a proportion of individuals experience victimisation across multiple rather than single IPV domains. Both ITV and polyvictimisation are shown to increase the risk of psychiatric morbidity, alcohol use, and anger expression. **OBJECTIVE:** The current study aimed to 1) ascertain if underlying typologies of victimisation across the life-course and over multiple victimisation domains were present and 2) ascertain if groupings differed on mean scores of posttraumatic stress disorder (PTSD), depression, alcohol use, and anger expression. **METHOD:** University students (N=318) were queried in relation to victimisation experiences and psychological well-being. Responses across multiple domains of IPV spanning the life-course were used in a latent profile analysis. ANOVA was subsequently used to determine if profiles differed in their mean scores on PTSD, depression, alcohol use, and anger

expression. RESULTS: Three distinct profiles were identified; one of which comprised individuals who experienced "life-course polyvictimisation," another showing individuals who experienced "witnessing parental victimisation," and one which experienced "psychological victimisation only." Life-course polyvictims scored the highest across most assessed measures. CONCLUSION: Witnessing severe physical aggression and injury in parental relationships as a child has an interesting impact on the ITV into adolescence and adulthood. Life-course polyvictims are shown to experience increased levels of psychiatric morbidity and issues with alcohol misuse and anger expression. [Author Abstract] KEY WORDS: intimate partner violence; inter-generational transmission of violence; polyvictimisation; psychiatric morbidity; anger; alcohol

Barone, L., A. Bramante, et al. (2014). "Mothers who murdered their child: an attachment-based study on filicide." *Child Abuse and Neglect* 38(9): 1468-1477.

The current study examined whether attachment theory could contribute to identifying risk factors involved in filicide. Participants were 121 women: mothers from the normative population (NPM, n = 61), mothers with mental illness (MIM, n = 37), and filicidal mothers, i.e., mothers who had murdered their child (FM, n = 23). Descriptive variables were collected and the Adult Attachment Interview was used to assess mental representations of attachment relationships using the traditional coding system and the Hostile/Helpless (HH) attachment state of mind coding. Unresolved, Insecure, Entangled, and Helpless representations of attachment relationships were overrepresented in the FM group. When a constellation of descriptive and attachment-based risk factors was taken into account, the HH attachment state of mind was found to contribute significantly to distinguishing between MIM and FM groups. As predicted, when the Bayesian Information Criterion was applied to multinomial regression models, descriptive variables were shown to be less able alone than in association with attachment-based classifications to disentangle the increased risk for committing filicide. [Author Abstract] KEY WORDS: filicide; attachment; mental illness; parenting risk factors

Belden, A. C., D. M. Barch, et al. (2014). "Anterior insula volume and guilt: neurobehavioral markers of recurrence after early childhood major depressive disorder." *Journal of the American Medical Association*.

IMPORTANCE: This is the first study to date to examine volumetric alterations in the anterior insula (AI) as a potential biomarker for the course of childhood major depressive disorder (MDD). OBJECTIVES: To examine whether children with a history of preschool-onset (PO) MDD show reduced AI volume, whether a specific symptom of PO MDD (pathological guilt) is related to AI volume reduction (given the known relationship between AI and guilt processing), and whether AI volumes predict subsequent likelihood of having an episode of MDD. DESIGN, SETTING, AND PARTICIPANTS: In a prospective longitudinal study, 306 children (age range, 3.00-5.11 years) and caregivers completed DSM diagnostic assessments at 6 annual time points during 10 years as part of the Preschool Depression Study. Magnetic resonance imaging was completed on a subset of 145 school-age children (age range, 6.11-12.11 years). MAIN OUTCOMES AND MEASURES: Whole-brain-adjusted AI volume measured using magnetic resonance imaging at school age and children's

diagnosis of MDD any time after their imaging. RESULTS: Compared with children without a history of PO MDD, school-age children previously diagnosed as having PO MDD had smaller left and right AI volumes (Wilks $\Lambda = 0.94$, $F_{[2,124]} = 3.37$, $P = .04$, Cohen $d = 0.23$). However, the effect of POMDD on reduced AI volumes was better explained by children's experience of pathological guilt during preschool ($\Lambda = 0.91$, $F_{[2,120]} = 6.17$, $P = .003$, $d = .30$). When covarying for children's lifetime history of MDD episodes, their experience of pathological guilt during preschool, as well as their sex and age at the time of imaging, schoolchildren's right-side AI volume was a significant predictor of being diagnosed as having an MDD episode after imaging (odds ratio, 0.96; 95%CI, 0.01-0.75; $P = .03$). CONCLUSIONS AND RELEVANCE: These results provide evidence that structural abnormalities in AI volume are related to the neurobiology of depressive disorders starting in early childhood. The present findings are consistent with mounting research in adult MDD suggesting that insula function and structure may be a target biomarker for major depression. [Author Abstract]

Birn, R. M., R. Patriat, et al. (2014). "Childhood maltreatment and combat posttraumatic stress differentially predict fear-related fronto-subcortical connectivity." *Depression and Anxiety* 31(10): 880-892.

BACKGROUND: Adult posttraumatic stress disorder (PTSD) has been characterized by altered fear-network connectivity. Childhood trauma is a major risk factor for adult PTSD, yet its contribution to fear-network connectivity in PTSD remains unexplored. We examined, within a single model, the contribution of childhood maltreatment, combat exposure, and combat-related posttraumatic stress symptoms (PTSS) to resting-state connectivity (rs-FC) of the amygdala and hippocampus in military veterans. METHODS: Medication-free male veterans ($n = 27$, average 26.6 years) with a range of PTSS completed resting-state fMRI. Measures including the Clinician-Administered PTSD Scale (CAPS), Childhood Trauma Questionnaire (CTQ), and Combat Exposure Scale (CES) were used to predict rs-FC using multilinear regression. Fear-network seeds included the amygdala and hippocampus. RESULTS: Amygdala: CTQ predicted lower connectivity to ventromedial prefrontal cortex (vmPFC), but greater anticorrelation with dorsal/lateral PFC. CAPS positively predicted connectivity to insula, and loss of anticorrelation with dorsomedial/dorsolateral (dm/dl)PFC. Hippocampus: CTQ predicted lower connectivity to vmPFC, but greater anticorrelation with dm/dlPFC. CES predicted greater anticorrelation, whereas CAPS predicted less anticorrelation with dmPFC. CONCLUSIONS: Childhood trauma, combat exposure, and PTSS differentially predict fear-network rs-FC. Childhood maltreatment may weaken ventral prefrontal-subcortical circuitry important in automatic fear regulation, but, in a compensatory manner, may also strengthen dorsal prefrontal-subcortical pathways involved in more effortful emotion regulation. PTSD symptoms, in turn, appear to emerge with the loss of connectivity in the latter pathway. These findings suggest potential mechanisms by which developmental trauma exposure leads to adult PTSD, and which brain mechanisms are associated with the emergence of PTSD symptoms. [Author Abstract] KEY WORDS: abuse; maltreatment; brain imaging; functional MRI; PTSD; trauma

Blosnich, J. R., M. E. Dichter, et al. (2014). "Disparities in adverse childhood experiences among individuals with a history of military service." *JAMA Psychiatry* 71(9): 1041-1048.

IMPORTANCE: Adverse childhood experiences (ACEs) are associated with several adulthood health problems, such as self-directed violence. For some individuals, enlistment in the military may be an instrumental act to escape adverse household environments; however, to our knowledge prevalence of ACEs among persons with a history of military service has not been documented in the United States using population-based data. **OBJECTIVE:** To compare the prevalence of ACEs among individuals with and without a history of military service. **DESIGN, SETTING, AND PARTICIPANTS:** Data are from the 2010 Behavioral Risk Factor Surveillance System. Computer-assisted telephone interviews were conducted with population-based samples of noninstitutionalized US adults from January 1 through December 31, 2010. Analyses were limited to respondents who received the ACE module (n = 60 598). Participants were categorized by history of military service and whether a respondent was 18 years of age in 1973. **MAIN OUTCOMES AND MEASURES:** History of military service was defined by active duty service, veteran status, or training for the Reserves or National Guard. The ACE inventory assessed 11 negative experiences before the age of 18 years. Weighted χ^2 tests and multiple logistic regression analyses were used to examine differences in ACEs by history of military service, era of service, and sex. **RESULTS:** Those with military experience had greater odds of any difference in prevalence of ACEs. In the all-volunteer era, men with military service had a higher prevalence of ACEs in all 11 categories than men without military service. Notably, in the all-volunteer era, men with military service had twice the odds of reporting forced sex before the age of 18 years (odds ratio, 2.19; 95% CI, 1.34-3.57) compared with men without military service. In the draft era, the only difference among men was household drug use, in which men with a history of military service had a significantly lower prevalence than men without a history of military service (2.1% vs 3.3%; P = .003). Fewer differences were observed among women in the all-volunteer and draft eras. **CONCLUSIONS AND RELEVANCE:** Differences in ACEs by era and sex lend preliminary support that enlistment may serve as an escape from adversity for some individuals, at least among men. Further research is needed to understand how best to support service members and veterans who may have experienced ACEs. [Author Abstract]

Bradshaw, C. P. (2014). "The role of families in preventing and buffering the effects of bullying [editorial]." *JAMA Pediatrics*.

There is a growing body of research documenting the behavioral, mental health, academic, and physiological impacts of bullying across the life course. This editorial comments on Frank J. Elgar, Anthony Napoletano, Grace Saul, Melanie A. Dirks, Wendy Craig, V. Paul Poteat, Melissa Holt, and Brian W. Koenig, "Cyberbullying victimization and mental health in adolescents and the moderating role of family dinners" *JAMA Pediatrics* [published online September 1, 2014] [42724]. [Adapted from Text]

Burnette, C. E. and C. Cannon (2014). "'It will always continue unless we can change something': consequences of intimate partner violence for indigenous women, children, and families." *European Journal of Psychotraumatology* 5.

BACKGROUND: Violence against indigenous women and girls is endemic, yet the absence of research on the consequences of this violence from the perspectives of women presents a profound barrier to the development of knowledge, along with violence prevention and mitigation. Although family is central to many indigenous communities, existing research typically examines the consequences of intimate partner violence (IPV) on women or children in isolation, rather than examining its consequences holistically. **OBJECTIVE:** The purpose of this article is to identify US indigenous women's perspectives about the impact of IPV on women, children, and families. **METHOD:** Data were collected with 29 indigenous women affected by violence from a Southeastern tribe in the United States. As part of a larger critical ethnography, pragmatic horizon analysis of life history interviews revealed the consequences of IPV across multiple levels. **RESULTS:** Women reported profound psychological consequences resulting from IPV. The majority of women had witnessed IPV in their childhood, providing support for an intergenerational cycle of violence. Women reported psychological consequences on children, which paralleled those reported by women, leaving deep impressions on children across their life course. Consequences on children and whole families were extensive, indicating the negative ramifications of IPV transcended personal boundaries and affected children and families across multiple generations. **CONCLUSIONS:** Given the tight-knit nature of indigenous families and communities, the consequences across individuals and families were noteworthy. However, a dearth in research examining consequences of IPV across levels fails to capture the interconnections of consequences for women, children, and families. Given the centrality of family in many indigenous communities, examining IPV from a holistic perspective that incorporates multiple levels is recommended for IPV research and intervention development. [Author Abstract] **KEY WORDS:** American Indian; Native American; domestic violence; family violence; qualitative; ethnography; life history

Calkins, M. E., T. M. Moore, et al. (2014). "The psychosis spectrum in a young U.S. community sample: findings from the Philadelphia Neurodevelopmental Cohort." *World Psychiatry* 13(3): 296-305.

Little is known about the occurrence and predictors of the psychosis spectrum in large non-clinical community samples of U.S. youths. We aimed to bridge this gap through assessment of psychosis spectrum symptoms in the Philadelphia Neurodevelopmental Cohort, a collaborative investigation of clinical and neurobehavioral phenotypes in a prospectively accrued cohort of youths, funded by the National Institute of Mental Health. Youths (age 11-21; N57,054) and collateral informants (caregiver/legal guardian) were recruited through the Children's Hospital of Philadelphia and administered structured screens of psychosis spectrum symptoms, other major psychopathology domains, and substance use. Youths were also administered a computerized neurocognitive battery assessing five neurobehavioral domains. Predictors of psychosis spectrum status in physically healthy participants (N54,848) were examined using logistic regression. Among medically healthy youths, 3.7% reported threshold psychotic symptoms (delusions and/or hallucinations). An additional 12.3% reported significant subpsychotic positive symptoms, with odd/unusual thoughts and auditory perceptions, followed by reality confusion, being the most discriminating and widely endorsed attenuated symptoms. A minority of youths (2.3%) endorsed subclinical negative/disorganized

symptoms in the absence of positive symptoms. Caregivers reported lower symptom levels than their children. Male gender, younger age, and non-European American ethnicity were significant predictors of spectrum status. Youths with spectrum symptoms had reduced accuracy across neurocognitive domains, reduced global functioning, and increased odds of depression, anxiety, behavioral disorders, substance use and suicidal ideation. These findings have public health relevance for prevention and early intervention. [Author Abstract] KEY WORDS: psychosis spectrum; U.S. youths; sub-psychotic positive symptoms; neurocognition; functional impairment

Castelli, P. and G. S. Goodman (2014). "Children's perceived emotional behavior at disclosure and prosecutors' evaluations." *Child Abuse and Neglect* 38(9): 1521-1532.

The present study investigated the perceived emotional behavior of alleged child victims when disclosing sexual abuse in a forensic interview. It also addressed whether the perceived emotional behavior influenced prosecutors' evaluations of children's potential as witnesses and prosecutors' recommendations to press charges. Ninety-eight videotapes of forensic interviews with alleged child sexual abuse victims (4- to 17-year-olds) were coded for behavioral indicators of emotions. Case file information and district attorney evaluations were also coded. Results indicated that children were not generally perceived as being emotional (e.g., sad) during disclosure. However, the perceived intensity of expressed emotions was greater when children disclosed the alleged abuse compared to when they discussed more neutral topics in rapport building. Greater perceived emotional withdrawal by children at disclosure was associated with more negative evaluations of child witnesses by prosecutors. Moreover, children's emotional behaviors, as noted by prosecutors, were among the predictors of prosecutors' recommendations to file charges. Practical implications are discussed. [Author Abstract] KEY WORDS: child witness; emotion; child sexual abuse; abuse disclosure; prosecution

Cecchet, S. J. and J. W. Thoburn (2014). "The psychological experience of child and adolescent sex trafficking in the United States: trauma and resilience in survivors." *Psychological Trauma: Theory, Research, Practice, and Policy* 6(5): 482-493.

To date, little empirical data exists examining the psychological experience of survivors of child sex trafficking in the form of prostitution, nor does current scientific data suggest how American women and children are recruited into the sex trade and sold for sex within the United States. This qualitative research study analyzed the narratives of interviews with 6 survivors of child and adolescent sex trafficking to assess factors that influenced their ability to survive, leave the sex trade, and reintegrate back into the community. Data were analyzed with an ecological systems model and a number of patterns emerged within participants' microsystems, mesosystems, and macrosystems. In the survivor microsystem, participants' insecure attachments led to their vulnerability to recruitment; within the mesosystem unsafe relationships contributed to increased emotional insecurities; in the macrosystem, participants were raised in environments that desensitized them to prostitution. In regard to escape and resilience, in the survivor microsystem participants left the sex trade because of pregnancy or mental health symptoms; in this mesosystem, participants needed safe relationships and increased self-worth; at the level of the macrosystem,

once participants left the industry they began processing their traumatic experiences through the mental health system. These data provide unprecedented insights into the psychological effects that the sex trade has on the individuals involved, shedding light on an unexplored issue that has a profound, yet furtive presence in the United States. [Author Abstract] KEY WORDS: sex trafficking; domestic minor trafficking; human trafficking; sexual trauma

Cisler, J. M., J. S. Steele, et al. (2014). "Corrigendum to "Neural processing correlates of assaultive violence exposure and PTSD symptoms during implicit threat processing: a network-level analysis among adolescent girls"." *Psychiatry Research: Neuroimaging* 223(3): 271-272.

The authors regret to report an error in a subset of analyses of the originally published manuscript: Josh M. Cisler, J. Scott Steele, Sonet Smitherman, Jennifer K. Lenow, and Clinton D. Kilts, "Neural processing correlates of assaultive violence exposure and PTSD symptoms during implicit threat processing: A network-level analysis among adolescent girls", *Psychiatry Research: Neuroimaging* 214(3) 238-246 (2013) [42798]. These corrected results negate the inference of any group differences in network activation for fear vs. neutral faces. [Adapted from Text]

Cloitre, M., D. W. Garvert, et al. (2014). "Distinguishing PTSD, complex PTSD, and borderline personality disorder: a latent class analysis." *European Journal of Psychotraumatology* 5.

BACKGROUND: There has been debate regarding whether Complex Posttraumatic Stress Disorder (Complex PTSD) is distinct from Borderline Personality Disorder (BPD) when the latter is comorbid with PTSD. OBJECTIVE: To determine whether the patterns of symptoms endorsed by women seeking treatment for childhood abuse form classes that are consistent with diagnostic criteria for PTSD, Complex PTSD, and BPD. METHOD: A latent class analysis (LCA) was conducted on an archival dataset of 280 women with histories of childhood abuse assessed for enrollment in a clinical trial for PTSD. RESULTS: The LCA revealed four distinct classes of individuals: a Low Symptom class characterized by low endorsements on all symptoms; a PTSD class characterized by elevated symptoms of PTSD but low endorsement of symptoms that define the Complex PTSD and BPD diagnoses; a Complex PTSD class characterized by elevated symptoms of PTSD and self-organization symptoms that defined the Complex PTSD diagnosis but low on the symptoms of BPD; and a BPD class characterized by symptoms of BPD. Four BPD symptoms were found to greatly increase the odds of being in the BPD compared to the Complex PTSD class: frantic efforts to avoid abandonment, unstable sense of self, unstable and intense interpersonal relationships, and impulsiveness. CONCLUSIONS: Findings supported the construct validity of Complex PTSD as distinguishable from BPD. Key symptoms that distinguished between the disorders were identified, which may aid in differential diagnosis and treatment planning. [Author Abstract] KEY WORDS: complex PTSD; PTSD; borderline personality disorder; WHO; ICD-11

Cole-Lewis, H. J., T. S. Kershaw, et al. (2014). "Pregnancy-specific stress, preterm birth, and gestational age among high-risk young women." *Health Psychology* 33(9): 1033-1045.

OBJECTIVE: There is evidence that pregnancy-specific stress is associated with preterm birth. The purpose of this study is to examine the association between change in pregnancy-specific stress

over the course of pregnancy and birth outcomes (i.e., preterm birth and gestational age) in an understudied but vulnerable group using a theoretically derived model. **METHODS:** Multivariate linear and logistic regression techniques were used to examine the association between pregnancy-specific stress (measured in second and third trimester) and length of gestation (i.e., preterm birth and gestational age) among a sample of 920 Black and/or Latina adolescent and young women. **RESULTS:** Second trimester pregnancy-specific stress was not associated with preterm birth or gestational age. Third trimester pregnancy-specific stress was associated with preterm birth but not with gestational age. Change in pregnancy-specific stress between second and third trimester was significantly associated with increased likelihood of preterm delivery and shortened gestational age, even after controlling for important biological, behavioral, psychological, interpersonal, and sociocultural risk factors. **CONCLUSIONS:** Findings emphasize the importance of measuring pregnancy-specific stress across pregnancy, as the longitudinal change from second to third trimester was significantly associated with length of gestation measured both as a dichotomous variable (preterm birth) and a continuous variable (gestational age). Furthermore, this is the first study to observe the association of pregnancy-specific stress with length of gestation in this understudied population-unique in age, race, and ethnicity. [Author Abstract] **KEY WORDS:** pregnancy-specific stress; pregnancy anxiety preterm birth; gestational age; birth outcomes

Cullen, K. R., M. K. Westlund, et al. (2014). "Abnormal amygdala resting-state functional connectivity in adolescent depression." *JAMA Psychiatry* 71(10): 1138-1147.

IMPORTANCE: Major depressive disorder (MDD) frequently emerges during adolescence and can lead to persistent illness, disability, and suicide. The maturational changes that take place in the brain during adolescence underscore the importance of examining neurobiological mechanisms during this time of early illness. However, neural mechanisms of depression in adolescents have been understudied. Research has implicated the amygdala in emotion processing in mood disorders, and adult depression studies have suggested amygdala-frontal connectivity deficits. Resting-state functional magnetic resonance imaging is an advanced tool that can be used to probe neural networks and identify brain-behavior relationships. **OBJECTIVE:** To examine amygdala resting-state functional connectivity (RSFC) in adolescents with and without MDD using resting-state functional magnetic resonance imaging as well as how amygdala RSFC relates to a broad range of symptom dimensions. **DESIGN, SETTING, AND PARTICIPANTS:** A cross-sectional resting-state functional magnetic resonance imaging study was conducted within a depression research program at an academic medical center. Participants included 41 adolescents and young adults aged 12 to 19 years with MDD and 29 healthy adolescents (frequency matched on age and sex) with no psychiatric diagnoses. **MAIN OUTCOMES AND MEASURES:** Using a whole-brain functional connectivity approach, we examined the correlation of spontaneous fluctuation of the blood oxygen level–dependent signal of each voxel in the whole brain with that of the amygdala. **RESULTS:** Adolescents with MDD showed lower positive RSFC between the amygdala and hippocampus, parahippocampus, and brainstem ($z > 2.3$, corrected $P < .05$) in contrast to negative amygdala-precuneus RSFC in the adolescents serving as controls. **CONCLUSIONS AND RELEVANCE:** Impaired amygdala-hippocampal/brainstem and amygdala-precuneus RSFC have not previously been highlighted in

depression and may be unique to adolescent MDD. These circuits are important for different aspects of memory and self-processing and for modulation of physiologic responses to emotion. The findings suggest potential mechanisms underlying both mood and vegetative symptoms, potentially via impaired processing of memories and visceral signals that spontaneously arise during rest, contributing to the persistent symptoms experienced by adolescents with depression. [Author Abstract]

da Silva Franzin, L. C., M. Olandovski, et al. (2014). "Child and adolescent abuse and neglect in the city of Curitiba, Brazil." *Child Abuse and Neglect* 38(10): 1706-1714.

Identify and analyze cases of child and adolescent abuse and neglect in Curitiba, Brazil. This is an exploratory descriptive study that takes a quantitative approach. Secondary data from the reporting registry of the Network for the Protection of Children and Adolescents at Risk for Violence in Curitiba, Brazil, dating from 2004 to 2009, were analyzed. Variables included the victims' sociodemographic profile, place of notification, type, nature and severity of abuse, information about the author of the aggression or abuse, and physical lesions. The frequency distribution and associations between the variables were analyzed using the Chi-square test at a 5% significance level. The analysis of 19,316 records showed that domestic violence, abuse and neglect directed against children and adolescents were the most frequently recorded situation, with 17,082 cases (88.4%) distributed in the following manner: neglect, with 9742 reports (57.0%); physical violence, with 1341 reports (7.9%); sexual violence, with 796 reports (4.7%); psychological violence, with 574 reports (3.4%); and abandonment, with 190 reports (1.1%). Of the total, 43.9% were considered severe cases. The most affected age group was between 5 and 14 years of age, with balance between genders. In the majority of cases, the mother was registered as the author of the abuse or neglect. Physical sequelae (20.2%) mostly affected the head and upper and lower limbs, with consequent lesions manifesting as bruises, cuts, and fractures. An increase in the visibility of domestic violence and children and adolescents abuse and neglect has been observed in the city during the last few years, suggesting the effectiveness of the reporting strategies proposed by the protection network. It is important to increase social security and public welfare policies to prevent child and adolescent abuse and neglect, focusing on family support. [Author Abstract] KEY WORDS: child abuse; neglect; domestic violence; maltreatment

Delker, B. C. and J. J. Freyd (2014). "From betrayal to the bottle: investigating possible pathways from trauma to problematic substance use." *Journal of Traumatic Stress* 27(5): 576-584.

Research in both community and clinical settings has found that exposure to cumulative interpersonal trauma predicts substance use problems. Less is known about betrayal as a dimension of trauma exposure that predicts substance use, and about the behavioral and psychological pathways that explain the relation between trauma and substance use. In a sample of 362 young adults, this study evaluated three intervening pathways between betrayal trauma exposure prior to age 18 years and problematic substance use: (a) substance use to cope with negative affect, (b) difficulty discerning and/or heeding risk, and (c) self-destructiveness. In addition, exposure to trauma low in betrayal (e.g., earthquake) was included in the model. Bootstrap tests of indirect effects

revealed that betrayal trauma prior to age 18 years was associated with problematic substance use via posttraumatic stress and two intervening pathways: difficulty discerning/heeding risk ($\beta = .07$, $p < .001$), and self-destructiveness ($\beta = .12$, $p < .001$). Exposure to lower betrayal trauma was not associated with posttraumatic stress or problematic substance use. Results contribute to a trauma-informed understanding of substance use that persists despite potentially harmful consequences. [Author Abstract]

Diaz, A., E. W. Clayton, et al. (2014). "Confronting commercial sexual exploitation and sex trafficking of minors." *JAMA Pediatrics* 168(9): 791-792.

Health care professionals who routinely interact with young people have an important role to play in preventing, identifying, and responding to commercial sexual exploitation and sex trafficking of minors. These crimes - which include any sexual activity with someone younger than 18 years in exchange for something of value - occur every day in the United States and have serious, long-term consequences for individuals who have experienced this violence and exploitation. Unfortunately, pediatricians may not recognize children and adolescents who are at risk or who may be abused. A recent report from the Institute of Medicine and the National Research Council sheds light on these crimes and provides recommendations designed to increase awareness, advance understanding, and support efforts to prevent and respond to this abuse. [Adapted from Text]

Dorrington, S., H. M. S. Zavos, et al. (2014). "Trauma, post-traumatic stress disorder and psychiatric disorders in a middle-income setting: prevalence and comorbidity." *British Journal of Psychiatry* 205(5): 383-389.

BACKGROUND: Most studies of post-traumatic stress disorder (PTSD) in low- and middle-income countries (LMICs) have focused on 'high-risk' populations defined by exposure to trauma. **AIMS:** To estimate the prevalence of post-traumatic stress disorder (PTSD) in a LMIC, the conditional probability of PTSD given a traumatic event and the strength of associations between traumatic events and other psychiatric disorders. **METHOD:** The Colombo Twin and Singleton Study (CoTASS) is a population-based twin study with a comparable non-twin sample. Our sample contained a mix of 3995 twins and 2019 non-twins. We asked participants about nine different traumatic exposures, including the category 'other', but excluding sexual trauma. **RESULTS:** Traumatic events were reported by 36.3% of participants and lifetime PTSD was present in 2.0%. Prevalence of non-PTSD lifetime diagnosis was 19.1%. Of people who had experienced three or more traumatic events, 13.3% had lifetime PTSD and 40.4% had a non-PTSD psychiatric diagnosis. **CONCLUSIONS:** Despite high rates of exposure to trauma, this population had lower rates of PTSD than high-income populations, although the prevalence might have been slightly affected by the exclusion of sexual trauma. There are high rates of non-PTSD diagnoses associated with trauma exposure that could be considered in interventions for trauma-exposed populations. Our findings suggest that there is no unique relationship between traumatic experiences and the specific symptomatology of PTSD. [Author Abstract]

Dorsey, S., M. D. Pullmann, et al. (2014). "Engaging foster parents in treatment: a randomized trial of supplementing trauma-focused cognitive behavioral therapy with evidence-based engagement strategies." *Child Abuse and Neglect* 38(9): 1508-1520.

The goal of this study was to examine the impact of supplementing Trauma-focused Cognitive Behavioral Therapy (TF-CBT; Cohen et al., 2006) with evidence-based engagement strategies on foster parent and foster youth engagement in treatment, given challenges engaging foster parents in treatment. A randomized controlled trial of TF-CBT standard delivery compared to TF-CBT plus evidence-based engagement strategies was conducted with 47 children and adolescents in foster care and one of their foster parents. Attendance, engagement, and clinical outcomes were assessed 1 month into treatment, end of treatment, and 3 months post-treatment. Youth and foster parents who received TF-CBT plus evidence-based engagement strategies were more likely to be retained in treatment through four sessions and were less likely to drop out of treatment prematurely. The engagement strategies did not appear to have an effect on the number of canceled or no-show sessions or on treatment satisfaction. Clinical outcomes did not differ by study condition, but exploratory analyses suggest that youth had significant improvements with treatment. Strategies that specifically target engagement may hold promise for increasing access to evidence-based treatments and for increasing likelihood of treatment completion. [Author Abstract] KEY WORDS: child trauma; child welfare; foster care; engagement; trauma-focused cognitive behavioral therapy; TF-CBT

Edinburgh, L., J. Pape-Blabolil, et al. (2014). "Multiple perpetrator rape among girls evaluated at a hospital-based child advocacy center: seven years of reviewed cases." *Child Abuse and Neglect* 38(9): 1540-1551.

The aim of this study was to describe contextual events, abuse experiences, and disclosure processes of adolescents who presented to a hospital-based Child Advocacy Center for medical evaluation and evidentiary collection as indicated after experiencing multiple perpetrator rape during a single event (n = 32) and to compare these findings to a group of single perpetrator sexual assaults (n = 534). This study used a retrospective mixed-methods design with in-depth, forensic interviews and complete physical examinations of gang-raped adolescents. Patients ranged from 12 to 17 years (M = 14 years). Girls who experienced multiple perpetrator rape during a single event were more likely to have run away, to have drunk alcohol in the past month, and to have participated in binge drinking in the past 2 weeks. Acute presentation of these victims were rare but 30% had hymenal transections and 38% had sexually transmitted infections (STIs). Forensic interviews revealed alcohol was a common weapon used by offenders, and its use resulted in victims experiencing difficulty in remembering and reporting details for police investigation or physical and mental health care. Most victims were raped at parties they attended with people they thought they could trust, and they felt let down by witnesses who could have helped but did not intervene. Although relatively rare, multiple perpetrator rape during a single event is a type of severe sexual assault experience and has significant risks for deleterious health outcomes. These victims require health care by trained providers to diagnose physical findings, treat STIs, screen for trauma, and

support victims. [Author Abstract] KEY WORDS: adolescents; sexual abuse; alcohol; runaways; multiple perpetrator rape; gang rape

Elgar, F. J., A. Napoletano, et al. (2014). "Cyberbullying victimization and mental health in adolescents and the moderating role of family dinners." *JAMA Pediatrics*.

IMPORTANCE: This study presents evidence that cyberbullying victimization relates to internalizing, externalizing, and substance use problems in adolescents and that the frequency of family dinners attenuate these associations. **OBJECTIVES:** To examine the unique association between cyberbullying victimization and adolescent mental health (after controlling differences in involvement in traditional, face-to-face bullying) and to explore the potential moderating role of family contact in this association. **DESIGN, SETTING, AND PARTICIPANTS:** This cross-sectional, observational study used survey data on 18 834 students (aged 12-18 years) from 49 schools in a Midwestern US state. Logistic regression analysis tested associations between cyberbullying victimization and the likelihood of mental health and substance use problems. Negative binomial regression analysis tested direct and synergistic contributions of cyberbullying victimization and family dinners on the rates of mental health and substance use problems. **EXPOSURES:** Frequency of cyberbullying victimization during the previous 12 months; victimization by traditional (face-to-face) bullying; and perpetration of traditional bullying. **MAIN OUTCOMES AND MEASURES:** Five internalizing mental health problems (anxiety, depression, self-harm, suicide ideation, and suicide attempt), 2 externalizing problems (fighting and vandalism), and 4 substance use problems (frequent alcohol use, frequent binge drinking, prescription drug misuse, and over-the-counter drug misuse). **RESULTS:** About one-fifth (18.6%) of the sample experienced cyberbullying during the previous 12 months. The frequency of cyberbullying positively related to all 11 internalizing, externalizing, and substance use problems (odds ratios from 2.6 [95% CI, 1.7-3.8] to 4.5 [95% CI, 3.0-6.6]). However, victimization related more closely to rates of problems in adolescents that had fewer family dinners. **CONCLUSIONS AND RELEVANCE:** Cyberbullying relates to mental health and substance use problems in adolescents, even after their involvement in face-to-face bullying is taken into account. Although correlational, these results suggest that family dinners (ie, family contact and communication) are beneficial to adolescent mental health and may help protect adolescents from the harmful consequences of cyberbullying. [Author Abstract]

Evans, C. B. R., M. W. Fraser, et al. (2014). "The effectiveness of school-based bullying prevention programs: a systematic review." *Aggression and Violent Behavior* 19(5): 532-544.

Bullying is a social phenomenon. About 30% of school children are involved in bullying as victims, bullies, or bully/victims. The victims of bullying suffer multiple negative consequences, including poor social and academic adjustment, depression, and anxiety. This paper extends Farrington and Ttofi's (2009) meta-analysis of controlled trials of 44 bullying interventions, which suggests that bullying programs are effective in decreasing bullying and victimization. We review controlled trials of bullying interventions published from June, 2009 through April, 2013, focusing on substantive results across 32 studies that examined 24 bullying interventions. Of the 32 articles, 17 assess both bullying and victimization, 10 assess victimization only, and 5 assess bullying only. Of

the 22 studies examining bullying perpetration, 11 (50%) observed significant effects; of the 27 studies examining bullying victimization, 18 (67%) reported significant effects. Although the overall findings are mixed, the data suggest that interventions implemented outside of the United States with homogeneous samples are more successful than programs implemented in the United States, where samples tend to be more heterogeneous. Few studies have measured bullying with sufficient precision to have construct validity. Finding strong measures to assess the complex construct of bullying remains a major challenge for the field. [Author Abstract] KEY WORDS: bullying; victimization; bullying intervention; bullying prevention

Fergusson, D. M., L. J. Horwood, et al. (2014). "Impact of a major disaster on the mental health of a well-studied cohort." *JAMA Psychiatry* 71(9): 1025-1031.

IMPORTANCE: There has been growing research into the mental health consequences of major disasters. Few studies have controlled for prospectively assessed mental health. This article describes a natural experiment in which 57% of a well-studied birth cohort was exposed to a major natural disaster (the Canterbury, New Zealand, earthquakes in 2010-2011), with the remainder living outside of the earthquake area. **OBJECTIVE:** To examine the relationships between the extent of earthquake exposure and mental health outcomes following the earthquakes-net of adjustment for potentially confounding factors related to personal circumstances, prior mental health, and childhood family background. **DESIGN, SETTING, AND PARTICIPANTS:** Data were gathered from the Christchurch Health and Development Study, a 35-year longitudinal study of a birth cohort of New Zealand children (635 males and 630 females). This general community sample included 952 participants with available data on earthquake exposure and mental health outcomes at age 35 years. **EXPOSURES:** A composite measure of exposure to the events during and subsequent to the 4 major (Richter Scale >6.0) Canterbury earthquakes during the years 2010-2011. **MAIN OUTCOMES AND MEASURES:** DSM-IV symptom criteria for major depression; posttraumatic stress disorder; anxiety disorder; suicidal ideation/attempt; nicotine dependence; alcohol abuse/dependence; and illicit drug abuse/dependence. Outcomes were measured approximately 20 to 24 months after the onset of exposure to the earthquakes and were assessed using DSM-IV diagnostic criteria and measures of subclinical symptoms. **RESULTS:** After covariate adjustment, cohort members with high levels of exposure to the earthquakes had rates of mental disorder that were 1.4 (95% CI, 1.1-1.7) times higher than those of cohort members not exposed. This increase was due to increases in the rates of major depression; posttraumatic stress disorder; other anxiety disorders; and nicotine dependence. Similar results were found using a measure of subclinical symptoms (incidence rate ratio, 1.4; 95% CI, 1.1-1.6). Estimates of attributable fraction suggested that exposure to the Canterbury earthquakes accounted for 10.8% to 13.3% of the overall rate of mental disorder in the cohort at age 35 years. **CONCLUSIONS AND RELEVANCE:** Following extensive control for prospectively measured confounding factors, exposure to the Canterbury earthquakes was associated with a small to moderate increase in the risk for common mental health problems. [Author Abstract]

Gerard, F. J., V. Jackson, et al. (2014). "An exploration of the current knowledge on young people who kill: a systematic review." *Aggression and Violent Behavior* 19(5): 559-571.

This exploratory systematic review assessed the quality of primary studies on young people who kill and synthesised the findings regarding the characteristics of these offenders. An electronic search yielded 12,717 hits of papers published between 1989 and 2012. Of these, 8395 duplicates, 3787 irrelevant hits, and 527 publications not meeting the inclusion criteria of the review were excluded (15 publications were added after searching the grey literature), leaving 23 good quality studies. From these, a further seven were removed due to their small sample size (i.e., $n < 30$), leaving a total of 16 studies reviewed in detail. A search update was carried out on 2 February 2014 and no further studies meeting the inclusion criteria were found. The results indicate that juvenile homicide offenders are a heterogeneous group and the risk factors for juvenile homicide are cumulative and evolve through life. The findings are mixed, but ten risk factors are identified which appear to be consistent for offenders across the studies reviewed. The limitations of the current review are highlighted and recommendations for future research are outlined, with particular consideration given to improving the quality of the literature in this field. [Author Abstract] KEY WORDS: juvenile homicide; systematic review; risk factor

Grace, A. M., R. Ahn, et al. (2014). "Integrating curricula on human trafficking into medical education and residency training." *JAMA Pediatrics* 168(9): 793-794.

Discusses the need for education on human trafficking and health-related effects including mental health effects. [VB]

Greene, C. A., J. D. Ford, et al. (2014). "Posttraumatic stress mediates the relationship between childhood victimization and current mental health burden in newly incarcerated adults." *Child Abuse and Neglect* 38(10): 1569-1580.

The purpose of this study was to evaluate the interrelationship among childhood abuse and traumatic loss, posttraumatic stress symptoms (PTSS), and Axis I psychiatric disorders other than PTSD among newly incarcerated adults, and to test a proposed model in which the severity of PTSS mediates the relationship between childhood abuse/loss and adult psychiatric disorders. Four hundred sixty-five male and female inmates participated in a structured clinical research interview. Four types of interpersonal potentially traumatic experiences (physical abuse, sexual abuse, emotional abuse, and traumatic loss) were assessed for occurrence prior to the age of 18 years old. Current psychiatric disorders and PTSS were also assessed by structured interview. Negative binomial regression was used to evaluate the association between the cumulative number of types of childhood abuse/loss experienced and number of current Axis I disorders, and to test the mediation model. Approximately half of the sample (51%) experienced 1 or more types of childhood abuse/loss, and 30% of the sample had at least one psychiatric disorder other than PTSD. For both men and women, childhood physical abuse and childhood sexual abuse were independently associated with psychiatric morbidity, and an increasing number of types of childhood trauma experienced was associated with an increase in the number of current Axis I diagnoses. However, these associations were no longer statistically significant when severity of PTSS was added to the

model, providing support for the proposed mediation model. Implications for secondary prevention services for at-risk inmates are discussed. [Author Abstract] KEY WORDS: childhood trauma; posttraumatic stress; mental health; incarcerated adults

Guerra, C., P. Cumsille, et al. (2014). "Post-traumatic stress symptoms in adolescents exposed to an earthquake: association with self-efficacy, perceived magnitude, and fear." *International Journal of Clinical and Health Psychology* 14(3): 202-207.

The objective of this study was to evaluate the relationship between the magnitude of an earthquake, the fear experienced, the self-efficacy beliefs, and post-traumatic stress symptoms in adolescents. We expected self-efficacy beliefs to predict post-traumatic stress symptoms, and this relation to be mediated by fear. We used data from a longitudinal project on adolescent normative development that was under way at the time of the 2010 earthquake in Chile. Six months before the earthquake, 218 adolescents responded to a self-efficacy beliefs scale; three months after the earthquake they reported the perceived magnitude of the event, the fear they experienced, and their post-traumatic stress symptoms. Results showed that perceived magnitude was not associated with fear or post-traumatic stress symptoms, but self-efficacy beliefs and fear were associated with post-traumatic stress symptoms. The hypothesized role of fear as a mediator in the relation between self-efficacy beliefs and post-traumatic stress symptoms was supported by the data. The results of the study, suggest that preventive interventions aimed to increase awareness of how to face a disaster may not only contribute to save lives but may also increase adolescent's sense of personal efficacy, reducing subsequent emotional reactivity associated with the event. [Author Abstract] KEY WORDS: post-traumatic stress symptoms; earthquake; self-efficacy; fear; ex post fact study

Habersaat, S., B. Pierrehumbert, et al. (2014). "Early stress exposure and later cortisol regulation: impact of early intervention on mother-infant relationship in preterm infants." *Psychological Trauma: Theory, Research, Practice, and Policy* 6(5): 457-472.

Preterm birth represents an acute stress for infants considering their physical immaturity and painful care procedures they are submitted to, potentially leading to altered cortisol regulation. It also represents a traumatic event for parents, sometimes leading to psychological diseases with repercussions on mother-infant relationships. Thirty preterm infants were submitted to an intervention on the mother-child relationships and were compared with 30 preterm infants without intervention and with 30 full-term infants. Salivary diurnal cortisol levels were assessed at 6 and 12 months. Diurnal cortisol levels at 6 months were lower in preterm infants without intervention as compared with other groups. At 12 months, such a difference was not found. The results of this study highlight a possible delay in the reorganization of the neuroendocrine system during the 1st year of life in preterm infants without intervention. [Author Abstract] KEY WORDS: intervention on the relationship; prematurity; attachment; maternal posttraumatic stress; depression symptoms

Hatzenbuehler, M. L., N. Slopen, et al. (2014). "Stressful life events, sexual orientation, and cardiometabolic risk among young adults in the United States." *Health Psychology* 33(10): 1185-1194.

OBJECTIVE: The goal of the present study was to examine whether sexual minority young adults are more vulnerable to developing cardiometabolic risk following exposure to stressful life events than heterosexual young adults. **METHOD:** Data came from the National Longitudinal Study for Adolescent Health (Shin, Edwards, & Heeren, 2009; Brummett et al., 2013), a prospective nationally representative study of U.S. adolescents followed into young adulthood. A total of 306 lesbian, gay, and bisexual (LGB) respondents and 6,667 heterosexual respondents met inclusion criteria for this analysis. Measures of cumulative stressful life events were drawn from all 4 waves of data collection; sexual orientation and cardiometabolic biomarkers were assessed at Wave 4 (2008-2009). **RESULTS:** Gay/bisexual men exposed to 1-2 ($\beta = 0.71$, $p = .01$) and 5+ ($\beta = 0.87$, $p = .01$) stressful life events had a statistically significant elevation in cardiometabolic risk, controlling for demographics, health behaviors, and socioeconomic status. Moreover, in models adjusted for all covariates, lesbian/bisexual ($\beta = 0.52$, $p = .046$) women with 5+ stressful life events had a statistically significant elevation in cardiometabolic risk. There was no relationship between stressful life events and cardiometabolic risk among heterosexual men or women. **CONCLUSION:** Stressful life events during childhood, adolescence, and young adulthood place LGB young adults at heightened risk for elevated cardiometabolic risk as early as young adulthood. The mechanisms underlying this relationship require future study. [Author Abstract] **KEY WORDS:** sexual orientation; cardiometabolic biomarkers; stressful life events; young adults

Hong, S.-B., G. J. Youssef, et al. (2014). "Different clinical courses of children exposed to a single incident of psychological trauma: a 30-month prospective follow-up study." *Journal of Child Psychology and Psychiatry* 55(11): 1226-1233.

BACKGROUND: We investigated the distinct longitudinal trajectories of posttraumatic stress symptoms in a sample of 167 children, who witnessed death of two mothers of their schoolmates. **METHODS:** The cohort was followed-up at 2 days (T1), 2 months (T2), 6 months (T3), and 30 months (T4) after the traumatic event. The children's posttraumatic stress symptoms (T1-T4), depression (T1, T3 and T4), state anxiety (T1, T3 and T4), and quality of life (T4) were assessed, along with parental stress related to child rearing (T4). Different trajectory patterns of the children's posttraumatic stress symptoms were identified using growth mixture modeling (GMM). **RESULTS:** Four different patterns of symptom change were identified, which were consistent with the prototypical model, and were named Recovery (19.9%), Resilience (72.7%), Chronic Dysfunction (1.8%), and Delayed Reactions (5.6%). Significant differences were found in depression and anxiety scores, children's quality of life, and parental rearing stress according to the distinct longitudinal trajectories of posttraumatic stress symptoms. **CONCLUSIONS:** The present study suggests that individual differences should be taken into account in the clinical course and outcome of children exposed to psychological trauma. The two most common trajectories were the Resilience and the Recovery types, together suggesting that over 90% of children were evidenced with a favorable 30-month outcome. The latent classes were associated with significant mean differences in depression and anxiety scores, supporting the clinical validity of the distinct trajectories. [Author Abstract] **KEY WORDS:** children; growth mixture modeling; PTSD; resilience

Hooper, L. M., S. Tomek, et al. (2014). "The impact of previous suicide ideations, traumatic stress, and gender on future suicide ideation trajectories among Black American adolescents: a longitudinal investigation." *Journal of Loss and Trauma*.

It has long been asserted that previous suicide behaviors (gestures and attempts) are a significant predictor of future suicide behaviors. Less is known about the extent to which this axiom applies to suicide ideations. The current investigation explored suicide ideations in a longitudinal sample of Black American adolescents (N = 977) aged 11 to 18. Individuals in the current study were all participants in the Mobile Youth Survey (MYS). Logistic growth models were conducted with future suicide ideations as the dependent variable and the number of previous suicide ideations, traumatic stress, and gender as independent variables. Results show, first, that previous suicide ideations and traumatic stress are potent predictors of future suicide ideations. Second, the probability of future suicide ideations is higher when both the number of previous suicide ideations and traumatic stress levels increase, and this probability remains higher as the adolescent ages. These results demonstrate that the long-held proposition that previous suicide behaviors are predictive of future suicide behavior trajectories can be applied as well to suicide ideations. [Author Abstract] KEY WORDS: Black American youth; gender; logistic growth models; longitudinal trajectories; suicide ideations; traumatic stress

Hoyeck, P., K. Madden, et al. (2014). "Predictors of change in mental health and distress among women attending a women's shelter." *European Journal of Psychotraumatology* 5.

BACKGROUND: Intimate partner violence (IPV) is detrimental to mental health. The Domestic Violence Survivor Assessment (DVSA), which includes a mental health assessment, is often used to evaluate abuse survivors in a counseling situation. The DVSA seeks to outline the cognitive state of women as per the stages of change as they attempt to move toward a life with no IPV. **OBJECTIVE:** The objective of this study was to explore predictors of change in mental health and distress among women who entered a women's shelter more than once. **METHODS:** Women entering a women's shelter more than once over a 3-year period were assessed by a trained social worker using the DVSA. A logistic regression analysis examined relationships between the chosen characteristics and the participants' mental health through the DVSA stages of change. **RESULTS:** We analyzed complete data for 94 women who entered the shelter a mean of 3.3 times (range 2-8) over a mean period of 16.1 days (range: 1-391). Thirty-six women (36/94; 38.3%) progressed through the stages. The average number of visits among women who progressed through the stages was 4. Our multivariable logistic regression showed women who had more visits to the shelter were almost twice as likely to progress through the stages compared to women who entered the shelter fewer times (OR=1.928; 95% CI=1.292-2.877; p=0.001). In the univariate analysis, only increased number of visits was significantly associated with progressing through the stages of change (OR=1.694; 95% CI=1.237-2.322; p=0.001). The other factors were not significantly associated with a change in mental health and distress (p>0.05). **CONCLUSION:** Women who enter women's shelters more frequently may be more likely to progress through the DVSA mental health stages compared to other women. Women's shelters may be helpful in assisting progression through the stages of change, thereby improving

their mental health after abuse. [Author Abstract] KEY WORDS: intimate partner violence; mental health stages; DVSA stages of change; repeated shelter visits

Jeon, H. J., C. Lee, et al. (2014). "Childhood trauma, parental death, and their co-occurrence in relation to current suicidality risk in adults: a nationwide community sample of Korea." *Journal of Nervous and Mental Disease* 202(12): 1-7.

Although previous studies have suggested that childhood trauma and parental death are strongly associated with suicidality in adulthood, it is still unclear how these factors interact within the same population. A total of 1396 adults were recruited through nationwide multistage probability sampling in South Korea. Subjects were evaluated through face-to-face interviews using the Suicidality Module of the Mini-International Neuropsychiatric Interview and the Early Trauma Inventory Self Report-Short Form. Among the 1396 adults, the group that experienced both childhood trauma and parental death had the highest current suicidality risks ($F = 12.16$, $p < 0.0001$) and lifetime suicide attempt ($\chi^2 = 35.81$, $p < 0.0001$) compared with the other groups, which were only childhood trauma, only parental death, and neither. Multivariate logistic regression analyses revealed that middle-to-high current suicidality risk and lifetime suicide attempt were significantly associated with concurrent childhood trauma and parental death (odds ratio, 3.64; 95% confidence interval, 1.99-6.65) as well as with only childhood trauma (odds ratio, 1.95; 95% confidence interval, 1.33-2.87), after adjusting for age, sex, education, marital status, household monthly income, and living area. Emotional abuse was the only type of childhood trauma significantly associated with higher current suicidality scores in those who experienced childhood parental death than in those who did not ($F = 3.26$, $p = 0.041$). Current suicidality risk and lifetime suicide attempt are associated with experiencing both parental death and trauma, especially emotional abuse, in childhood, whereas experiencing only childhood parental death is associated with neither. [Author Abstract] KEY WORDS: suicidality; childhood trauma; parental death; emotional abuse

Kabir, Z. N., H.-E. Nasreen, et al. (2014). "Intimate partner violence and its association with maternal depressive symptoms 6-8 months after childbirth in rural Bangladesh." *Global Health Action* 7.

BACKGROUND: The prevalence of intimate partner violence (IPV), a gross violation of human rights, ranges widely across the world with higher prevalence reported in low- and middle-income countries. Evidence related mainly to physical health shows that IPV has both direct and indirect impacts on women's health. Little is known about the impact of IPV on the mental health of women, particularly after childbirth. **OBJECTIVE:** To describe the prevalence of IPV experienced by women 6-8 months after childbirth in rural Bangladesh and the factors associated with physical IPV. The study also aims to investigate the association between IPV and maternal depressive symptoms after childbirth. **DESIGN:** The study used cross-sectional data at 6-8 months postpartum. The sample included 660 mothers of newborn children. IPV was assessed by physical, emotional, and sexual violence. The Edinburgh Postnatal Depression Scale assessed maternal depressive symptoms. **RESULTS:** Prevalence of physical IPV was 52%, sexual 65%, and emotional 84%. The husband's education (OR: 0.41, CI: 0.23-0.73), a poor relationship with the husband (OR: 2.64, CI: 1.07-6.54), and emotional violence by spouse (OR: 1.58, CI: 1.35-1.83) were significantly associated with

physical IPV experienced by women. The perception of a fussy and difficult child (OR: 1.05, CI: 1.02-1.08), a poor relationship with the husband (OR: 4.95, CI: 2.55-9.62), and the experience of physical IPV (OR: 2.83, CI: 1.72-4.64) were found to be significant predictors of maternal depressive symptoms among women 6-8 months after childbirth. Neither forced sex nor emotional violence by an intimate partner was found to be significantly associated with maternal depressive symptoms 6-8 months postpartum. CONCLUSIONS: It is important to screen for both IPV and depressive symptoms during pregnancy and postpartum. Since IPV and spousal relationships are the most important predictors of maternal depressive symptoms in this study, couple-focused interventions at the community level are suggested. [Author Abstract] KEY WORDS: intimate partner violence; mental health; South Asia; Bangladesh; maternal depression

Kessler, R. C., S. Rose, et al. (2014). "How well can post-traumatic stress disorder be predicted from pre-trauma risk factors? An exploratory study in the WHO World Mental Health Surveys." *World Psychiatry* 13(3): 265-274.

Post-traumatic stress disorder (PTSD) should be one of the most preventable mental disorders, since many people exposed to traumatic experiences (TEs) could be targeted in first response settings in the immediate aftermath of exposure for preventive intervention. However, these interventions are costly and the proportion of TE-exposed people who develop PTSD is small. To be cost-effective, risk prediction rules are needed to target high-risk people in the immediate aftermath of a TE. Although a number of studies have been carried out to examine prospective predictors of PTSD among people recently exposed to TEs, most were either small or focused on a narrow sample, making it unclear how well PTSD can be predicted in the total population of people exposed to TEs. The current report investigates this issue in a large sample based on the World Health Organization (WHO)'s World Mental Health Surveys. Retrospective reports were obtained on the predictors of PTSD associated with 47,466 TE exposures in representative community surveys carried out in 24 countries. Machine learning methods (random forests, penalized regression, super learner) were used to develop a model predicting PTSD from information about TE type, sociodemographics, and prior histories of cumulative TE exposure and DSM-IV disorders. DSM-IV PTSD prevalence was 4.0% across the 47,466 TE exposures. 95.6% of these PTSD cases were associated with the 10.0% of exposures (i.e., 4,747) classified by machine learning algorithm as having highest predicted PTSD risk. The 47,466 exposures were divided into 20 ventiles (20 groups of equal size) ranked by predicted PTSD risk. PTSD occurred after 56.3% of the TEs in the highest-risk ventile, 20.0% of the TEs in the second highest ventile, and 0.0-1.3% of the TEs in the 18 remaining ventiles. These patterns of differential risk were quite stable across demographic-geographic sub-samples. These results demonstrate that a sensitive risk algorithm can be created using data collected in the immediate aftermath of TE exposure to target people at highest risk of PTSD. However, validation of the algorithm is needed in prospective samples, and additional work is warranted to refine the algorithm both in terms of determining a minimum required predictor set and developing a practical administration and scoring protocol that can be used in routine clinical practice. [Author Abstract] KEY WORDS: PTSD; predictive modeling; machine learning; penalized regression; random forests; ridge regression

Lagarde, E., L.-R. Salmi, et al. (2014). "Association of symptoms following mild traumatic brain injury with posttraumatic stress disorder vs postconcussion syndrome." *JAMA Psychiatry* 71(9): 1032-1040.

IMPORTANCE: A proportion of patients experience long-lasting symptoms following mild traumatic brain injury (MTBI). The postconcussion syndrome (PCS), included in the DSM-IV, has been proposed to describe this condition. Because these symptoms are subjective and common to other conditions, there is controversy whether PCS deserves to be identified as a diagnostic syndrome. **OBJECTIVE:** To assess whether persistent symptoms 3 months following head injury are specific to MTBI or whether they are better described as part of posttraumatic stress disorder (PTSD). **DESIGN, SETTING, AND PARTICIPANTS:** We conducted a prospective cohort study of injured patients recruited at the adult emergency department of the University Hospital of Bordeaux from December 4, 2007, to February 25, 2009. **MAIN OUTCOMES AND MEASURES:** At 3-month follow-up, we compared the prevalence and risk factors for PCS and PTSD. Multiple correspondence analyses were used to assess clustering of symptoms and their associations with the type of injury. **RESULTS:** We included 534 patients with head injury and 827 control patients with other nonhead injuries. Three months following the trauma, 21.2% of head-injured and 16.3% of nonhead-injured patients fulfilled the DSM-IV diagnosis of PCS; 8.8% of head-injured patients fulfilled the diagnostic criteria for PTSD compared with 2.2% of control patients. In multivariate analysis, MTBI was a predictor of PTSD (odds ratio, 4.47; 95% CI, 2.38-8.40) but not of PCS (odds ratio, 1.13; 95% CI, 0.82-1.55). Correspondence analysis suggested that symptoms considered part of PCS behave similarly to PTSD symptoms in the hyperarousal dimension. None of these 22 symptoms showed any pattern of clustering, and no clear proximity with head or nonhead injury status could be found. **CONCLUSIONS AND RELEVANCE:** Persistent subjective symptoms frequently reported 3 months after MTBI are not specific enough to be identified as a unique PCS and should be considered part of the hyperarousal dimension of PTSD. [Author Abstract]

Lagdon, S., C. Armour, et al. (2014). "Adult experience of mental health outcomes as a result of intimate partner violence victimisation: a systematic review." *European Journal of Psychotraumatology* 5.

BACKGROUND: Intimate partner violence (IPV) has been known to adversely affect the mental health of victims. Research has tended to focus on the mental health impact of physical violence rather than considering other forms of violence. **OBJECTIVE:** To systematically review the literature in order to identify the impact of all types of IPV victimisation on various mental health outcomes. **METHOD:** A systematic review of 11 electronic databases (2004-2014) was conducted. Fifty eight papers were identified and later described and reviewed in relation to the main objective. **RESULTS:** Main findings suggest that IPV can have increasing adverse effects on the mental health of victims in comparison with those who have never experienced IPV or those experiencing other traumatic events. The most significant outcomes were associations between IPV experiences with depression, posttraumatic stress disorder, and anxiety. Findings confirm previous observations that the severity and extent of IPV exposure can increase mental health symptoms. The effect of

psychological violence on mental health is more prominent than originally thought. Individual differences such as gender and childhood experience of violence also increase IPV risk and affect mental health outcomes in diverse ways. CONCLUSIONS: Psychological violence should be considered as a more serious form of IPV which can affect the mental health of victims. Experiencing more than one form of IPV can increase severity of outcomes. Researchers should look at IPV as a multi-dimensional experience. A uniformed definition and measure of IPV could help advance knowledge and understanding of this disparaging global issue. [Author Abstract] KEY WORDS: intimate partner violence; domestic violence; PTSD; depression; gender; mental health

Li, X., J. Liu, et al. (2014). "Childhood trauma associates with clinical features of bipolar disorder in a sample of Chinese patients." *Journal of Affective Disorders* 168: 58-63.

OBJECTIVES: Childhood trauma is a major public health problem which has a long-term consequence, a few studies have examined the relationship between childhood trauma and clinical features of bipolar disorder, most in western culture, with no such studies done in Chinese culture. METHODS: The CTQ-SF was administered to 132 Chinese patients with DSM-IV bipolar disorder. Participants also completed the Childhood Experience of Care and Abuse Questionnaire (CECA.Q), the Impact of Events Scale-Revised (IES-R), and the State-Trait Anxiety Inventory (STAI). The CTQ-SF cut-off scores for exposure were used to calculate the prevalence of trauma. The relationship between childhood trauma and clinical features of bipolar disorder were examined. RESULTS: The internal consistency of CTQ-SF was good (Cronbach's $\alpha=0.826$) and four week test-retest reliability was high ($r=0.755$). 61.4% of this sample reported physical neglect (PN) in childhood, followed by emotional neglect (EN, 49.6%), sexual abuse (SA, 40.5%), emotional abuse (EA, 26.0%) and physical abuse (PA, 13.1%). Significant negative correlations existed between age of onset and EA and EN score ($r=-0.178\sim-0.183$, $p<0.05$). Significant positive correlations were observed between EA, CTQ-SF total score and intrusion and hyper-arousal scores of IES-R ($r=0.223\sim0.309$, $p<0.05$). Similarly, significant positive correlations were found between EN, PN, CTQ-SF total and STAI score ($r=0.222\sim0.425$, $p<0.05$). LIMITATIONS: Data on childhood trauma were derived from a retrospective self-report questionnaire without independent corroboration. A number of potential patients (more severe or chronic patients) was excluded because they were either refused to participate or inappropriate to participate in research. CONCLUSIONS: Significant number of subjects in patients with BD reported experience of childhood abuse and neglect. Exposure to childhood trauma is associated with age of onset of illness, co morbid PTSD and anxiety symptoms. To study the pathogenesis of childhood trauma on bipolar disorder and explanation the interaction between childhood trauma and susceptibility genes are proposed. [Author Abstract] KEY WORDS: childhood; abuse; neglect; bipolar disorder; clinical feature

Liao, T.-L., Y.-S. Chen, et al. (2014). "Self-reported internalizing and externalizing behaviours among junior high school students at 2 and 4 years after the 921 earthquake in Taiwan." *Stress and Health* 30(4): 265-271.

We examined the impact of the 921[1999] Taiwan Earthquake on internalizing and externalizing behaviours among junior high school students 2 and 4 years after the earthquake. This

study was a secondary analysis using data extracted from the Taiwan Education Panel Survey and included 12111 students. The impact of the earthquake was assessed by the length of time to restore the home environment and whether a family member died or was severely injured in the earthquake. Generalized estimating equations showed that living in an urban area and a longer duration after the earthquake were associated with increased internalizing and externalizing behaviours. Boys reported more externalizing but fewer internalizing behaviours than girls. After adjustment for those variables, having a family member who had died or was severely injured was not significantly associated with increased internalizing and externalizing behaviours. However, a longer duration of time to restore the home environment was significantly associated with these behaviours. Regardless of the impact level of the disaster, adolescents had increased internalizing and externalizing behaviours from the seventh to ninth grades. Post-disaster mental health services should continue monitoring and supporting children whose ordinary home living is affected by a natural disaster up to 4 years post-disaster. [Author Abstract] KEY WORDS: mental health; disaster; adolescents; Taiwan Education Panel Survey

Liberzon, I., A. P. King, et al. (2014). "Interaction of the ADRB2 gene polymorphism with childhood trauma in predicting adult symptoms of posttraumatic stress disorder." *JAMA Psychiatry* 71(10): 1174-1182.

IMPORTANCE: Posttraumatic stress disorder (PTSD), while highly prevalent (7.6% over a lifetime), develops only in a subset of trauma-exposed individuals. Genetic risk factors in interaction with trauma exposure have been implicated in PTSD vulnerability. **OBJECTIVE:** To examine the association of 3755 candidate gene single-nucleotide polymorphisms with PTSD development in interaction with a history of childhood trauma. **DESIGN, SETTING, AND PARTICIPANTS:** Genetic association study in an Ohio National Guard longitudinal cohort (n = 810) of predominantly male soldiers of European ancestry, with replication in an independent Grady Trauma Project (Atlanta, Georgia) cohort (n = 2083) of predominantly female African American civilians. **MAIN OUTCOMES AND MEASURES:** Continuous measures of PTSD severity, with a modified (interview) PTSD checklist in the discovery cohort and the PTSD Symptom Scale in the replication cohort. **RESULTS:** Controlling for the level of lifetime adult trauma exposure, we identified the novel association of a single-nucleotide polymorphism within the promoter region of the ADRB2 (Online Mendelian Inheritance in Man 109690) gene with PTSD symptoms in interaction with childhood trauma (rs2400707, $P = 1.02 \times 10^{-5}$, significant after correction for multiple comparisons). The rs2400707 A allele was associated with relative resilience to childhood adversity. An rs2400707 \times childhood trauma interaction predicting adult PTSD symptoms was replicated in the independent predominantly female African American cohort. **CONCLUSIONS AND RELEVANCE:** Altered adrenergic and noradrenergic function has been long believed to have a key etiologic role in PTSD development; however, direct evidence of this link has been missing. The rs2400707 polymorphism has been linked to function of the adrenergic system, but, to our knowledge, this is the first study to date linking the ADRB2 gene to PTSD or any psychiatric disorders. These findings have important implications for PTSD etiology, chronic pain, and stress-related comorbidity, as well as for both primary prevention and treatment strategies. [Author Abstract]

Lowell, A., K. Renk, et al. (2014). "The role of attachment in the relationship between child maltreatment and later emotional and behavioral functioning." *Child Abuse and Neglect* 38(9): 1436-1449.

The experience of childhood maltreatment is an important predictor of unfavorable emotional and behavioral outcomes. Because little research examined explanatory variables in the relationship between childhood maltreatment experiences and later outcomes, this study examined the role that attachment serves in this relationship. Four hundred twenty-four participants completed questionnaires assessing the variables of interest for this study. Results indicated that both childhood maltreatment experiences (particularly emotional abuse) and attachment (particularly to mothers and peers) are significant predictors of later emotional and behavioral outcomes. Further, attachment contributed unique and significant variance to the relationship between childhood maltreatment experiences and later outcomes. Such findings suggested that secure attachment may serve as a protective factor against maladaptive emotional and behavioral outcomes as children reach emerging adulthood, even in the context of childhood maltreatment experiences. The importance of studying the relationships among these variables is discussed. [Author Abstract] KEY WORDS: trauma; child maltreatment; emotional abuse; attachment; internal working models; internalizing problems; externalizing problems; emerging adults

Lueger-Schuster, B., D. Weindl, et al. (2014). "Resilience and mental health in adult survivors of child abuse associated with the institution of the Austrian Catholic Church." *Journal of Traumatic Stress* 27(5): 568-575.

In recent years, reports of institutional abuse within the Catholic Church have emerged and research on the consequences on mental health is in its beginnings. In this study, we report findings on current mental health and resilience in a sample of adult survivors of institutional abuse (N = 185). We compared 3 groups of survivors that differed regarding their current mental health to investigate aspects of resilience, coping, and disclosure. The majority of the sample was male (76.2%), the mean age was 56.28 (SD = 9.46) years, and more than 50.0% of the sample was cohabiting/married. Most of the survivors reported severe mental health problems. Known protective factors (education, social support, age) were not associated with mental health in our sample. Our findings corroborate that institutional abuse has long-term effects on mental health. We found that fewer emotional reactions during disclosure, task-oriented coping, and optimism were associated with better mental health. The study was limited by a cross-sectional design, but we conclude that the kind of institutional abuse reported is especially adverse, and thus typical protective factors for mental health do not apply. Future research should focus on intrapersonal factors and institutional dynamics to improve treatment for persons affected by institutional abuse. [Author Abstract]

Mannert, K., S. Dehning, et al. (2014). "Quality of life in Ethiopia's street youth at a rehabilitation center and the association with trauma." *Journal of Traumatic Stress* 27(5): 593-601.

Quality of life (QOL) tends to be lower among the homeless than the general population, and traumatic events experienced on the streets have a negative impact on QOL. Low-income countries

face a high number of street youth, yet little research has been performed so far on QOL, trauma, and posttraumatic stress disorder (PTSD) among this group. This study aimed at examining the QOL of a sample of Ethiopian street youth within a rehabilitation program and at exploring whether the street youth have experienced traumatic events and show posttraumatic stress symptoms. We interviewed 84 street youths with the World Health Organization Quality of Life Questionnaire (WHOQOL-BREF) and the Diagnostic Interview for Children and Adolescents (DICA). Mean QOL scores differed significantly between the groups assessed at the beginning and at the end of the program (Cohen's $d = 0.48$). Eighty-three percent of the Ethiopian street youths had experienced traumatic events, and 25.0% met criteria for PTSD according to the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders. QOL did not differ between those with and without PTSD symptoms. These findings show the high rate of traumatic events among Ethiopian street youth and the importance for rehabilitation programs that focus on improving QOL. The results of the study may have cultural limitations. [Author Abstract]

Marsanic, V. B., B. A. Margetic, et al. (2014). "The prevalence and psychosocial correlates of suicide attempts among inpatient adolescent offspring of Croatian PTSD male war veterans." *Child Psychiatry and Human Development* 45(5): 577-587.

Despite evidence that children of male war veterans with combat-related posttraumatic stress disorder (PTSD) are at particularly high risk for behavior problems, very little is currently known about suicidal behaviors in this population of youth. This study aimed to examine the prevalence and psychosocial correlates of suicide attempts among psychiatrically hospitalized adolescent offspring of Croatian male PTSD veterans. Participants were psychiatric inpatients, ages 12-18 years. Self-report questionnaires assessed demographics, suicide attempts, psychopathology, parenting style, and family functioning. The prevalence of suicide attempts was 61.5 % (65.2 % for girls and 58.0 % for boys). Internalizing symptoms, family dysfunction, lower levels of maternal and paternal care, and paternal overcontrol were significantly associated with suicide attempts. Our findings suggest that suicide attempts are common among inpatient adolescent offspring of male PTSD veterans and that interventions targeting both adolescent psychopathology and family relationships are needed for adolescents who have attempted suicide. [Author Abstract] KEY WORDS: adolescent offspring; combat-related PTSD; male veterans; suicide attempts

Martins, C. M. S., C. Von Werne Baes, et al. (2014). "Emotional abuse in childhood is a differential factor for the development of depression in adults." *Journal of Nervous and Mental Disease* 202(11): 774-782.

We evaluate the association between subtypes of early life stress (ELS; sexual abuse, physical abuse, emotional abuse, physical neglect, and emotional neglect) and psychiatric disorders in adults. The sample was composed of 81 adult psychiatric patients treated at the Day Hospital Unit in Brazil. The patients were assessed using the Mini International Neuropsychiatric Interview according to diagnostic criteria of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. The presence of ELS was confirmed by the Childhood Trauma Questionnaire, which investigates abuse and neglect subtypes. The patients were also evaluated for the severity of

psychiatric symptoms through self-report questionnaires. A total of 71.6% of the patients experienced some type of severe ELS compared with 28.4% of the patients without ELS. Of these, 55.5% reported having experienced emotional abuse; 48.1%, physical neglect; 45.7%, emotional neglect; 39.5%, physical abuse; and 27.2%, sexual abuse. Our data showed that, among the ELS subtypes, emotional abuse was positively associated with psychopathology in adults, particularly with mood disorders ($p < 0.05$). The patients with a history of emotional abuse had higher severity scores in all symptoms, such as depression, hopelessness, suicidal ideation, anxiety, and impulsivity. These data demonstrate the impact of ELS, especially in cases of emotional abuse, as a trigger for psychiatric disorders and indicate that the severity of ELS is associated with severity of psychiatric symptoms. Therefore, further studies are needed to assess the importance of emotional abuse as a risk factor of severe psychopathology in adults. [Author Abstract] KEY WORDS: early life stress; emotional abuse; psychiatric disorders; depression; psychiatric symptoms

Mason, S. M., A. J. Flint, et al. (2014). "Posttraumatic stress disorder symptoms and food addiction in women by timing and type of trauma exposure." *JAMA Psychiatry* 71(11): 1271-1278.

IMPORTANCE: Posttraumatic stress disorder (PTSD) appears to increase obesity risk but the pathways by which PTSD leads to weight gain are not known. Identification of the links between PTSD and obesogenic eating behaviors is necessary to clarify this pathway and inform development of obesity prevention strategies in PTSD-affected populations. **OBJECTIVE:** To determine whether women with PTSD symptoms are more likely to report food addiction, a measure of perceived dependence on food, than women without PTSD symptoms. Also, to determine whether age at PTSD symptom onset and type of trauma influence the PTSD-food addiction association. **DESIGN, SETTING, AND PARTICIPANTS:** Cross-sectional analysis of 49 408 participants in the Nurses' Health Study II, a cohort comprising women nurses who were aged 25 to 42 years at the 1989 recruitment from 14 US states. **MAIN OUTCOMES AND MEASURES:** The Nurses' Health Study II ascertained lifetime trauma exposure and PTSD symptoms in 2008 and current food addiction in 2009. Food addiction was defined as 3 or more clinically significant symptoms on a modified version of the Yale Food Addiction Scale. Confounder-adjusted prevalence ratios and 95% CIs were estimated using modified Poisson regression. **RESULTS:** Approximately 80% of the study sample reported some type of trauma exposure, with 66% of the trauma-exposed participants reporting at least 1 lifetime PTSD symptom. Eight percent of the cohort met the criteria for food addiction. The prevalence of food addiction increased with the number of lifetime PTSD symptoms, and women with the greatest number of PTSD symptoms (6-7 symptoms) had more than twice the prevalence of food addiction as women with neither PTSD symptoms nor trauma histories (prevalence ratio, 2.68; 95% CI, 2.41-2.97). Symptoms of PTSD were more strongly related to food addiction when symptom onset occurred at an earlier age. The PTSD-food addiction association did not differ substantially by trauma type. **CONCLUSIONS AND RELEVANCE:** Symptoms of PTSD were associated with increased food addiction prevalence in this cohort of women. Strategies to reduce obesity associated with PTSD may require psychological and behavioral interventions that address dependence on food and/or use of food to cope with distress. [Author Abstract]

Mast, J. E., T. N. Antonini, et al. (2014). "Web-based parenting skills to reduce behavior problems following abusive head trauma: a pilot study." *Child Abuse and Neglect* 38(9): 1487-1495.

Pediatric abusive head trauma causes significant cognitive and behavioral morbidity, yet very few post-acute interventions exist to facilitate long-term recovery. To meet the needs of this vulnerable population, we piloted a web-based intervention, I-INTERACT, with live coaching designed to improve positive parenting and child behavior. The efficacy of this parenting skills intervention was compared with access to Internet resources on brain injury. Participants included seven families (four randomized to the parenting intervention and three randomized to receive Internet resources). Parenting skills were observed and child behavior was rated at baseline and intervention completion. At completion, parents who received the parenting skills intervention showed significantly more positive parenting behaviors and fewer undesirable behaviors during play than parents who received access to Internet resources. Additionally, during play, children in the parenting skills intervention group were more compliant following parent commands than children in the Internet resources group. Lastly, parents who received the parenting intervention reported less intense oppositional and conduct behavior problems in their children post-intervention than did parents in the Internet resources group. These findings provide preliminary evidence for the use of this web-based positive parenting skills intervention to improve parenting skills and child behavior following abusive head trauma. [Author Abstract] KEY WORDS: traumatic brain injury; rehabilitation; abusive head trauma; pediatrics; online intervention

O'Donnell, M. L., N. Alkemade, et al. (2014). "Impact of the diagnostic changes to post-traumatic stress disorder for DSM-5 and the proposed changes to ICD-11." *British Journal of Psychiatry* 205(3): 230-235.

BACKGROUND: There have been changes to the criteria for diagnosing post-traumatic stress disorder (PTSD) in DSM-5 and changes are proposed for ICD-11. **AIMS:** To investigate the impact of the changes to diagnostic criteria for PTSD in DSM-5 and the proposed changes in ICD-11 using a large multisite trauma-exposed sample and structured clinical interviews. **METHOD:** Randomly selected injury patients admitted to four hospitals were assessed 72 months post trauma (n = 510). Structured clinical interviews for PTSD and major depressive episode, as well as self-report measures of disability and quality of life were administered. **RESULTS:** Current prevalence of PTSD under DSM-5 scoring was not significantly different from DSM-IV (6.7% v. 5.9%, z = 0.53, P = 0.59). However, the ICD-11 prevalence was significantly lower than ICD-10 (3.3% v. 9.0%, z = -3.8, P<0.001). The PTSD current prevalence was significantly higher for DSM-5 than ICD-11 (6.7% v. 3.3%, z = 2.5, P = 0.01). Using ICD-11 tended to show lower rates of comorbidity with depression and a slightly lower association with disability. **CONCLUSIONS:** The diagnostic systems performed in different ways in terms of current prevalence rates and levels of comorbidity with depression, but on other broad key indicators they were relatively similar. There was overlap between those with PTSD diagnosed by ICD-11 and DSM-5 but a substantial portion met one but not the other set of criteria. This represents a challenge for research because the phenotype that is studied may be markedly different according to the diagnostic system used. [Author Abstract]

Rees, K., V. Zweigenthal, et al. (2014). "Implementing intimate partner violence care in a rural sub-district of South Africa: a qualitative evaluation." *Global Health Action* 7.

BACKGROUND: Despite a high burden of disease, in South Africa, intimate partner violence (IPV) is known to be poorly recognised and managed. To address this gap, an innovative intersectoral model for the delivery of comprehensive IPV care was piloted in a rural sub-district. **OBJECTIVE:** To evaluate the initiative from the perspectives of women using the service, service providers, and managers. **DESIGN:** A qualitative evaluation was conducted. Service users were interviewed, focus groups were conducted amongst health care workers (HCW), and a focus group and interviews were conducted with the intersectoral implementation team to explore their experiences of the intervention. A thematic analysis approach was used, triangulating the various sources of data. **RESULTS:** During the pilot, 75 women received the intervention. Study participants described their experience as overwhelmingly positive, with some experiencing improvements in their home lives. Significant access barriers included unaffordable indirect costs, fear of loss of confidentiality, and fear of children being removed from the home. For HCW, barriers to inquiry about IPV included its normalisation in this community, poor understanding of the complexities of living with violence and frustration in managing a difficult emotional problem. Health system constraints affected continuity of care, privacy, and integration of the intervention into routine functioning, and the process of intersectoral action was hindered by the formation of alliances. Contextual factors, for example, high levels of alcohol misuse and socio-economic disempowerment, highlighted the need for a multifaceted approach to addressing IPV. **CONCLUSIONS:** This evaluation draws attention to the need to take a systems approach and focus on contextual factors when implementing complex interventions. The results will be used to inform decisions about instituting appropriate IPV care in the rest of the province. In addition, there is a pressing need for clear policies and guidelines framing IPV as a health issue. [Author Abstract] **KEY WORDS:** interpersonal violence; intimate partner violence; domestic violence; mental health services; health systems

Resick, P. A., M. K. Suvak, et al. (2014). "The impact of childhood abuse among women with assault-related PTSD receiving short-term cognitive-behavioral therapy." *Journal of Traumatic Stress* 27(5): 558-567.

This study examined the effect of child sexual or physical abuse on brief cognitive-behavioral therapy treatments with adults with posttraumatic stress disorder (PTSD). We analyzed secondary data from two randomized controlled trials (Resick, Nishith, Weaver, Astin, & Feuer, 2002; Resick et al., 2008) that included women with PTSD who did or did not have child sexual abuse (CSA) or child physical abuse (CPA) histories to determine whether childhood abuse impacted dropout rate or reduction in PTSD symptoms. In Study 1, presence, duration, or severity of CSA was not associated with dropout; however, frequency of CSA significantly predicted dropout (OR = 1.23). A significant CPA Severity × Treatment Group interaction emerged such that CPA severity was associated with greater dropout for prolonged exposure (PE; OR = 1.45), but not cognitive processing therapy (CPT; OR = 0.90). Study 2 found no differences in dropout. Study 1, comparing CPT and PE among women who experienced at least 1 rape found no differences in outcome based on childhood abuse history ($r^2_{subscript}p^{superscript}2s = .000-.009$). Study 2, a dismantling study of CPT with women seeking

treatment for adult or child sexual or physical abuse found that for those with no childhood abuse, CPT-C, the cognitive-only version of CPT, had an advantage, whereas both forms of CPT worked best for those with higher frequency of childhood abuse; the effect size was small. [Author Abstract]

Roos, L. E., J. Distasio, et al. (2014). "A history in-care predicts unique characteristics in a homeless population with mental illness." *Child Abuse and Neglect* 38(10): 1618-1627.

Multiple studies of homeless persons report an increased prevalence of a history in-care, but there is a dearth of information on associated outcomes or relevant demographic profiles. This information is critical to understanding if certain individuals are at elevated risk or might benefit from specific intervention. Here, we investigate how a history in-care relates to demographics and multiple outcome measures in a homeless population with mental illness. Using the Mini International Neuropsychiatric Interview (MINI), the Short-Form 12, and a trauma questionnaire, we investigated baseline differences in demographics and length of homelessness in the At Home/Chez Soi Trial (N = 504) Winnipeg homeless population with and without a history in-care. Approximately 50% of the homeless sample reported a history in-care. This group was significantly more likely to be young, female, married or cohabitating, of Aboriginal heritage, have less education, and have longer lifetime homelessness. Individuals of Aboriginal heritage with a history in-care were significantly more likely to report a familial history of residential school. Individuals with a history in-care experienced different prevalence rates of Axis 1 mental disorders. Those with a history in-care also reported significantly more traumatic events (particularly interpersonal). A distinctive high-risk profile emerged for individuals with a history in-care. Sociocultural factors of colonization and intergenerational transmission of trauma appear to be particularly relevant in the trajectories for individuals of Aboriginal heritage. Given the high prevalence of a history in-care, interventions and policy should reflect the specific vulnerability of this population, particularly in regards to trauma-informed services. [Author Abstract] KEY WORDS: foster care; homelessness; indigenous health; trauma

Salazar, M., K. Dahlblom, et al. (2014). "Exposure to intimate partner violence reduces the protective effect that women's high education has on children's corporal punishment: a population-based study." *Global Health Action* 7.

BACKGROUND: Previous studies have shown that women's education is protective against corporal punishment (CP) of children. However, the effect that women's exposure to intimate partner violence (IPV) has on the association between women's education and children's CP has not been studied. **OBJECTIVE:** To understand how the interaction between women's exposure to IPV and their education level influences the occurrence of children's CP at the household level. **METHODS:** We selected 10,156 women who had at least one child less than 16 years old from cross-sectional data from the 2006-2007 Nicaraguan Demographic and Health Survey. Children's CP was defined as the punishment of children by slapping them, hitting them with a fist, or hitting them with a rope, belt, stick, or other object. IPV was measured by using a conflict tactic scale. The WHO Self-Reporting Questionnaire 20 (SRQ-20) was used to assess the women's mental health. We computed adjusted risk ratios (ARR) and 95% confidence intervals (CI) using Poisson regression with a robust variance estimator. **RESULTS:** Women's exposure to IPV was associated with a 10-17% increase in the risk of

children's CP. IPV and children's CP were associated with impaired women's mental health. Women's lifetime exposure to emotional IPV and controlling behavior by a partner significantly decreased the protective effect from women's high education level on children's CP. When women were exposed to emotional IPV, the protective effect from having a college education decreased from ARR=0.61 (95% CI 0.47-0.80) to ARR=0.98 (95% CI 0.80-1.19). A similar pattern was found among women exposed to controlling behavior by a partner, the protective effect decreased from ARR=0.71 (95% CI 0.53-0.90) to ARR=0.86 (95% CI 0.70-1.06). CONCLUSION: This study shows how significant gains in one positive social determinant of children's well-being can be undermined when it interacts with men's violence toward women. Policies that aim to end children's CP must include actions to end women's exposure to IPV. [Author Abstract] KEY WORDS: children's corporal punishment; education; interaction; IPV; women

Shenk, C. E., L. D. Dorn, et al. (2014). "Prior exposure to interpersonal violence and long-term treatment response for boys with a disruptive behavior disorder." *Journal of Traumatic Stress* 27(5): 585-592.

Interpersonal violence (IPV) is common in children with a disruptive behavior disorder (DBD) and increases the risk for greater DBD symptom severity, callous-unemotional (CU) traits, and neuroendocrine disruption. Thus, IPV may make it difficult to change symptom trajectories for families receiving DBD interventions given these relationships. The current study examined whether IPV prior to receiving treatment for a DBD predicted trajectories of a variety of associated outcomes, specifically DBD symptoms, CU traits, and cortisol concentrations. Boys with a DBD diagnosis (N = 66; age range = 6-11 years; 54.5% of whom experienced IPV prior to treatment) of either oppositional defiant disorder or conduct disorder participated in a randomized clinical trial and were assessed 3 years following treatment. Multilevel modeling demonstrated that prior IPV predicted smaller rates of change in DBD symptoms, CU traits, and cortisol trajectories, indicating less benefit from intervention. The effect size magnitudes of IPV were large for each outcome (d = 0.88-1.07). These results suggest that IPV is a predictor of the long-term treatment response for boys with a DBD. Including trauma-focused components into existing DBD interventions may be worth testing to improve treatment effectiveness for boys with a prior history of IPV. [Author Abstract]

Thompson, R., E. G. Flaherty, et al. (2014). "Trajectories of adverse childhood experiences and self-reported health at age 18." *Academic Pediatrics*.

OBJECTIVE: Despite growing evidence of links between adverse childhood experiences (ACEs) and long-term health outcomes, there has been limited longitudinal investigation of such links in youth. The purpose of these analyses was to describe the patterns of exposure to ACEs over time and their links to youth health. METHODS: The current analyses used data from LONGSCAN, a prospective study of children at risk for or exposed to child maltreatment, who were followed from age 4 to age 18. The analyses focused on 802 youth with complete data. Cumulative exposure to ACEs between 4 and 16 was used to place participants in 3 trajectory-defined groups: chronic ACEs, early ACEs only, and limited ACEs. Links to self-reported health at age 18 were examined using linear mixed models after controlling for earlier health status and demographics. RESULTS: The chronic

ACEs group had increased self-reported health concerns and use of medical care at 18 but not poorer self-rated health status. The early ACEs only group did not significantly differ from limited ACEs on outcomes. CONCLUSIONS: In addition to other negative outcomes, chronic ACEs appear to affect physical health in emerging adulthood. Interventions aimed at reducing exposure to ACEs and early mitigation of their effects may have lasting and widespread health benefits. [Author Abstract] KEY WORDS: adolescent health; adverse childhood experiences; child abuse and neglect; childhood adversities

Vloet, A., M. Simons, et al. (2014). "Long-term symptoms and posttraumatic growth in traumatised adolescents: findings from a specialised outpatient clinic." *Journal of Traumatic Stress* 27(5): 622-624.

Although traumatic experiences are associated with an increased risk of developing psychiatric disorders, little is known regarding the long-term outcomes of traumatised adolescents. In the current study, 42 traumatised adolescents who had been referred to a specialised health service were reassessed 2 to 5 years after the traumatic event. The course of posttraumatic stress disorder (PTSD) and other psychiatric symptoms, the development of posttraumatic growth (PTG), and parental PTSD were analysed. The rate of PTSD (full and partial) declined from 59.5% to 11.9% between the first assessment and the follow-up. On average, low levels of PTG were reported by the adolescents at follow-up. Sexual abuse was associated with most severe PTSD symptoms at initial assessment ($\eta^2 = .18$) and the highest PTG ($\eta^2 = .12$). Adolescents with psychotherapeutic support showed the largest symptom reduction ($\eta^2 = .15$). Adolescent PTSD at follow-up was shown to be correlated with both PTG ($r = .34$) and parental PTSD ($r = .58$). The results highlight the need for psychotherapeutic support for traumatised adolescents and their parents to prevent long-term psychological impairment. The development of PTG should be considered in the aftermath of trauma and its relevance for posttraumatic recovery should be addressed in future studies. [Author Abstract]

Webermann, A. R., B. L. Brand, et al. (2014). "Childhood maltreatment and intimate partner violence in dissociative disorder patients." *European Journal of Psychotraumatology* 5.

BACKGROUND: Childhood maltreatment (CM) is a risk factor for subsequent intimate partner violence (IPV) in adulthood, with high rates of retrospectively reported CM among IPV victims and perpetrators. A theorized mechanism of the link between CM and IPV is dissociation. Dissociation may allow perpetrators of violence to remain emotionally distant from their behavior and minimize empathy toward those they victimize, enabling them to commit acts of violence similar to their own experiences. Indeed, elevated rates of dissociation and dissociative disorders (DD) have been found among IPV survivors and perpetrators. In addition, in pilot studies, DD clinicians have reported high levels of violent behavior among DD patients. OBJECTIVE: The present study investigates IPV among DD patients with Dissociative Identity Disorder and Dissociative Disorder Not Otherwise Specified, a group with CM rates of 80-95% and severe dissociative symptoms. METHODS: DD clinicians reported on rates of CM and IPV among 275 DD patients in outpatient treatment. DD patients also completed a self-report measure of dissociation. Analyses assessed the associations between CM typologies

and IPV, as well as trait dissociation and IPV. RESULTS: Physical and emotional child abuse were associated with physical IPV, and childhood witnessing of domestic violence (DV) and childhood neglect were associated with emotional IPV. CONCLUSIONS: The present study is the first to provide empirical support for a possible CM to adult IPV developmental trajectory among DD patients. Future research is needed to better understand the link between CM and IPV among those with trauma and DD. [Author Abstract] KEY WORDS: dissociation; dissociative identity disorder; dissociative disorders; intimate partner violence; domestic violence; childhood maltreatment; childhood abuse

Wilson, B. and L. D. Butler (2014). "Running a gauntlet: a review of victimization and violence in the pre-entry, post-entry, and peri-/post-exit periods of commercial sexual exploitation." *Psychological Trauma: Theory, Research, Practice, and Policy* 6(5): 494-504.

International sex trafficking and domestic prostitution are each forms of commercial sexual exploitation (CSE), and CSE typically encompasses a gauntlet of victimization and violence for its victims. Girls and women subjected to CSE are not only damaged during their involvement in the sex industry, but they typically suffer maltreatment and related factors before they enter into it and again as they endeavor to leave it. In this article we review the common risk factors associated with entry into the sex trade industry, the traumas commonly experienced while in the industry and their psychological sequelae, and the challenges surrounding, and longer-term impact of, endeavoring to exit the industry. We describe the complex conditions present at each of these three stages (pre-entry, post-entry, and peri-/post-exit) and how they result in challenges in treating this population. As rates of commercial sexual exploitation increase both nationally and worldwide, there is an urgent need to identify effective interventions for victims and to address the conditions that foster and support CSE. [Author Abstract] KEY WORDS: sex trafficking; prostitution; commercial sexual exploitation; trauma; victimization and violence