

Friday, October 31

Friday, October 31

F01-01

assess

**Personality Styles and Posttraumatic Stress Disorder**

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**Purpose:** The purpose of the present study was to broaden the knowledge about vulnerability to posttraumatic stress disorder (PTSD) among battered women. Specifically, the study explored the relationship between personality styles, self-criticism and dependency, and post traumatic stress disorder (PTSD) among battered women in Israel. **Method:** The research population comprised a sample of 91 battered women aged 20-60 applying to Domestic Violence Treatment and Prevention Centers for treatment. They were administered questionnaires relating backgrounds variables, previous traumatic events, personality styles (self-criticism and dependency) and the intensity of PTSD. **Findings:** The findings suggest that self-critical personality style was significantly associated with the diagnosis of PTSD. Furthermore, dependency personality style was a moderator factor to the association between self-criticism and PTSD. In that, at high levels of self-criticism, dependency had no influence on the intensity of PTSD, but at low levels of self-criticism high levels of dependency moderate the intensity of PTSD. **Conclusions:** Personality trait is a vulnerability factor in PTSD.

F01-02

assess

**Evaluation of the Mississippi Scale Using Rasch Measurement**

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This study used Rasch measurement theory to examine the Mississippi Scale-Revised for its utility in the development of a continuous measure of PTSD. Rasch is a probability based theory that provides both a measure of the person responding to the instrument and the location of each item calibration on one common variable. The study used a largely male sample of 153 veterans to evaluate the quality of the items defining PTSD, to describe how the items represent the symptom range of the disorder, and to assess the functioning of items in evaluating PTSD with and without comorbid MDD. Ten items defined the construct in equal interval units and could be used to construct a measurement of PTSD.

F01-03

assess

**The PTCI: Factor Structure in Motor Vehicle Accident Survivors**

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The Posttraumatic Cognitions Inventory (PTCI; Foa et al., 1999) is a relatively new measure to assess negative cognitions in Posttraumatic Stress Disorder (PTSD). The PTCI contains 33 items, which load onto three factors: Negative Cognitions about the Self, Negative Cognitions about the World, and Self-Blame. In an effort to provide additional psychometric support for the PTCI, an independent confirmatory factor analysis (CFA) was performed using a sample of 112 individuals who experienced a motor vehicle accident (MVA) that met criterion A for PTSD (48% PTSD+; 25% subsyndromal PTSD). The CFA model specified in Foa et al. (1999) did not fit the data well and some of the standardized factor loadings were small. Modification indices indicated that four items cross-loaded on two factors. Elimination of the cross-loading items resulted in a model that approached an adequate fit to the data ( $X^2(374, n=112) = 540.52, p < .00001, X^2/df \text{ ratio} = 1.45, CFI = 0.88, RMSEA = 0.06$ ) and all standardized factor loadings were substantial ( $>.45$ ). The PTCI

appears to capture many aspects of dysfunctional cognitions in PTSD that fall into 3 domains. These data indicate that further refinement of this promising measure may result in more homogeneous factors.

F01-04

assess

**Evaluating LOSS: Comparing War Eras Among Aging Veterans**

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Late-onset Stress Symptomatology (LOSS) is a condition among older veterans who: a) were exposed to highly stressful war-zone events in their early adult years; b) have functioned successfully with no long-term history of chronic stress-related disorders; and c) began to register combat-related mental health complaints in their later years. A 36-item questionnaire was developed to assess the construct validity of LOSS via associations with potentially related variables including concerns about retirement, elder life stressors, and PTSD. Our preliminary sample included 254 combat veterans derived from the Normative Aging Study, the Veterans Health Study, and a sample of repatriated prisoners of war. Participants included 3 eras of war veterans: World War II, the Korea Conflict, and Vietnam. In general, correlations between LOSS and related variables were similar and in the expected direction for all 3 eras. However, while LOSS and the Elder Life Stressor Inventory were positively correlated for WWII and Korean conflict veterans ( $r = .32$  and  $r = .58$  respectively), for Vietnam veterans the association between LOSS and Elder Life Stressor Inventory was small but negatively correlated ( $r = -.10$ ). These findings suggest that LOSS may be similar across these three war eras.

F01-05

assess

**The Identification of Latent Factors Underlying Comorbidity in PTSD**

Forbes, David, MA, Australian Centre for Posttraumatic Mental Health and University of Melbourne; Creamer, Mark, PhD, Australian Centre for Posttraumatic Mental Health and University of Melbourne; Allen, Nicholas, PhD, University of Melbourne; Elliott, Peter, PhD, Australian Centre for Posttraumatic Mental Health; McHugh, Tony, MA, Austin and Repatriation Medical Centre

Previous research by the current authors, using the MMPI-2 and a range of other measures, identified social alienation, anger, anti-sociality, disinhibition, and alcohol use as factors influencing treatment outcome for PTSD. One model gaining increased attention in the literature has identified externalization as a latent factor of underlying a number of psychiatric conditions, including anti-sociality, impulsivity and substance abuse, factors identified in our previous research as predictors of outcome. This paper examines data from 275 treatment seeking veterans with combat-related PTSD (C-R PTSD). The paper investigated whether the comorbidities associated with PTSD were best explained as manifestations of underlying externalisation or internalization constructs or another discrete syndrome. Confirmatory factor analytic procedures, using Mplus, identified that the two-factor solution of externalisation and internalization best accounted for the range of key areas of comorbidity associated with C-R PTSD. These two constructs were moderately correlated with each other and with PTSD. The results are discussed in terms of the use of the MMPI-2 as a measure of comorbidity in PTSD, the relationship of these two latent factors with the MMPI-2 personality disorder and PSY-5 scales, and implications of these findings for conceptualizations of the broader posttraumatic syndrome.

Friday, October 31

F01-06

assess

**Memory Differences in PTSD Are Not an Artifact of Impaired Attention**

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Many, but not all, studies have documented explicit memory and attention differences between veterans with and without PTSD. Few have addressed the question of whether differences in performance on memory tests seen in PTSD and controls are related to memory function or an artifact of poor attention. The present study compares verbal memory and attention in 32 veterans with PTSD and 31 demographically matched veterans without PTSD while controlling for possible differences in attention. Participants were medically healthy and had no substance abuse or dependence within the last five years. PTSD participants showed significantly lower scores on a number of verbal memory and attention measures, although still in the non-impaired range. After covarying for the effects of attention, some of the observed differences between PTSD and controls were no longer significant with a few notable exceptions. PTSD subjects demonstrated poorer performance in paragraph recall and total word recall in tests of verbal memory. These results suggest that verbal memory differences in veterans with PTSD are not merely an artifact of poor attention.

F01-07

assess

**Military Records of Veterans Seeking Treatment for Combat-Related PTSD**

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Data show that veterans seeking treatment for combat-related PTSD within VA Medical Centers show diffuse elevations across measures of psychopathology, and they elevate the validity scales of the Minnesota Multiphasic Personality Inventory (MMPI) in a manner suggestive of symptom overreporting. This is a concern because 69-74% of these veterans are seeking disability from the VA, and disability seeking veterans evidence even greater elevations across clinical and validity measures than do non-disability seeking veterans. This has led some to question the validity of PTSD reports in this population. It has also been noted that neither VA clinicians nor investigators tend to substantiate veterans' reports of combat by checking available military personnel records. We conducted a Freedom of Information Act request from the National Military Personnel Records for 100 consecutive veterans reporting Vietnam combat trauma in a VA PTSD clinic. Results showed that while 92% of the sample had clear documentation of having served in Vietnam during the war, only 40% of the total sample had clear evidence of combat exposure documented in their record. The rate of Purple Heart (21%) and valorous (7%) medals are also noted. Implications and future directions for research with combat veterans will be discussed.

F01-08

assess

**Posttraumatic Distress in Motor Vehicle Accident Survivors**

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The present study investigated the effects of motor vehicle accidents (MVA), and the relationship between peri-accident variables and short and longer-term outcomes on students at the University at Albany. Survivor's anonymously answered a MVA survey, PTSD checklist (PCL), Center for Epidemiological Studies Depression Scale (CES-D), Travel Anxiety Questionnaire (TAQ), and State Dissociation Questionnaire (SDQ). The mean age of our sample was 19 years; 55% were female. Approximately 2% of the MVA survivors met the criteria for current probable PTSD and 20% met the criteria for current probable depression. Those with current probable PTSD scored significantly higher on the SDQ, past CES-D, current CES-D, and past PCL. Significant predictors of current PCL score include: fear during the MVA, responsibility attributed to other conditions during the MVA, fear of death during the MVA, age at the time of the MVA, decrease in health in the month after the MVA, and current feelings of vulnerability as a passenger. Overall, this model accounted for 13% of the variance in current PCL score. When past PCL score was added as a predictor to the above model, 46.3% of the variance was accounted for. Additional results will be presented and directions for future research discussed.

F01-09

assess

**Developing Methodology for Quantifying Fear Inhibition in PTSD**

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Patients with posttraumatic stress disorder (PTSD) have persistent fear despite the presence of safety signals. Although the inability to inhibit fear is a central problem in PTSD, it has not been well studied. Our purpose was to assess fear potentiation and fear inhibition as independent processes in humans. We utilized fear-potentiated startle because it has been observed across many different species, its neural correlates are well known, and it has face validity with PTSD symptoms. We translated a conditional discrimination procedure (AX+/BX-), validated in animals, in order to quantify fear inhibition. Protocol adaptation was difficult and involved 11 experimental iterations tested across 50 pilot subjects. These difficulties included selecting the appropriate startle probe, overcoming configural processing by introducing a response keypad, and adding a novel stimulus to control for external inhibition. The final version of this protocol was tested on ten healthy volunteers and resulted in significant fear potentiation (startle amplitude to 'danger'=182.85 arbitrary machine units (mu) vs. baseline startle=144.32mu,  $F(1,9)=5.84$ ,  $p<0.05$ ) and trend level fear inhibition (difference from baseline startle: 'safety + danger'=44.83mu vs. 'novel + danger'=99.12mu,  $F(1,9)=4.53$ ,  $p=0.06$ ). We believe this procedure will advance PTSD research by providing an effective measure of fear inhibition independent of fear potentiation.

Friday, October 31

F01-10

assess

**Testing the URICA in a PTSD Treatment Group**

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This pilot study was conducted to evaluate the psychometric properties of the University of Rhode Island Change Assessment (URICA) long form. This form has been utilized with veterans undergoing residential treatment for posttraumatic stress disorder (PTSD). The URICA is a 32 item continuous measure designed for use in psychotherapy to assess readiness to change. The instrument pre-test and post-test subscales (precontemplation, contemplation, action and maintenance) were evaluated using Rasch Rating Scale method based on criterion identified by Smith (2000). Our analysis revealed that the URICA scale in the PTSD population did not provide evidence of construct validity. The major limitation of this pilot study was a small sample size.

F01-11

assess

**Correlates of PTSD Diagnosis and Symptom Severity in a VA Program**

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In addition to symptoms of PTSD, people exposed to trauma may also experience diffuse anxiety, depression, dissociative states unrelated to traumatic memories, difficulty putting feelings into words, and difficulty feeling understood. Some of these symptoms may adversely affect quality of life at least as much as do symptoms of PTSD. Veterans presenting for treatment in a VA outpatient PTSD treatment program over the course of three years responded to questionnaires and were evaluated by experienced clinicians. Nearly half of the participants were diagnosed with PTSD based on their total Clinician Administered PTSD Scale score. A majority of the measures were significantly related; however, the amount of self-reported avoidance was not correlated with the clinician's rating of avoidance symptoms. Self-reported degree of alexithymia, current anxiety, and working alliance during the evaluation were not significantly related to PTSD symptom severity. The self-reported quality of life was correlated with symptoms of dissociation and depression as well as clinician-rated avoidance and hyperarousal PTSD symptoms. Based on logistic regression, symptoms of dissociation and anger, number of trauma-related combat experiences, and quality of life significantly contribute to a diagnosis of PTSD. The results are discussed in terms of the fragmentation following exposure to traumatic events.

F01-12

withdrawn

F01-13

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**Internalizing and Externalizing Personality Characteristics in PTSD**

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Studies of the latent structure of mental illness suggest that patterns of co-morbidity cohere along dimensions of internalization (a propensity to express distress inwards) and externalization (a propensity to express distress outwards; Krueger, McGue, & Iacono, 2001). The present study continues a line of work investigating heterogeneity in post-traumatic responses among veterans with PTSD. Forty-five male combat veterans were administered the Multidimensional Personality Questionnaire (MPQ; Tellegen, 1985; in press) as well as measures of PTSD, anger, violence, social support, anxiety, and repression. MPQ results were used to identify internalizing and externalizing profiles using criteria established in prior research (Miller, Dillon, Kaloupek, & Keane, under review; Miller, Greif, & Smith, in press). Results support an association between internalizing profiles and number of PTSD symptoms, anxiety, and inward-focused anger. Externalizing was associated with violent behavior, outward anger expression, and number of traumatic life events. Evidence for a stronger linkage between PTSD and indices of internalizing pathology support findings that PTSD tends to load on the internalizing dimension along with anxiety and unipolar mood disorders (Cox, Clara, & Enns, 2002). Results are discussed with regard to the development of clinical techniques that appropriately address individual differences in presentation of PTSD.

F01-14

assess

**Quality of Life in Crime Victims with Posttraumatic Stress Disorder**

Paunovic, Nenad, PhD, Traumacenter, Danderyds Hospital; Öst, Lars-Göran, PhD, Department of Psychology, Stockholm University

The psychometric properties of the Swedish version of the quality of life inventory (QOLI) were investigated with a sample of crime victims with posttraumatic stress disorder (PTSD) and a nontraumatized sample with no lifetime or current psychiatric disorder from the general population in the Stockholm county of Sweden. The QOLI showed excellent internal consistencies in both the clinical and the non-clinical sample. A PTSD group matched on age and gender with a nontraumatized control group displayed a significantly lower quality of life in 15 out of 16 domains of life than the latter group. The QOLI was inversely correlated with the severity of PTSD, depression and anxiety on a broad range of interview and self-report measures. The results are discussed in relation to previous research, methodological limitations and future directions.

F01-15

assess

**Psychometric Evaluation of a Spanish Harvard Trauma Questionnaire**

Sabin, Miriam, PhD, The University of Georgia School of Social Work; Bride, Brian, PhD, University of Tennessee, Nashville

The validation of instruments that measure traumatic stress in indigenous refugees is critical to field research in traumatology. The Harvard Trauma Questionnaire (HTQ) is one of the most widely used measures of traumatic stress designed for refugee populations. However, the HTQ has primarily been normed and validated with Southeast Asian and Bosnian refugee groups. This study investigates the psychometric characteristics of a Spanish language version of the HTQ, developed for two cross-sectional surveys in 2000 and 2001 with Mayan Guatemalan refugees in five refugee camps in Chiapas

## Friday, October 31

and five repatriated communities in Guatemala, respectively. Six independent reviewers who were fluent in Spanish, and knowledgeable about Guatemalan refugee trauma experiences and Mayan conceptions of mental illness modified the HTQ for content validity and for dialect Spanish comprehension. All reviewers concurred independently with a final Spanish version in back-translations. Data collectors were trained to verbally administer the questionnaire in Spanish and two unwritten Mayan languages. The modified HTQ was administered to a total of 358 refugees; sixty percent of questionnaires were conducted in Mayan. Analysis revealed that reliability and validity results were comparable to prior studies on the HTQ.

F01-16

assess

### Developmental and Neuropsychological Issues of High Functioning BPD

*Sikora, Elizabeth, PhD, The Wholeness Institute*

This presentation suggests different developmental experiences of women who are high functioning and diagnosed with BPD, as well as an increase in the number of cases of mild Traumatic Brain Injury. The impact of mild Traumatic Brain Injury on the symptomology of BPD in several women is presented; and the need for early evaluation of TBI and cognitive impairment is shown, along with evaluation methods, treatment needs, and comorbid treatment considerations.

F01-17

assess

### Correlates for PTSD in Gulf War Veterans: A Retrospective Study

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Prior research has shown that childhood and lifetime trauma, combat exposure, and avoidant coping are correlated with Post-Traumatic Stress Disorder (PTSD), although few studies have examined their concurrent effects. This study investigated these correlates' unique and additive effects on PTSD, as well as combat exposure's moderating effects on the other variables' relations to PTSD. Sample consisted of 120 Gulf War veterans (89% men, mean age = 37.7). Logistic regression results indicated an 88% correct classification of PTSD diagnosis, with combat exposure and disengagement style having the primary effects ( $ps < .001$ ). Multiple regression results showed that lifetime trauma, combat exposure, and disengagement coping were strongly related to PTSD symptoms, as assessed by the Clinician-Administered PTSD Scale ( $ps < .002$ ,  $R^2 = .48$ ) and the Mississippi Scale for Combat-related PTSD ( $ps < .03$ ,  $R^2 = .63$ ). Multiple regressions also revealed moderating effects ( $ps < .02$ ) of combat exposure on the relations of childhood trauma to PTSD, which will be examined further with post hoc regressions. This study's correlational results are an important first step to examine additive and interactive effects of the primary correlates on PTSD and may provide an efficient and sufficiently complex model for longitudinal investigations of PTSD development.

F01-18

assess

### The Examination of Avoidance Symptom in Domestic Violence Victims

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The authors launched the support project for the domestic violence (DV) victims at official women's shelter in Tokyo. It consists of psycho-education, social support and psychological assessments including the IES-R at the baseline, at the time of discharge and

during the follow-up. As yet 76 women refugee agreed to take part in the project and completed the baseline and the second time assessment, with the mean interval 15.3 days ( $SD=9.1$ ). During this interval, the IES-R scores showed significant reduction ( $p<0.01$ ) in the total as well as the intrusion and hyperarousal subscores. The avoidance subscore did not change, presumably because the avoidance symptom has different risk factors and backgrounds, or because the limitation of the IES-R as a quantitative measurement tool for each symptom, though it detected the change in other two symptoms. The nature of the avoidance symptom should be also thoroughly investigated in its particular role for psychological protection during the prolonged victimization due to violence. The short time seclusion may not be enough to let the victims gain the sense of reality and the more long lasting support will be needed for its recovery. The project is ongoing and our result and hypothesis will be enriched further.

F02-01

biomed

### Low Post-Trauma GABA Plasma Levels: A Predictive Factor of PTSD or MDE?

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Background. Several studies suggest a relationship between a low level of GABA and vulnerability to mood disorders, or to alcohol addiction. In a preliminary study, we suggest that GABA regulation is involved in acute PTSD. However, the comorbidity between PTSD and major depressive episode (MDE) has been described in many studies. At 1 year, are low GABA levels in relationship with PTSD rather than with a depressive episode? Method. Victims of a road traffic accident were included in a prospective study. The day after admission to the Traumatology department, two 10 ml tubes of blood were taken. Plasma GABA levels were measured using an "ion-trap" technique, with isotopic dilution using mass spectrometry. Clinical evaluation was performed at 3 steps: during the first days following hospitalization, 2 months and 1 year later. We used the MINI assessment and the DSM-IV criteria for MDE (actual and current) at one year. The patients were contacted by telephone, at 2 months and 1 year. Results. At one year, we had 70 complete files: 31 subjects suffering from ASD in the first month, 31 from MDE at one year, 40 from PTSD at six weeks and 27 at one year. We found a covariate relationship between PTSD and depression at 1 year. Low post-trauma GABA levels seem to be predictive in the development of acute PTSD (2 months), but more in the development of Mood Depressive Disorder at one year.

F02-02

biomed

### Dexamethasone Suppression Test in Patients with Combat-Related PTSD

*Chung, Moon, MD, PhD, Seoul Veterans Hospital, Yonsei University*

Dexamethasone suppression test (DST) was used to investigate the possibility of enhanced negative feedback sensitivity of the hypothalamic-pituitary-adrenal (HPA) axis in 12 male PTSD patients and age-matched 12 male controls. We measured Mississippi scale and Beck depression inventory (BDI), which were significantly higher in patients group than in control group. There was no difference in combat exposure scale (CES) score and baseline plasma cortisol level between two groups. Plasma cortisol levels at 8:00 am and 4:00 pm were significantly lower in patients group than control

Friday, October 31

group. Relative value of change was significantly higher in patients group than in control group. There was no significant correlation between relative value of change of cortisol from baseline to 4:00 pm and BDI and CES score. But Mississippi scale score had significant correlation with relative value of change. It is supposed that alteration of DST observed in this study be related with enhanced HPA axis sensitivity in PTSD.

F02-03

biomed

#### Determinants of the Sleep Disturbances in PTSD Patients

*Germain, Anne, PhD, University of Pittsburgh School of Medicine, Department of Psychiatry; Shear, Katherine, MD, University of Pittsburgh School of Medicine, Department of Psychiatry; Buysse, Daniel, MD, University of Pittsburgh School of Medicine, Department of Psychiatry; Fayyad, Rana, PhD, Pfizer Inc.; Austin, Carol, MD, Pfizer Inc.*

Background: Sleep disturbances (SD) characterize posttraumatic stress disorder (PTSD), and influence PTSD severity and outcomes. However, SD may arise from both non-PTSD and non-PTSD specific determinants. This study examines the influence of patient-characteristics (e.g., gender, age), disorder-related characteristics (e.g., trauma types, PTSD severity and chronicity), and psychiatric comorbidity on SD severity in patients presenting with PTSD prior to pharmacotherapy. Methods: 368 PTSD patients (51.9% women; aged 18-69 yrs.; mean baseline CAPS 73.3+ 17.7; mean PTSD duration 15.0 + 12.3yrs) completed the Pittsburgh Sleep Quality Index (PSQI). ANOVAs were conducted on global sleep scores to determine whether SD severity varied according to gender, age, trauma type, PTSD chronicity and severity, or psychiatric comorbidity. Results: Mean PSQI score was 12.0 + 3.6, indicating severe SD. Gender, age, trauma types, PTSD chronicity, or psychiatric comorbidity did not influence SD severity. Increasing PTSD severity was associated with increased SD severity. Conclusions: SD severity is closely related to PTSD severity, but not to gender, age, trauma type, comorbidity, or chronicity. The robustness of the present findings is reinforced by the inclusion of PTSD patients who were not recruited for a sleep study. The findings reinforce the notion that SD may reflect a core PTSD dysfunction.

F02-04

biomed

#### Auditory Startle Responses in Crime Victims with PTSD

*Griffin, Michael, PhD, University of Missouri, St. Louis*

Enhanced startle responses are a common symptom reported in posttraumatic stress disorder (PTSD). In recent years there have been a number of studies that have provided empirical support for the idea of enhanced physiological responding to intense auditory stimuli in trauma survivors with PTSD. Many of these studies have focused upon male combat veterans with chronic PTSD. Less is known about female trauma survivors in the acute aftermath of a traumatic event. Data will be presented from a longitudinal study of female rape and physical assault survivors assessed for startle responding using an intense (95-dB 1000Hz) auditory stimulus. Assessments were conducted within one month of the assault and follow-ups were conducted six months later. Assessments also included clinical interviews of symptoms using the Clinician administered PTSD Scale. Data have been collected on 50 women at both time points. Startle measures include physiological measurements of heart rate, skin conductance, and eye-blink electromyogram responses. Analyses will examine the degree of physiological startle related to PTSD symptoms. Findings will be discussed in terms of the time course of startle responding in PTSD both in the acute aftermath of trauma and later in chronic PTSD.

F02-05

biomed

#### Decreased Endocrine and Sleep Responses to Metyrapone in PTSD

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Metyrapone blocks cortisol synthesis, which results in a stimulation of hypothalamic corticotropin releasing factor (CRF) and a reduction in delta sleep. We examined the effect of metyrapone administration on endocrine and sleep measures in male subjects with and without chronic PTSD. We hypothesized that metyrapone would result in a decrease in delta sleep and that the magnitude of this decrease would be correlated with the endocrine response. Finally, we utilized the delta sleep response to metyrapone as an indirect measure of hypothalamic CRF activity and hypothesized that PTSD subjects would have decreased delta sleep at baseline and a greater decrease in delta sleep induced by metyrapone. Three nights of polysomnography were obtained in 24 male subjects with combat-related PTSD and 18 male combat-exposed normal controls. On day 3 metyrapone was administered during normal waking hours until habitual sleep onset preceding night 3. Endocrine responses to metyrapone were measured in plasma obtained the morning following sleep recordings the day before and after administration. Repeated measures ANOVAs were conducted to compare the endocrine and sleep response to metyrapone in PTSD and controls. PTSD subjects had significantly less delta sleep as indexed by stages 3 and 4, and total delta integrated amplitude prior to metyrapone administration. There were no differences in pre-metyrapone cortisol or ACTH levels in PTSD versus controls. PTSD subjects had a significantly decreased ACTH response to metyrapone compared to controls. Metyrapone caused an increase in awakenings and marked decrease in quantitative measures of delta sleep that was significantly greater in controls compared to PTSD. The decline in delta sleep was significantly associated with the magnitude of increase in both 11-deoxycortisol and ACTH. The results suggest that the delta sleep response to metyrapone is a measure of the brain response to increases in hypothalamic CRF. These data also suggest that the ACTH and sleep EEG response to hypothalamic CRF is decreased in PTSD.

F02-06

biomed

#### Norepinephrine Levels Are Associated with Peritraumatic Dissociation

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We had previously reported that urinary catecholamine levels excreted during the first 15 hours following a motor vehicle accident (MVA) were negatively correlated with reports of peritraumatic dissociation (Delahanty et al., 2001). However, 15-hour samples are influenced by a number of factors in addition to the accident such as emergency room experiences, surgeries, and speaking with loved ones. The present study was designed to limit the influence of these confounds by examining the relationship between catecholamine levels excreted within 5 hours after the accident and peritraumatic dissociation in 76 MVA victims (50 males, 26 females). Following hospital protocol, patients were catheterized upon admittance, and 5-hour urine samples were collected. After informed consent, participants completed the peritraumatic dissociative experiences questionnaire (PDEQ; Marmar et al., 1997). An analysis of covariance, controlling for use of alcohol/drugs, age, and gen-

Friday, October 31

der, found that high dissociators had significantly lower norepinephrine levels than low dissociators,  $F(1,71)=5.72, p=.019$ . Urinary epinephrine was not related to reports of peritraumatic dissociation. These results extend the findings of Delahanty et al. (2002) and suggest that norepinephrine levels excreted within 5 hours following an acute trauma are related to reports of dissociative experiences.

F03-01

child

**Stability of Memory for Traumatic Experience and Relationship to PTSD**

*Bartholomew, David, National Child Traumatic Stress Network, Boston University Medical Center; Saxe, Glenn, MD, National Child Traumatic Stress Network, Boston University Medical Center; Koenan, Karestan, PhD, National Center for PTSD, Boston VA Healthcare System; Lopez, Carlos, MD, National Child Traumatic Stress Network, Boston University Medical Center; Kaplow, Julie, PhD, National Child Traumatic Stress Network, Boston University Medical Center; Stoddard, Frederick, MD, Shriners Burns Hospital; Moulton, Steven, MD, Department of Pediatrics, Boston Medical Center; Hall, Erin, MA, National Child Traumatic Stress Network, Boston University Medical Center; Mccampbell, Daphne, National Child Traumatic Stress Network, Boston University Medical Center*

The purpose of this study is to examine the stability of memory for the experience of an acute injury or burn. We defined memory of the traumatic experience as the children's recollection of both their immediate anxiety response (PTSD A2 criteria) and their dissociative response at the time of trauma. Data has been collected on 45 children (7-17 y.o) admitted to a hospital with acute injuries and enrolled in a prospective study on the longitudinal course of PTSD. We looked at the change of the child's reports from their acute hospital stay to three months post trauma. Our indices of memory changed an average of 36.7% with a minimum of 21.1% ("Did you feel completely horrified?") and a maximum of 64.3% ("Did time seem different?"). We also found that memory for the experience of dissociative response at time of trauma was strongly influenced by changes in PTSD symptoms. Changes in reporting of acute dissociative response were positively correlated with changes in PTSD symptoms ( $r = .442, sig = .005$ ). This suggests that memory of traumatic experience is dependent upon emotional state at the time of interview.

F03-02

child

**Religious Practice and Meaning Among Children Traumatized by 9/11**

*Brown, Elissa, PhD, New York University School of Medicine; Goodman, Robin, PhD, New York University School of Medicine; Tokayer, Naama, PsyD, New York University School of Medicine; Sena, Amanda, New York University School of Medicine; Doyle, Megan, New York University School of Medicine*

Theoreticians have hypothesized that stressful life events, such as trauma and bereavement, impact religious practice and spirituality. In turn, religious practice and spirituality may be protective factors against the development of mental health outcomes following stressful life events. Although based in strong theoretical foundation, these hypothesized relations have not been studied empirically in children who are bereaved as a result of a trauma. The purpose of this study is to use empirical means to elucidate the nature of the relations among religious practice, spirituality, and psychiatric symptoms in children who were traumatically bereaved as a result of the events of September 11th, 2001. Wives and children of uniformed service workers (firefighters, police, port authority police, and emergency medical service personnel) who died on September 11th, 2001 responded to questions regarding their religious practice (e.g., use of prayer, attending activities at religious organizations), spirituality (e.g., perception of life's meaning), posttraumatic stress disorder (PTSD), depression, and traumatic grief. Statistical analyses will evaluate whether religious activity and meaning increased, decreased,

or remained the same following September 11th, 2001. We will then explore whether level of and change in religious practice and sense of meaning are associated with severity of children's PTSD, depression, and traumatic grief. Implications of findings include an increased understanding of the impact of religious practice and spirituality for traumatically bereaved children.

F03-03

child

**Anxiety and Depression in Children: Impact of Residential Fire**

*Conde, Joann, MA, University of North Texas; Jones, Russell, PhD, Virginia Tech University; Ollendick, Thomas, PhD, Virginia Tech University; Kephart, Christina, MA, Virginia Tech University; Wang, Yanping, MA, Virginia Tech University*

Symptoms of anxiety and depression were examined in 99 children and adolescents (56 African American and 43 European American) following a residential fire. The children and their parents completed self-administered questionnaires and were interviewed regarding their reactions to the fire and their current psychological functioning. It is hypothesized that for all children the most commonly reported symptoms after the fire will be worry/oversensitivity, physiological complaints, negative mood, and internalizing behaviors. It is believed that African American children will endorse more symptoms when compared to European American children. It is predicted that exposure and loss will be directly related to anxious and depressive symptomology, fears, and internalizing behaviors. The moderating roles of social support, life events, and coping abilities will be explored. Preliminary analysis appears to support the hypothesis regarding commonly reported symptoms. There were no differences across ethnicity for overall anxiety, depression, fears, and behaviors. Exposure was directly related to parental report of child internalizing behaviors. Loss was not related to symptomology or behaviors. However, the proposed moderators significantly influenced the relationships between loss, exposure, and all dependent variables. Overall, child characteristics and environment appear to be the best predictors of adjustment following a residential fire.

F03-04

child

**Traumagenic Role of Peritraumatic Dissociation in Adolescents**

*Geyran, Pakize, MD, Bakrkoy Neuropsychiatry Education and Research Hospital, Psychological Trauma Treatment Center (PTTC); Turan, Fethi, MD, Bakrkoy Neuropsychiatry Education and Research Hospital, Psychological Trauma Treatment Center (PTTC); Fulya, Maner, MD, Bakrkoy Neuropsychiatry Education and Research Hospital, Psychological Trauma Treatment Center (PTTC)*

The study in this presentation examined severity of the dissociation at the time of trauma and its connection with current dissociative symptoms. We investigated the relationship between general clinical (GD) tendencies and peritraumatic dissociation (PD) of specific traumatic events in nonclinical adolescent sample. It describes the relation of different types of traumas to the degree of dissociative experiences. The purpose of it is to be evaluated a broad spectrum of traumatic events (18 types) and the effect of PD that could account for mediating factor in the development of GD. A total of 640 community respondents interviewed at the school-based. 52.9% were girls, 47% were boys, the mean age was 16.43 (SD:0.64), 17.7% described stressful life events resulting instabile family environment. 620 completed Traumatic Life Events questionnaire. Our results showed that 97.3% had at least one trauma. (mean:2.84;Sd:1.74) 71.6% subjects explained intense emotional reactions and 15.4% explained to be injured at the time of trauma. Because of the multiple trauma history was very high (74.8%),the worst trauma was selected for the rating PDE-Q.Only 425 subjects rated PDE-Q (mean:20.10;sd:8.68). The percentage of the worst traumas are 63% natural disaster; 5.6% suddenly and unexpected loss; 4.2% witnessing family violence; 2.8% other accidents; 1.9% sexual assault under 13;1.7% traffic accident. Regression analysis was made in three steps. Outcome variables were selected as DIS-Q for step-1, step-3

Friday, October 31

and as PDE-Q for step-2. PDE-Q was added to predictor variables in step-3. Gender, trauma type, instable family environment, being injured were unique predictors of both types of dissociation. When PDE-Q was entered in regression, trauma type did not predict DIS-Q. This means that PD accounted for the mediating factor in the GD development.

F03-05

child

**A Multimodal Treatment of Pediatric PTSD**

*Heiden, Lynda, PhD, Stanford University; Saltzman, Kasey, PhD, Stanford University; Carrion, Victor, MD, Stanford University*

A multimodal treatment protocol addressing multiple dimensions of trauma-related distress and dysfunction in children with PTSD will be presented. PTSD is characterized by symptoms of emotional constriction and dysregulation, intrusive re-experiencing, and physiological hyperarousal (APA 1994). These symptoms can lead to impaired academic and social functioning and disrupt normal development. Currently there are no systematic protocols integrating psychoeducational, psychophysiological, and psychosocial components of pediatric treatment. This protocol is based on an extensive review of the empirical and theoretical literature as well as clinical experience. Additionally, because conditioned hyperarousal and difficulties with regulation of anxiety are consistently present in children who experience maltreatment (Perry & Pate, 1994), studies of stress-related psychophysiological reactivity in children were also reviewed. Based on our findings, an integrative treatment protocol was developed and is being piloted on 20 children who have suffered interpersonal violence. The protocol provides 15 structured 60-min therapy sessions addressing psychoeducation of parents and children, psychophysiology and emotional regulation, anxiety management, parent/family issues, and exploring and restructuring trauma-related schemes. Phases of manual development will be described (piloting, reevaluation, revision), and the objectives and procedures will be discussed in detail. Pilot data evaluating the effectiveness of the protocol will also be presented.

F03-06

child

**Parent-Child Agreement on the PTSD Module of the DICA**

*Kia-Keating, Maryam, EdM, Boston University Medical Center; MacDonald, Helen, MA, Boston University Medical Center; Banh, My, MPH, Boston University Medical Center; Saxe, Glenn, MD, Boston University Medical Center; Stoddard, Frederick, MD, Boston University Medical Center; Koenen, Karestan, PhD, Boston University Medical Center; Lopez, Carlos, MD, Boston University Medical Center; Hall, Erin, MA, Boston University Medical Center; Kaplow, Julie, MA, Boston University Medical Center*

Although parent reports of their children's psychopathology are indispensable, children can provide valuable information about their subjective thoughts, behaviors, and emotions. PTSD symptoms include both observable behaviors, which parents can report on, as well as internal states, which may be more suited for self-report. Comparisons of parent and child reports are crucial to improving the assessment and diagnosis of childhood traumatic stress. Families of children aged 7-17 were enrolled in this ongoing prospective study examining the longitudinal course of posttraumatic stress symptoms in a sample of children who have experienced an acute burn or injury. 71 child-parent dyads were administered the PTSD module of the Diagnostic Interview for Children and Adolescents (DICA). Overall, there was 81.7% agreement between parent and child diagnosis of PTSD. Within cluster symptoms, there was significant agreement between parent and child reporting of re-experiencing and avoidance/numbing cluster symptoms, with a 74.2% and 74.6% agreement respectively. However, parent-child agreement on hypervigilance/arousal symptoms was not statistically significant, with only a 53.2% agreement. These findings help clarify the utility of the DICA with injured or burned children and indicate that parent-child agreement differences exist depending on symptom cluster. These differences warrant further investigation.

F03-07

child

**Assessing Long-Term Risk Among Child and Adolescent Flood Victims**

*Kreuger, Larry, PhD, University of Missouri, Columbia School of Social Work; Stretch, John, PhD, Saint Louis University, School of Social Services*

Investigated were relationships between emotional distress and risk factors indicating service needs in children following a long-term flood. Twenty-seven hundred and nineteen children from 18 parochial schools grades 4-12 were screened on-site using two standardized measures: the RCMAS and CDI-Short Form, along with measures of disaster impact and recovery. Of 2719 screened, 1950 (72%) measured WNL for both anxiety and depression. Of those 769 children (28%) with elevated scores, 570 (74%) had elevated anxiety, 41 (5%) had elevated depression, and the remaining 158 (21%) had both. The perception of harm to self ( $x^2 = 23.95, p < .001$ ); self-reported illnesses, ( $x^2 = 18.93, p < .001$ ); and evacuation of residence ( $x^2 = 17.10, p < .001$ ), were related to elevated scores. Analysis suggests a disaster recovery model with five levels. Using these data, 2253 (83%) of those screened would be classified in low risk magnitude 1; 170 (6.3%) would be in (slight risk) level 2; 152 (5.6%) would be in (moderate risk) level 3; and the remaining 144 (5.3%) would be classified in the level 4 group (highest risk, loss of residence). No children were in level 0 (no risk), as participating schools were selected from parishes where at least minimal inundation had occurred.

F03-08

child

**Relation Between Infant Disorganized Attachment and Childhood PTSD**

*MacDonald, Helen, MA, Boston University Medical Center, National Child Traumatic Stress Network; Grant Knight, Wanda, PhD, Boston University Medical Center, National Child Traumatic Stress Network; Woods, Ryan, Boston University School of Public Health; Beeghly, Marjorie, PhD, Harvard Medical School, Children's Hospital; Cabral, Howard, PhD, Boston University School of Public Health; Rose-Jacobs, Ruth, PhD, Boston University School of Medicine, Boston Medical Center; Frank, Deborah, MD, Boston University School of Medicine, Boston Medical Center*

Prior research has shown that disorganized attachment in infancy is related to heightened physiological stress in the infant, as reflected in higher salivary cortisol, and to increased externalizing behaviors at school age. However, few studies have examined whether disorganized infant attachment is associated with school-aged children's reactions to traumatic stress. This study evaluated whether children with a history of disorganized attachment at 12 months of age had increased posttraumatic stress symptoms at 8.5 years of age, after covariate control. Subjects were 78 children (87% AA/AC, 47% female, 49% prenatally cocaine exposed) who were participants in a larger prospective cohort study of the effects of prenatal cocaine exposure on children's growth and development. Children's attachment status at 12 months was scored from videotapes of children and their primary caregiver in Ainsworth's Strange Situation. Fourteen (18%) children were classified as disorganized. Children were administered the Diagnostic Interview for Children and Adolescents - PTSD module at 8.5 years. Chi-square analyses indicated that disorganized attachment was significantly related to higher levels of PTSD avoidant symptoms; findings remained significant after gender and prenatal cocaine exposure were covaried ( $p < .05$ ). These results suggest that relational factors in early life may mediate children's later traumatic stress reactions.

F03-09

child

**Initial Cardiovascular Predictors and PTSD in Child Accident Victims**

*Nugent, Nicole, MA, Kent State University; Delahanty, Doug, PhD, Kent State University; Christopher, Norman, MD, Akron Children's Hospital; Buckley, Beth, Kent State University; Sledjeski, Eve, MA, Kent State University*

Although cardiovascular levels soon after trauma have been related to subsequent PTSD in adults, the extent to which initial cardiovascular activity predicts PTSD in children has not been investigated. The present study examined the relationship between initial cardiovascular levels and subsequent PTSD symptoms in 47 male and 22 female children admitted to a level 3 trauma unit. Systolic blood pressure (SBP), diastolic blood pressure (DBP), and heart rate (HR) were assessed at four time points: during EMS transportation, upon trauma admission, for 20 minutes following admission, and upon discharge. Beginning at admission, 12-hour urine samples for assessment of urinary catecholamine and cortisol levels were collected. Six weeks later, children were administered the Clinician Administered PTSD Scale for Children and Adolescents (CAPS-CA). Analyses revealed no relationship between cardiovascular levels upon admission and 6-week PTSD symptoms (SBP:  $r = -.052, p > .7$ , DBP:  $r = .002, p > .9$ , HR:  $r = -.039, p > .8$ ). Similar findings were obtained for cardiovascular levels at all other time points. Initial admission DBP and HR levels were related to 12-hour urinary norepinephrine levels (DBP:  $r = .583, p < .01$ , HR:  $r = .461, p < .01$ ). The present results question the use of initial cardiovascular levels as predictors of PTSD in child trauma victims.

F04-01

clin res

**Effects of Smoking Outcome Expectancy on Anxiety in a PTSD Population**

*Bedard, Michele, National Center for PTSD, Boston VA Healthcare System; Dewulf, Anne-Cecile, Catholic University of Louvain, Belgium; Mozley, Susannah, PhD, National Center for PTSD, Boston VA Healthcare System; Buckley, Todd, PhD, National Center for PTSD, Boston VA Healthcare System; Holohan, Dana, PhD, VAMC*

Research indicates that individuals with PTSD smoke at higher rates than the general population. However, the mechanisms that contribute to this rate of smoking are not clearly understood. The present study investigated the relationship between smokers' expectations that smoking reduces negative affect and actual post-cigarette anxiety reduction following exposure to trauma-related imagery. Participants were 30 PTSD diagnosed men and women enrolled in a placebo-controlled study examining the effect of nicotine on physiological reactivity to trauma cues. Results of regression analyses indicate a greater belief that smoking reduces negative affect predicts decreased anxiety following an anxiety prime (45 second trauma script) and smoking phase (nicotine or placebo cigarettes), controlling for baseline anxiety level and nicotine condition,  $R^2 = .19$ . Smoking expectancy was the only variable included in analyses that significantly added to the predictive value of the equation,  $B = .44, p = .029$ . Regardless of nicotine content of the cigarettes, individuals who expected smoking to reduce negative feelings experienced a decrease in anxiety. Results suggest that smoking related expectancies in individuals with PTSD are likely to contribute to the high incidence of smoking and nicotine dependence beyond the pharmacological effects of nicotine. Implications for future research will be discussed.

F04-02

clin res

**Residential Rehabilitation Treatment for Combat-Related PTSD—Outcome**

*David, Daniella, MD, University of Miami and Miami VAMC; Fuller, Cathara, Miami VAMC; Defaria, Ludmila, MD, University of Miami and Miami VAMC*

The outcome efficacy of rehabilitation treatment for combat-related PTSD has been previously questioned. While symptom severity measures do not always show improvement, functional outcome has been reported to improve. The goal of this study is to evaluate the changes in symptoms of depression, anxiety and PTSD, and in mental and physical health perceptions, as reported by veterans who completed a PTSD residential rehabilitation program. Subjects were 131 male veterans with a primary diagnosis of PTSD, who were admitted over a two-year period and completed the full length of the program. Mean age was 54.1 +/- 6.4 years, 44.3% were White, 34.4% were Black and 21.4% were Hispanic. Patients completed the Beck Depression and Anxiety Inventories (BDI and BAI), the Mississippi scale for combat-related PTSD (M-PTSD), and the SF-36 upon admission to the program, at discharge and at 4-6 months follow-up. Follow-up data is presently in final collection stage. Differences in BDI, BAI, M-PTSD and SF-36 scores between admission and discharge were analyzed by paired t-tests. Once follow-up collection is complete, ANOVA will be used to compare the three time points. No significant changes were found in BDI and BAI scores between admission and discharge, while the M-PTSD scores were higher on discharge (133.9 +/- 17.3 vs 136.5 +/- 18.8,  $t = 2.1, df = 115, p = .04$ ). SF-36 subscales showed significant improvement in emotional role (21.9 +/- 3.0 vs 38.6 +/- 5.2,  $t = 2.6, df = 53, p = .01$ ), mental health perception (24.5 +/- 16.6 vs 31.6 +/- 18.7,  $t = 2.6, df = 53, p = .01$ ), and vitality (21.1 +/- 18.6 vs 27.2 +/- 20.6,  $t = 2.1, df = 53, p = .04$ ), and worsening in physical health perception (41.8 +/- 27.7 vs 34.0 +/- 27.4,  $t = 2.9, df = 55, p = .006$ ). Residential treatment for chronic, combat-related PTSD is associated with no change or worsening in symptom severity and physical health perception. However, mental health perception measures show significant improvement. Possible explanations for these findings will be discussed.

F04-03

clin res

**Prevalence, Impact, and Disclosure of Political Violence in US Latinos**

*Eisenman, David, MD, MSHS, University of California, Los Angeles, School of Medicine; Gelberg, Lillian, MD, MSHS, University of California, Los Angeles; Liu, Honghu, PhD, University of California, Los Angeles; Shapiro, Martin, MD, PhD, University of California, Los Angeles*

Political violence (PV) is wide-spread in Latin America. Little is documented about its impact on U.S. Latino immigrants. We surveyed a random sample of Latino immigrants at 3 general medicine clinics in Los Angeles to estimate the prevalence of PV, associated health impairments, and disclosure to physicians. Of 1287 Latino patients, 919 (71%) were eligible (age >18; born in Latin America) and 638 (69%) underwent face-to-face interviews (male 24%; mean age 46 years; Mexico 42%, Salvador 33%, Guatemala 17%, Other 8%). Overall, 44% reported PV experiences; 7% reported torture. In multivariate logistic regressions controlling for age, gender, country, years in US, acculturation, income, and insurance, PV exposure was significantly related to symptoms of depression (OR 3.2; 1.8-5.5), PTSD (OR 2.7; 1.3-5.4), panic (OR 2.7; 1.1-7.2), and alcohol abuse (OR 3.5; 1.3-9.4). PV was associated with poorer health-related quality of life (lower scores = worse health) in several domains: role limitations from physical problems (59 vs 74,  $p < .0001$  ANOVA), from emotional problems (61 vs 78,  $p < .0001$  ANOVA), and chronic pain (56 vs 65,  $p < .001$  ANOVA). 3% reported disclosing PV to a US physician. This first study about PV in US Latino immigrants suggests the need for interventions targeted to this population.

Friday, October 31

F04-04

clin res

**Trauma and PTSD: Does Emotion Regulation Play a Role?**

Frey, Linda, MA, University of Montana; Crouse, Ellen, MA, University of Montana; Caruso, John, PhD, University of Montana; Waltz, Jennifer, PhD, University of Montana

Posttraumatic stress disorder (PTSD) has been conceptualized as a disorder of affect regulation (Zlotnick, Mattia & Zimmerman, 2001). While some empirical evidence supports a relationship between these constructs (e.g., Frey, et al., 2001), there currently remains a dearth of scientific investigation in this area. Using a sample of 141 undergraduate students with reported trauma exposure, the present study assesses emotion regulation as an intervening variable between trauma and PTSD. Analyses were carried out examining specific features associated with the trauma event (known or unknown assailant, CSA or other trauma, sexual assault or nonsexual assault), and their relation to the degree of arousal, reexperiencing and avoidance symptoms. The use of three emotion regulation measures enriches this analysis. Overall, results offer minimal evidence for mediation: emotion regulation, as measured by the Affective Control Scale (Williams, Chambless & Ahrens, 1997), served as an intervening variable between nonsexual assault and all types of PTSD symptomatology, while emotion regulation, as assessed by the Negative Mood Regulation Scale (Catanzaro & Greenwood, 1994) served as an intervening variable between nonsexual assault and avoidance symptoms only. Results are discussed in terms of our conceptualization of the role of the emotion regulation process in the development of PTSD.

F04-05

clin res

**One Year PTSD Outcomes in a Depression Treatment Trial**

Green, Bonnie, PhD, Department of Psychiatry, Georgetown University; Krupnick, Janice, PhD, Department of Psychiatry, Georgetown University; Chung, Joyce, MD, Department of Psychiatry, Georgetown University; Siddique, Juned, MA, Department of Psychiatry, UCLA; Miranda, Jeanne, PhD, Department of Psychiatry, UCLA

Low income minority women with major depression (MDD), about half of whom had comorbid PTSD, were screened and recruited for a depression treatment trial in public primary care settings. Those meeting full MDD criteria were randomized to CBT, medication (usually SSRI), or treatment as usual (referral only, TAU), and evaluated by baseline clinical interview and followed by telephone for one year. PTSD was reassessed at one year. Six month data were available on 279 women. 44% were African American and 50% Latina, 36% had less than a high school education, and 64% were uninsured. 49% of the sample had current co-morbid PTSD. Both treatment groups showed significant improvement in depression symptoms and social functioning during the first 6 months, compared to TAU, with no differences by ethnicity or PTSD status. Among the 211 subjects assessed at one year, CBT subjects without PTSD were significantly less depressed than TAU subjects, but those with comorbid PTSD did not differ. There were no significant depression differences for medication. However, medication subjects with PTSD at baseline were significantly less likely to have PTSD at one year. Treatment did not affect exposure to new traumas.

F04-06

clin res

**Can Acute Flashback Characteristics Predict PTSD?**

Jones, Charlie, MA, University of Oxford; Harvey, Allison, University of Oxford; Hackmann, Ann, University of Oxford; Bootzin, Richard, University of Arizona

Flashbacks are core diagnostic reexperiencing symptoms of posttraumatic stress disorder (PTSD) and yet have also been described as beneficial, in facilitating the processing of traumatic material. Studies have generally not investigated flashbacks in the acute stage posttrauma. Do flashbacks in the acute stage posttrauma

occur in all trauma survivors? Are there different types of flashback? Consecutive road traffic accident survivors were assessed as soon as possible (Time 1, n = 91) and at six weeks posttrauma (Time 2, n = 70). Time 1 was an average of 4-5 days posttrauma. Participants rated flashbacks on various characteristics on 7 point Likert scales. At Time 2, PTSD was diagnosed with the PTSD Diagnostic Scale. At Time 1, 49 participants reported flashbacks and 42 did not. Flashbacks at Time 1 were reported by participants who both did (n = 12) and did not (n = 27) subsequently develop PTSD. Flashbacks reported by individuals who later developed PTSD were significantly more intense (p < 0.05) and more fearful (p < 0.05) than the flashbacks reported by individuals who did not go on to develop PTSD. These results challenge the assumption that all flashbacks in the acute stage posttrauma are beneficial to cognitive restructuring.

F04-07

withdrawn

F04-08

clin res

**Implications of Childhood Trauma, Complex PTSD and Alexithymia**

McLean, Linda, PhD, CAMH, Clarke Division, Department of Psychiatry, University of Toronto; Toner, Brenda, PhD, Women's Mental Health & Addiction Program, CAMH; Stuckless, Noreen, PhD, Department of Psychiatry, University of Toronto; Desroches, Mary, PhD, Department of Psychology, York University

Over the past decade, there has been a dramatic increase in interest in the etiologic primacy of childhood sexual abuse to adult psychopathology and diagnoses. A body of empirical literature points to the association of severe childhood trauma with complex posttraumatic stress disorder (CP) and with alexithymia. Affect dysregulation, central to both constructs, impacts mental health and functioning. This study examined the strength of the association between CP, affect regulation, dissociation, somatization and alexithymia in women with a reported history of early (i.e., LE12 years of age) childhood sexual abuse. The differential role of specific types of early trauma in the level of adult alexithymia was elucidated in a convenience sample of seventy women (GE18 years of age) drawn from six mental health outpatient clinics and the community in a large metropolitan city. The Traumatic Antecedents Questionnaire, the Structured Interview for Disorders of Extreme Stress and the Toronto Alexithymia Scale-20 was administered to each participant. It is anticipated that the role of adult alexithymia in women who meet diagnostic criteria for CP will be highlighted, thus informing treatment.

F04-09

clin res

**Predictors of Attrition in Children Exposed to Family Violence**

Murtaugh, Cristin, University of Maryland; Koverola, Catherine, PhD, University of Maryland; Boppa, Dinesh, MPH, University of Maryland

Attrition poses a significant barrier for conducting treatment outcome research with children exposed to family violence. This paper will identify both, risk factors that predict attrition and protective factors that predict retention. The sample includes 121 children, aged 3 to 17 years, referred for treatment because of family violence. Predictor variables include: (1) Demographic Characteristics; (2) Violence Exposure (Conflict Tactics Scale); (3) Child Adjustment (Diagnosis, Child Behavior Checklist, Culture Free Self-Esteem Inventory); and (4) Caregiver Functioning (Parenting Stress Index, Social Support Questionnaire, Child Abuse Potential Inventory). Differences in demographics, violence exposure, child adjustment, and caregiver functioning between those engaged in treatment and the attrited group will be examined with logistic (or probit) regression for discrete outcomes and multiple regression for continuous outcomes. This will allow examination of simultaneous effects of several multiple variables that might influence the attrition rate as

Friday, October 31

well as examination of non-linear (e.g., interactive) effects; for example, the effect of violence exposure on attrition may differ as a function of certain demographic characteristics. The implications of these findings for treatment outcome studies will be presented.

**F04-10**

**clin res**

**The Longitudinal Course of Chronic Combat-Related PTSD**

*Nilles, Barbara, PhD, National Center for PTSD, VA Boston Healthcare System; Wolf, Erika, PhD, National Center for PTSD, VA Boston Healthcare System; Doron-LaMarca, Susan, PhD, National Center for PTSD, VA Boston Healthcare System*

Many researchers have examined the development symptoms of PTSD during the months or years following a traumatic stressor. However there has been very little documentation of the fluctuation of symptoms in cases where PTSD symptoms sustain and become chronic. This presentation examines the course of chronic PTSD in Vietnam veterans at least 30 years after their traumatic combat events. In this two-year study, participants PTSD symptoms, life stressors, and social support are assessed every two weeks via telephone interviews. Preliminary evidence suggests that PTSD symptoms fluctuate substantially, but show no general upward or downward trend over time. Participants vary in terms of the degree of symptom variability, with some participants having wide fluctuation and some relatively little. As clinical anecdote would predict, for those study participants who were enrolled in the study prior to 9/11/01, PTSD symptoms did increase significantly during the following weeks. However, no association was detected between self-reported stressors and PTSD symptom fluctuation in general. Symptom changes corresponding to the U.S./Iraq war will be examined. The clinical and research implications of these findings will be discussed.

**F04-11**

**clin res**

**Impact of Relaying Trauma Story on Symptoms in CSA Survivors**

*Palesh, Oxana, PhD, Stanford University; Classen, Catherine, PhD, Stanford University; Field, Nigel, PhD, Pacific Graduate School of Psychology; Spiegel, David, MD, Stanford University*

This study examines the relationship between CSA survivors' immediate response to relaying their stories of child sexual abuse and self-reported trauma symptoms, cognitions and interpersonal functioning. This study examines baseline data collected from 171 female CSA survivors who were participating in an intervention study. Participants were given 10 minutes to respond to the prompt "Please tell me what happened to you when you were sexually abused as a child." After completion of the narrative, participants completed a questionnaire consisting of 12 items which inquired about their feelings towards themselves and their abuser, intrusive thoughts and dissociative experiences during the narration of the story. Preliminary findings based on a qualitative analysis of the trauma narratives will be presented. In addition, the relationship between data generated from the trauma narrative, the post-trauma interview questionnaire and other self-reported measures of interpersonal problems, dissociation and trauma symptoms will be examined.

**F04-12**

**clin res**

**Prazosin Effects on Specific Symptoms in Chronic Combat Trauma PTSD**

*Raskind, Murray, MD, VA Puget Sound Health Care System; Peskind, Elaine, MD, VA Puget Sound Health Care System; Petrie, Eric, MD, VA Puget Sound Health Care System; Thompson, Charles, MD, VA Puget Sound Health Care System; Kanter, Evan, MD, VA Puget Sound Health Care System; Radant, Allen, MD, VA Puget Sound Health Care System; Dobie, Dorcas, MD, VA Puget Sound Health Care System; Hoff, David, PA-C, VA Puget Sound Health Care System; McFall, Miles, PhD, VA Puget Sound Health Care System*

Purpose: Prazosin is a generically available brain active alpha-1 adrenergic antagonist. We recently reported a placebo-controlled crossover study demonstrating that prazosin substantially and effectively reduces trauma-related nightmares, sleep disturbance and overall PTSD severity in Vietnam War combat veterans with chronic PTSD (*Am J Psychiatry* 2003;160:371-373). Here we report the effects of prazosin on specific PTSD symptoms as described by the Clinician Administered PTSD Scale (CAPS). Methods: Ten Vietnam combat veterans with chronic PTSD and frequent severe treatment resistant trauma related nightmares (CAPS recurrent distressing dream item score  $\geq 6$ ) participated in a double-blind, placebo-controlled crossover study. They were randomized to prazosin or placebo for a three-week drug titration period followed by six weeks on maximum effective dose. Following a two-week washout period, they were then "crossed over" to the other medication (prazosin or placebo). Maintenance psychotropic drugs were kept constant. Change scores were compared between prazosin and placebo conditions by paired t test. Findings: Prazosin was significantly more effective than placebo on the following CAPS items: intrusive memories ( $p=0.03$ ); recurrent distressing dreams ( $p<0.01$ ); physiologic distress on exposure ( $p<0.01$ ); decreased interest ( $p=0.03$ ); numbing ( $p=0.03$ ); sleep disturbance ( $p=0.02$ ); irritability/anger ( $p=0.01$ ). Conclusions: Prazosin significantly reduces severity of multiple PTSD symptoms across the accepted cluster of PTSD symptoms.

**F04-13**

**clin res**

**Experiential Avoidance, Shame and PTSD Symptoms in Trauma Survivors**

*Rhatigan, Deborah, PhD, VA Boston Healthcare System and Boston University School of Medicine; Block Lerner, Jennifer, PhD, VA Boston Healthcare System and Boston University School of Medicine; Plumb, Jennifer, VA Boston Healthcare System and Boston University School of Medicine; Street, Amy, PhD, VA Boston Healthcare System and Boston University School of Medicine; Shipherd, Jillian, PhD, VA Boston Healthcare System and Boston University School of Medicine*

Trauma survivors, who are likely to experience greater levels of trait-based shame, or the tendency to globally evaluate the self as "small," worthless or powerless (Tangney et al., 1992), commonly use avoidant coping strategies to manage negative emotions (Street, et al., under review). Avoidant coping strategies may be indicative of a general pathological process known as experiential avoidance, which involves an unwillingness to remain in contact with private experiences, such as thoughts or emotions (Hayes et al., 1996). High levels of experiential avoidance have been linked to the development of multiple problems, including PTSD (Foa & Riggs, 1995). Using a predominately veteran sample (current N=60), the present study will examine associations among trait-based shame, experiential avoidance, and PTSD symptomatology. It will employ multiple measures of experiential avoidance including cognitive avoidance (i.e., White Bear Suppression Inventory), behavioral avoidance (i.e., Brief COPE), and general avoidance (i.e., Acceptance and Action Questionnaire) as well as measures of trait-based shame (i.e., TOSCA) and PTSD symptomatology (i.e., DEQ). It is expected that higher levels of experiential avoidance will mediate the association between feelings of shame and PTSD. Exploratory regression analyses will additionally examine the role of potential moderating factors, including participant gender and type of trauma.

**F04-14**

**clin res**

**The Relation Between Childhood Abuse and Conversion Disorder**

*Roelofs, Karin, PhD, Leiden University, The Netherlands; Keijsers, Ger, PhD, University of Nijmegen, The Netherlands; Hoogduin, Kees, Prof dr., University of Nijmegen, The Netherlands*

Despite the fact that the assumption of a relationship between conversion disorder and childhood traumatization has a long history, there is little empirical evidence to support this premise. The present

Friday, October 31

study examined this relation and investigated whether other negative life-events mediate the relation between childhood trauma and conversion symptoms. A total of 54 patients with conversion disorder and 50 matched comparison patients with an affective disorder were administered a Structured Trauma Interview (STI), measures of cognitive (DES) and somatoform dissociative experiences (SDQ-20), and a measure of life-events concerning a 12 month period prior to the onset of the symptoms. Conversion patients reported a higher incidence of physical/sexual abuse, a larger number of different types of physical abuse, sexual abuse of longer duration and more often incestuous experiences than comparison patients. In addition, within the group of conversion patients, parental dysfunction by the mother was associated with larger scores on the DES and the SDQ-20. Physical abuse was associated with a larger number of conversion symptoms (SCID-I). The relation between childhood abuse and conversion symptoms proved to be partially mediated by other negative life events. In conclusion, the present results provide evidence of a relationship between childhood traumatization and conversion disorder.

F04-15

clin res

#### Trauma in Couples: Relationship Fragmentation and Integration

*Schwerdtfeger, Kami, Kansas State University; Jones, Nina, Kansas State University; Nelson, Briana, PhD, Kansas State University; Hoheisel, Carol, MS, Kansas State University; Smith, Douglas, MS, Kansas State University; Peterson, F. Ryan, Kansas State University; Kelley, Sharif, Kansas State University; Archuleta, Kristy, Kansas State University*

Traumatic events affect not only individual trauma survivors, but also people who have significant relationships with trauma-exposed and traumatized individuals. Much of the literature on traumatic stress focuses on the individual, without an empirical description of the systemic impact of trauma. The couple relationship provides a unique context for examining the interpersonal or systemic impact of trauma and understanding how exposure to traumatic events and post-traumatic responses can impact both the primary trauma survivor, the spouse/partner of the trauma survivor, and the interpersonal dynamics of the relationships of trauma survivors. This poster presents data from research examining the effects of trauma on the couple relationship. A mixed method design, including qualitative interviews with each partner, was used to identify individual trauma symptoms, levels of relationship satisfaction, and other variables related to the impact of previous trauma on each individual and on the couple's relationship. The qualitative analysis focused on extracting central themes and descriptions from each participant. Results suggest that previous trauma can negatively impact the couple relationship. The participants' responses and themes will be presented and implications for clinicians and researchers will be explored.

F04-16

clin res

#### The Effect of Trauma Exposure and Affect Intensity on Emotionality

*Tull, Matthew, MA, University of Massachusetts Boston; Jakupcak, Matthew, MA, Seattle VA, Puget Sound Health Care System*

Emotional functioning deficits in PTSD are poorly understood, as are the effect of individual difference factors on the presentation of these difficulties. The present study examined the effect of trauma exposure and negative affect intensity on fear of anxiety, experiential avoidance, and emotional expressivity among college students. Participants filled out a series of questionnaires assessing trauma exposure, PTSD symptom severity, negative affect intensity, fear of anxiety, experiential avoidance, and emotional expressivity. Participants were assigned to a trauma or non-trauma group based upon self-report of physical and/or sexual assault and PTSD symptom severity. Participants were also assigned to either a low or high negative affect intensity group based upon self-report. Results

demonstrate that trauma group participants reported significantly greater experiential avoidance, fear of anxiety, and significantly less emotional expressivity as compared to non-trauma participants. Similar main effects were found for high negative affect intensity participants. A significant interaction between trauma exposure and negative affect intensity was found for fear of anxiety. Trauma group participants high in negative affect intensity reported greater fear of anxiety as compared to those low in negative affect intensity. Results are discussed in terms of implications for interventions and future research on posttraumatic emotional responses.

F04-17

clin res

#### Impact of Complex Childhood Abuse on Physical Health

*Widera-Wysockanska, Agnieszka, PhD, Institute of Psychology, University of Wroclaw, Clinical Division*

In this study, the correlations between health problems and the type of childhood trauma (emotional, physical, sexual and alcoholism of mother or father), the age at which the person experienced it, and the identity of the perpetrator (mother, father, or a stranger) were investigated in a random sample. To recognize the types of trauma, the Intimate Situations Questionnaire and Family Childhood Abuse Questionnaire were used. The results of the study showed that a history of childhood trauma correlated significantly with several somatic problems. The different types of diseases most likely to affect people from alcoholic families, victims of physical abuse, and of sexual abuse are presented. The long term health problems, were more likely to affect victims of sexual and also physical abuse than people who met the criteria for emotional abuse. Childhood sexual abuse was associated with perceived poorer overall health, greater physical functional disability, and an increased number of physical symptoms. People with multiple types of abuse showed the greatest health decrement. Persons raised by an alcoholic mother showed more somatic problems than those raised by an alcoholic father. The greater the distance between a mother and a child, the earlier the appearance of somatic problems, the longer the problems lasted, and the more intensive they were. The treatment issue is discussed.

F05-01

commun

#### Juvenile Court Diversion Programming for Refugee Youths

*Fasulo, Samuel, MA, Georgia State University; Isakson, Brian, Georgia State University; Jurkovic, Gregory, PhD, Georgia State University; Hudson, Bryan, Refugee Family Services; Dhongade, Catherine, Refugee Family Services; Valentine, Leanne, Georgia State University; Dunn, Sarah, Georgia State University*

Social service agencies have been challenged to meet the pressing needs of the rapidly growing refugee population in the U.S. One agency that has received surprisingly little attention in this regard is the juvenile court. Related, in part, to the trauma and stress of refugee youths' pre- and post-migratory experiences, many are developing behavior problems resulting in their referral to the juvenile court. This poster will present the initial phase of our development of a multifaceted, culturally-anchored, community-based effort to divert refugee youths from the juvenile court system. Delivered through a refugee family center located in the heart of the target population in a large Southeastern metropolitan area, the program includes a tutoring and an innovative strengths-oriented mentoring component involving youths and their parents along with consultation to teachers. Ways in which the psychology graduate student mentors support the resiliency of the youths while at the same time providing them with opportunities to process traumatic experiences will be presented. We are also working with key refugee center and juvenile court staff and parents in the refugee community to establish "parent-youth councils" whose task is to serve as an alternative to court services (supervision, probation, and detention) for at-risk youths.

Friday, October 31

F05-02

commun

**Examining the Intersection of PTSD and Disability of Traumatic Origin**

*Stamm, B. Hudnall, PhD, Institute of Rural Health, Idaho State University; Gray, Matt, PhD, Department of Psychology, University of Wyoming; Cellucci, Leigh, PhD, Institutes of Rural Health, Idaho State University; Spearman, Russell, MEd, Institute of Rural Health, Idaho State University; Piland, Neill, DrPH, Institute of Rural Health, Idaho State University; Conley, Heather, PhdC, Institute of Rural Health, Idaho State University*

Life-threat is common to the etiology PTSD and traumatic disability. Using new and archival data, this poster examines the intersection of traumatic disability and traumatic stress. PTSD requires experiencing "threatened death or serious injury" and disability of traumatic origin specifies, "the individual is expected to die as a result." Life-threatening events account for 20-25% of PTSD cases and 16.8% of people who experience a serious accident or injury develop PTSD. Etiology is rarely reported for people with disabilities. One U.S. study of 12 million (of 53 million) disabilities yielded a conservative estimate of 31% injury-related disabilities. Using the 16.8% PTSD conversion rate, that would suggest epidemiologically, at least 2,760,240 people have both a disability and lifetime PTSD. Regardless of the actual number, the risk and protective factors are similar for PTSD and for disability. Co-morbidity of PTSD and disability make recovery and integration particularly challenging. A statewide needs and resources assessment was conducted with 485 Idahoans with disabilities. The data reveal that the sample is characterized by previously recognized PTSD and disability risk factors: poverty, unemployment, health problems, quality of life, and family and residence changes. These data suggest that greater empirical study of this intersection of population is warranted.

F06-01

culture

**Sexual Harassment and Attitudes Toward Women in the Military**

*Bruce, Tamara, NC-PTSD, Women's Health Sciences Division, VA Boston Healthcare System; Vogt, Dawne, PhD, NC-PTSD, Women's Health Sciences Division, VA Boston Healthcare System; Street, Amy, PhD, NC-PTSD, Women's Health Sciences Division, VA Boston Healthcare System; Stafford, Jane, PhD, NC-PTSD, Women's Health Sciences Division, VA Boston Healthcare System*

Research among military populations indicates that the potentially traumatic experience of sexual harassment in this environment is all too common, with more than three-fourths of women in the Armed Forces reporting one or more experiences of unwanted sexual attention during their service. In this study, we explored the predictors of negative attitudes towards women in the military and tolerance of sexual harassment among 1,957 male and female former members of the Reserve Components of the Armed Forces. In addition, we examined the relationship between attitudes towards women in the military and tolerance of sexual harassment of women. Negative attitudes towards women in the military and tolerance of sexual harassment were predicted by gender and race/ethnicity, with women and non-Caucasians having more positive attitudes and a lower tolerance of harassment. One possible explanation for these results suggests that prior personal experience with discrimination may result in more positive attitudes toward other stigmatized groups. Additional analyses indicated that negative attitudes towards women in the military were associated with a higher tolerance for sexual harassment. In turn, higher tolerance of sexual harassment has been shown to be related to the propensity to harass and inaction when witnessing sexual harassment.

F06-02

culture

**Psychological Status of Help-Seeking Bosnian Refugees**

*Keane, Terence, PhD, Boston University School of Medicine and DVA National Center for PTSD-Boston; Petrovic, Alma, Boston University School of Medicine; Pinjic, Emma, Boston University School of Medicine; Charney, Meredith, Boston University School of Medicine; Cajdric, Aida, Boston University School of Medicine; Piwowarczyk, Linda, MD, Boston University School of Medicine*

In the development of a culturally sensitive approach to treatment development for Bosnian refugees exposed to war trauma, we employed wide ranging focus groups. Treatments were developed and are in the process of being evaluated empirically. During the course of this project we have comprehensively examined 70 individuals to determine eligibility for the clinical trial. In this presentation we will provide information on the diagnostic status of all individuals; these diagnoses were provided via administration of the Clinician Administered PTSD Scale (CAPS) and the Structured Clinical Interview for DSM (SCID). In addition, we will present information on their psychosocial functioning derived from the Quality of Life Scale, the Family Functioning Scale, the Addiction Severity Index, and the SF-36. Preliminary analyses indicate high levels of depression and PTSD and low levels of substance abuse problems are prevalent in this cohort. Depressive symptoms are related to cognitive appraisals of losses associated with the civil war in the former Yugoslavia. Additional data analyses will be completed on a total sample of 150 participants in our treatment program; structural equation modeling will be applied to determine those factors contributing to the development of PTSD and other levels of adversity among these civilian survivors of war.

F06-03

culture

**The Communicative Robustness of Trauma Dialogue Among Refugee Families**

*Muzurovic, Nerina, The University of Chicago; Weine, Stevan, MD, International Center on Human Responses to Social Catastrophes; Kulauzovic, Yasmira, MA, International Center on Human Responses to Social Catastrophes; Besic, Sanela, International Center on Human Responses to Social Catastrophes; Lezic, Alma, International Center on Human Responses to Social Catastrophes; Mujagic, Aida, College of Nursing, University of Illinois at Chicago; Muzurovic, Jasmina, JD, International Center on Human Responses to Social Catastrophes; Spahovic, Dzemila, MD, International Center on Human Responses to Social Catastrophes; Feetham, Suzanne, University of Chicago; Pavkovic, Ivan, MD, International Center on Human Responses to Social Catastrophes*

Objective: To construct a model of refugee families' communications regarding trauma-related symptoms and emotions. Method: This study utilized a grounded-theory approach to analyze qualitative evidence in the Bosnian language from multi-family support and education groups with Bosnian refugee families. Textual search, coding, and analysis were conducted using ATLAS/ti for Windows. Results: A grounded theory model was constructed that assesses the communicative robustness of symptoms and emotions by examining their semantic links to the domains of war, refuge, and family. According to this model, the communicative robustness varied across different symptoms and emotions. For example, nervozan(irritable) and smiren(calm) are highly robust, with links to war, family, and refuge, as does spavanje(sleep), which is also linked to medication. In contrast, strah (fear) and tuga (sadness) are far less robust, being limited to one domain. Conclusion: Terms commonly associated with trauma and mental health vary according to their communicative robustness amongst Bosnian refugee families. Clinical and preventive trauma and mental health interventions should consider using terms that contain more communicative robustness when talking with refugee families.

Friday, October 31

F06-04

culture

**Ethnocultural Variations in Immediate Posttraumatic Distress**

*Santos, Monica, Harborview Medical Center, University of Washington School of Medicine; Russo, Joan, PhD, Harborview Medical Center, University of Washington School of Medicine; Zatzick, Douglas, MD, Harborview Medical Center, University of Washington School of Medicine*

Purpose: Few investigations have assessed ethnocultural variations in immediate posttraumatic distress among acutely injured trauma survivors. Method: The investigation included a random sample of 269 acute care inpatients. Inpatients were screened for PTSD (PCL), dissociative (PDEQ), and depressive symptoms (CES-D). In order to accurately determine ethnocultural heritage, we compared trauma registry classifications, patient categorical self-reports, and patient open-ended descriptions of ethnocultural group identification. A coding scheme was developed that derived from US census procedures. Symptoms were then compared across groups. Results: The trauma registry misclassified 20% of patients. Recoding revealed that 59% (N=160) of patients were from White/European backgrounds while 41% (N=109) of patients were from Non-White (i.e., African American, Asian, Latin American/Hispanic, and American Indian) backgrounds. Non-White patients demonstrated statistically significant elevations in peritraumatic dissociative ( $t(257) = 3.7, p < 0.001$ ) and PTSD ( $t(262) = 3.1, p < 0.01$ ) symptoms. These significant differences persisted in linear regression models that adjusted for relevant injury, demographic and clinical characteristics. Conclusions: Current procedures for documenting the heritages of diverse acute care inpatients are associated with substantial inaccuracies. Proper identification is important, as ethnocultural group status is independently associated with significant variations in early symptomatic responses to traumatic injury.

F07-01

practice

**Health and Health Care Utilization in Female Vets with Sexual Trauma**

*Himmelfarb, Naomi, PhD, Department of Veteran Affairs, West Los Angeles Healthcare Center; Yaeger, Deborah, MD, Department of Veteran Affairs, West Los Angeles Healthcare Center; Lu, Nghi, University of California, Los Angeles; Cammack, Allison, University of California, Los Angeles; Freer, Janya, MD, University of California, Los Angeles*

This study looks at health effects of military sexual trauma (MST) on female veterans. Previous research has shown that women veterans have high rates of MST, that women with sexual trauma are more prone to emotional and physical disorders, and that they seek more medical treatment. Our first objective was to determine the prevalence of MST and associated health problems. We anticipated that women with MST would have more post-traumatic stress disorder (PTSD), depression, and physical complaints than would non-traumatized women. Second, we wanted to understand the relationship between MST and health care utilization; we expected greater health care use by traumatized women. Our sample was 137 female veterans completing self-report questionnaires and structured interviews. Data for health care utilization were derived from medical records. We found that 40% of our sample had experienced MST and that women with MST had twice the incidence of PTSD and depression as non-traumatized subjects. We also found an increase in physical health problems related primarily to PTSD. As predicted, we found greater health care utilization by traumatized subjects. Depression made the greatest contribution to this increase; PTSD made a smaller contribution. There was no direct relationship between health care utilization and MST.

F07-02

practice

**War Trauma, SES, and Posttraumatic Stress Symptoms in Bosnian Youths**

*Isakson, Brian, Georgia State University; Jurkovic, Gregory, PhD, Georgia State University; Maltese, Kelly, Georgia State University*

Little research in the traumatology field has investigated the role of socioeconomic (SES) variables in children's development of post-traumatic stress symptomatology (PTS). The present study examined whether parental educational and occupational status moderated the relation of trauma exposure to PTS in Bosnian youths. Trauma exposure was expected to be more highly associated with PTS in youths living in low SES families than those in high SES families. It was assumed that families with more resources were better able to buffer the effects of children's war-related experiences. As part of a larger study of PTS in an elementary school in Sarajevo, 140 youths in grades 6-8 were administered a measure of PTS. One of their parents also completed a measure of their children's PTS, along with a demographic form evaluating, in part, their educational and occupational status, and the child and family's exposure to war-related trauma. Separate hierarchical regression analyses examining the relation of trauma exposure and SES to both the child and parent reports of PTS were conducted. In general, main effects for trauma exposure and SES were found; however, neither analysis yielded a significant interaction between the two. The implications of the findings for theory and practice are discussed.

F07-03

practice

**Intimate Partner Violence in Postpartum Women**

*Johnson, Dawn, PhD, Center for the Treatment and Study of Traumatic Stress, Summa Health System, St. Thomas Hospital; Zlotnick, Caron, PhD, Brown University; Kohn, Robert, MD, Brown University*

Intimate partner violence (IPV) is a significant social problem associated with severe emotional consequences in women. Using the National Survey of Families and Households (NSFH), the rates of IPV over a five-year period in married or cohabitating women less than 48 months postpartum (N = 606) relative to other women (N = 3489) were explored. Additionally, severity of depression symptoms was compared among those postpartum women with IPV to those without. Preliminary results indicate that 7.1% of postpartum women endorsed recent IPV, compared to 4.1% of other women. This difference between groups does not remain significant when controlling for age and SES. Postpartum women with IPV reported significantly more severe depression symptoms than those without, and these differences were maintained at a 5-year follow-up (N = 513). Women with no IPV at baseline were significantly more likely to remain in the relationship with the abuser than were those with IPV (81.8% vs. 42.9%). Of those women who remained with their partner over time, a larger proportion of those who initially reported IPV reported IPV five years later (33.3%) than did those who did not initially report IPV (4.2%). Clinical implications will be discussed.

F07-04

practice

**Maladaptive Cognitions and Eating Disturbances in Assault Victims**

*Mastnak, Julie, MA, Center for Trauma Recovery; Resick, Patricia, PhD, Center for Trauma Recovery*

Posttraumatic stress disorder (PTSD) and depression are among the possible sequelae to a sexual or physical assault. Clinical impressions suggest that eating disturbances may also be among the possible sequelae. It is widely accepted that maladaptive cognitions are important in maintaining PTSD, depression and eating disturbances. It is hypothesized here that women reporting eating disturbances will report more severe PTSD and depressive symptoms and more maladaptive cognitions than women without eating disturbances.

Friday, October 31

Standardized interviews and symptom questionnaires are administered to a treatment-seeking sample of female victims of sexual or physical assault as part of an ongoing study. Assessment measures for this presentation include the Health Questionnaire, Personal Beliefs and Reactions Scale, Clinician-Administered PTSD Scale and Beck Depression Inventory. The anticipated sample size for this presentation is 120 subjects. Descriptive analyses will be conducted to determine the frequency of disturbed eating among PTSD-positive female assault victims. ANOVAs will be conducted to examine differences in PTSD, depression and maladaptive cognitions between the groups of women with and without eating disturbances. A discussion of these analyses will be presented. Clinical implications and directions for future research will also be addressed.

F07-05

practice

### Childhood Abuse and Adult Sexual Risk in Women

*Stines, Lisa, MA, Kent State University; Hobfoll, Stevan, PhD, Kent State University*

Childhood sexual abuse has been linked with risky sexual behavior in adulthood for abuse survivors. However, the mechanisms for this association, and whether this applies to other traumatic experiences during childhood, are unclear. This investigation examined the relationship between childhood sexual abuse (CSA), childhood physical abuse (CPA), PTSD, adult revictimization, and sexual risk in adulthood. Risk was defined in two ways: behavioral risk (e.g. sexual intercourse without condoms) and relational risk (e.g. involvement in a romantic relationship with a man who has sex with other men). The following hypotheses were proposed: (1) CSA, but not CPA, will be associated with sexual risk (both behavioral and relational) in adulthood; (2) PTSD and adult revictimization will mediate the relationship between CSA and sexual risk. A community sample of young, high-risk inner city women were interviewed. Contrary to the first hypothesis, preliminary analyses revealed that both CSA and CPA are associated with sexual risk in adulthood. Results also indicate that PTSD and adult revictimization mediate the relationship between abuse experiences during childhood and adult sexual risk for women. These results suggest that a cycle of interpersonal loss and trauma may exacerbate sexual risk behaviors and relationships among female survivors of childhood abuse.

F07-06

practice

### Relationship Between PTSD and Self-Reported Health Problems

*Vora, Rajvee, MB, Eastern Michigan University; Lauterbach, Dean, PhD, Eastern Michigan University; Rakow, Madeline, Eastern Michigan University*

Recently there has been increasing awareness that PTSD impacts health outcomes. Elevations in health risk have been found in veterans who served in a combat zone, female victims of sexual assault, and crime victims. This paper utilized data from the National Comorbidity Survey (NCS) to better understand the extent and nature of this relationship. The NCS is a large (n=8,098) nationally representative population survey assessing the lifetime and 12 month prevalence of numerous DSM-III-R disorders. Persons with and those without PTSD were compared on the prevalence of self-reported symptoms of heart attacks, hypertension, Diabetes Mellitus, and several other health problems. It was consistently found that those with PTSD had a higher frequency of self-reported symptoms. Next, these two groups were compared on the availability of insurance coverage, and the availability of resources other than Medicaid and welfare. Persons with PTSD were less likely to have insurance coverage, and more likely to have medical expenses covered by Medicare/Medicaid. This, in combination with the finding that they have higher frequency of health problems is a potentially dangerous and overlooked combination. Additional data on the relationship between these variables will be presented.

F08-01

disaster

### Mental Health Service and Psychotropic Medication Use in New York One-Year After Terrorist Attacks

*Boscarino, Joseph, PhD, MPH, New York Academy of Medicine; Adams, Richard, PhD, New York Academy of Medicine*

Purpose: To assess mental health service use after the September 11 attacks in New York City. Methods: A random telephone community survey was conducted 1-year after the attacks among 2,368 adults. Findings: 16.5% of adults received some psychological counseling post-disaster and 11.5% took psychiatric medications. Furthermore, 7.3% read information provided by health care professionals, 2.5% used mental health information from the Internet, and 6.6% received mental counseling at work. Regardless of modality, however, 70% to 80% of adults reported that these services helped them "a lot" or "somewhat" with post-disaster emotional problems. Nevertheless, 16.4% increased alcohol use after the attacks and 3.7% consumed alcohol nearly every day in the past month. Among those who received treatment, 20% to 22% experienced a panic attack, PTSD, or major depression in the past year. The most common post-disaster psychiatric medications taken included antidepressants (20.6%), sleep medications (13.3%), and anti-anxiety drugs (8.8%). Finally, while 28.5% of participants thought some questions were stressful, 79.8% reported the survey would help service planning and only 0.2% (n=5) asked to speak to the study's counselor at survey completion. Conclusion: New Yorkers used a range of mental health services post-disaster and seemed to benefit regardless of modality of care.

F08-02

disaster

### Understanding Traumatic Grief and the Bereavement Process

*Flomenhaft, David, MSW, South Nassau Communities Hospital; Demaria, Thomas, PhD, South Nassau Communities Hospital; Barrett, Minna, PhD, South Nassau Communities Hospital; Comforto, Bobbie, MSW, South Nassau Communities Hospital*

The authors extensive experience with World Trade Center Survivors and their families provided a window to examine the impact of terrorism upon the bereavement process and how it and other factors induced traumatic grief. It was noted that this catastrophe was unimaginable in scope of physical and emotional destruction. Attackers targeted their destruction upon governmental and societal institutions not individuals. Victims were often young and defenseless; their remains were often not identifiable and severely fragmented. The rescue and recovery was prolonged. The media coverage was saturated and repetitive. The responsible parties and their motivations were often unclear. The government's role in preventing the attack and apprehending those responsible was questionable. The availability of trained mental health providers and their capacity to address violent death was limited. The loss of loved ones became public and funerals and anniversaries were publicly observed in great numbers. A celebrity of grief surrounded the mourners. These factors exacerbated the bereavement process and challenged the authors to research and develop alternative treatment approaches. Group therapy was the chosen method to address traumatic grief, which is the collision of grief and Post Traumatic symptoms. The group process also enhances the grief process and provides the necessary forum for universality of bereavement issues and group mourning, which helps address issues of alienation. The essential aspect of the deceased family member as container for the family tradition receives validation in the group process. The Post Traumatic Stress symptoms are recognized and addressed in the group. CBT and stress reduction techniques to address traumatic images, educate and reduce PTSD symptom are implemented, group members receive validation and support.

Friday, October 31

F08-03

disaster

**CATS Preliminary Data Report**

Hoagwood, Kimberly, PhD, Columbia University/NYSPI/New York State Office of Mental Health; Bickman, Len, PhD, Vanderbilt University; Murray, Laura, PhD, Columbia University/NYSPI; Rodriguez, James, PhD, Columbia University/NYSPI

The Child and Adolescent Treatment and Services Consortium (CATS) was designed to offer services and also measure a variety of variables. The project is currently under the data collection phase, and is the only intensive child-focused trauma program initiated after September 11th. This presentation will report on the number of youth presenting with clinical levels of distress or impairment due to trauma, the number of referrals made across various organizations, and the sites' ability to engage families in the project. A second goal of CATS included multi-site, community training on evidence-based trauma treatments for children and adolescents. The effectiveness of these treatments specific to a post-9/11 NYC population will be discussed based on a thorough mental health assessment and ongoing monitoring of symptomatology. Finally, a report will be given on the impact of organizational level variables on the delivery of evidence-based therapies, specifically looking at therapeutic alliance and adherence. This preliminary data will be presented with reference to current social psychological and organizational theories about the interplay between characteristics of work environments and clinical care.

F08-04

disaster

**Patterns of Stressor Exposure in 9/11 Disaster Relief Clinicians**

Knight, Jeffrey, PhD, National Center for PTSD, Boston DVAMC; Zimering Gulliver, Rose, PhD, Boston VA Health Care System Outpatient Clinic; Gulliver, Suzy, PhD, Boston VA Health Care System Outpatient Clinic; Munroe, James, EdD, Boston VA Health Care System Outpatient Clinic; Mattichio, Todd, Boston VA Health Care System Outpatient Clinic; Baker-Morrisette, Sandra, PhD, Boston VA Health Care System Outpatient Clinic; Wolfsdorf, Barbara, PhD, Boston VA Health Care System Outpatient Clinic

Patterns of exposure to potentially traumatic stressors were examined in a cohort of 95 disaster relief workers who provided critical incident debriefing services post-World Trade Center disaster (9-11-01). Disaster relief workers were firefighters and professionals associated with firefighting units (social workers, chaplains). Analyses were based on self-reports, via a Life Events Checklist, of past and recent exposure to classes of stressors including natural disasters, accidents, injury, combat, fire, captivity, interpersonal violence, death of others, and toxic exposures. Respondents reported on the type of stressor, whether it happened to self or others, and whether they heard about it, witnessed it, or directly experienced the event. Few direct experiences were reported, but direct toxic exposure was endorsed most frequently (65%). Witnessed and "learned about" events were more commonly experienced. Most frequent witnessed events included: severe human suffering (66%), and fire (58%); whereas the most frequently endorsed "learned about" events included: sudden violent death (60%), and motor vehicle accidents (55%). The pattern of less-frequent, direct exposure to stressors, in contrast to more frequent occurrences of witnessed events, might account for lower rates of PTSD in this cohort. The relationship of stress exposure to primary and secondary PTSD will be discussed.

F08-05

disaster

**Impact of 9/11 WTC Attacks on New York City Police Officers**

Marmar, Charles, MD, University of California, San Francisco and VA Medical Center San Francisco; Best, Suzanne, PhD, University of California, San Francisco and VA Medical Center San Francisco; Metzler, Thomas, University of California, San Francisco and VA Medical Center San Francisco; Gloria, Rebecca, University of Michigan, Ann Arbor; Killeen, Alyse, University of California, San Francisco and VA Medical Center San Francisco; Jackson, Tiffany, University of California, San Francisco and VA Medical Center San Francisco

Aim: To determine levels and risk factors for PTSD in police officers after a terrorist attack. Methods: Prospective cohort survey of 242 New York and 95 Bay Area police officers assessed before and after the events of 9/11. Female and minority officers were over recruited. Mean time interval from pre 9/11 baseline to post 9/11 follow-up was 3.7 years, range 1.0-4.7 Results: Prior to 9/11 3.5% of NYPD officers were estimated to have PTSD and 3.5% partial PTSD; this compares with 8.8% with PTSD and 15% with partial PTSD after 9/11. NYPD officers were found to have increases in anxiety (E.S.=.27, p<.001), depression (E.S.=.23, p<.001), sleep disturbances (E.S.=.51, p<.001), marital difficulties (E.S.=.32, p<.001). Changes in Bay Area Police were negligible. Hierarchical linear regression model predicting PTSD symptoms related to 9/11 exposure in NYPD officers revealed the following: the full model accounted for 61.4% of the variance of current PTSD symptoms with greater PTSD symptoms prior to 9/11, greater dissociation and terror during 9/11 exposure, and greater negative life events and lower social support post 9/11 being significant predictors. Discussion: Implications for training and treatment will be discussed.

F08-06

disaster

**Predictors of Stress Symptoms Six Months After September 11**

Murphy, Ronald, PhD, Dillard University; Wismar, Keith, PhD, Dillard University; Hankton, Umieca, Dillard University; Gibbs, Sean, Dillard University; Freeman, Kassie, PhD, Dillard University

A previous study found extensive stress reactions among African-American college students not directly exposed to the events of September 11 within three days of the attacks. The present study examined predictors of distress in a subgroup of the original sample (30.1%, n=66) six months after September 11. Participants completed a variety of self-report measures assessing distress related to September 11. Findings showed that even after 6 months, approximately 23%-36% of the participants gave the maximum rating of distress to each of 7 types of media reports (e.g., the planes crashing into the towers, people jumping from the towers). Hierarchical multiple regression analyses were used to examine possible predictors of PTSD symptom severity (PCL score) at six months. These predictors included gender, college year, number of lifetime trauma events, hardiness, PTSD symptom severity 3 days after Sept. 11, coping (e.g. talking to someone, turning to religion, and avoiding media coverage), and distress about the anthrax attacks. The results indicated that fear of anthrax and the subject's PCL score three days after Sept. 11 predicted PTSD symptom severity at six months. Implications for interventions addressing distress among college-age distant witnesses in this time of terrorist threat are discussed.

Friday, October 31

F08-07

disaster

**Challenges of Balancing Services and Research in a Post-9/11 Project**

*Murray, Laura, PhD, Columbia University/New York State Psychiatric Institute; Hoagwood, Kimberly, PhD, Columbia University/NYSPI/New York State Office of Mental Health; Rodriguez, James, PhD, Columbia University/NYSPI*

The Child and Adolescent Trauma Treatment and Services Consortium (CATS) is a SAMSHA-funded child trauma treatment project, designed to implement evidence-based trauma therapies for children and adolescents affected by 9/11. This project has included multi-site collaboration, intensive training in evidence-based treatments, and evaluation of diverse variables including treatment effectiveness and clinician procedures and attitudes. CATS has experienced many of the typical obstacles inherent in post-disaster integration work, as well as some unique challenges due to its hybrid design with both service and research goals. Challenges such as the need to respond rapidly, the development sound data collection procedures, and implementing evidence-based treatments into community settings while balancing concerns about flexibility and fidelity will be discussed. This presentation will also incorporate issues of mobilizing city-wide outreach and working in collaboration with other ongoing and newly developed trauma programs within NYC. These challenges will be discussed in terms of overall, post-disaster community integration work, lessons learned from NYC, and ways these lessons could help ameliorate these obstacles in future situations.

F08-08

disaster

**Neuroendocrine Stress Response in Police Officers**

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Posttraumatic stress disorder is characterized by increased catecholaminergic reactivity to trauma reminders and low resting cortisol levels with an enhanced negative feedback inhibition of the hypothalamic-pituitary-adrenal axis. Since cortisol has a counter-regulatory effect on sympathoadrenal responses, pre-existing low cortisol levels might be associated with increased catecholaminergic reactivity in PTSD because of potentially less counter-regulatory control over sympathoadrenal activity. As part of an ongoing prospective study of traumatic stress in police officers, 80 police academy recruits were exposed to a 20 minute critical incident video depicting incidents in which real-life officers were either injured, under threat of serious injury, or exposed to highly stressful situations. Salivary cortisol and 3-methoxy-4-hydroxyphenylethylene glycol (MHPG, a metabolite of norepinephrine) were collected 10 minutes prior to the video (baseline), immediately following the video and 20 minutes after the end of the video. Data will be presented on the interrelationship between the cortisol and catecholamine response. It is predicted that lower cortisol response will be associated with a higher increase of catecholamines during the video. The implications of the findings will be discussed.

F08-09

disaster

**Fear-Potentiated Startle and Peritraumatic Dissociation in Police**

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Several studies have reported that individuals with posttraumatic stress disorder (PTSD) exhibit elevated fear-potentiated startle responses. It is unknown, however, whether exaggerated startle is a vulnerability factor for the development of PTSD. We studied 80 police academy trainees without PTSD and without police-related trauma exposure in a two-part laboratory experiment involving: (a) exposure to fear-potentiated startling sounds while eyeblink electromyogram (EMG), skin conductance (SC), and heart rate (HR) responses were recorded and (b) viewing a video of actual law enforcement officers being killed or seriously injured in the line of duty followed by a modified version of the Peritraumatic Dissociative Experiences Questionnaire (PDEQ). We hypothesized that greater fear-potentiated startle would be associated with greater "peritraumatic" dissociation during the video. Though most trainees did not show fear-potentiated increases in HR during the startle paradigm, those who did reported significantly greater "peritraumatic" dissociation during the video. If the responses to the video serve as an analog of how the trainee will respond to actual police-related trauma then the findings suggest that large fear-potentiated HR responses may identify individuals who are likely to dissociate during traumatic stress, which is the best known predictor of developing PTSD.

F08-10

disaster

**CATS: Child and Adolescent Trauma Treatment and Services Consortium**

*Rodriguez, James, PhD, Columbia University/New York State Psychiatric Institute; Hoagwood, Kimberly, PhD, Columbia University/NYSPI/New York State Office of Mental Health; Murray, Laura, PhD, Columbia University/New York State Psychiatric Institute*

This presentation will provide an overview of a study by the Child and Adolescent Trauma Treatment and Services consortium. The consortium is comprised of six community-academic partnerships in the New York City area, working in partnership with the New York State Office of Mental Health to evaluate outcomes associated with delivery of evidence-based treatments for children and youth with mental health symptomatology resulting from the 9/11 terrorist attack. The presentation will cover three areas. First, we will review the goals and the design of the study, including both treatment outcome and service delivery components. The naturalistic research design is intended to evaluate the relative effectiveness of evidence-based treatments across sites, and examine factors that promote and impede implementation of evidence-based treatments at the clinical and organizational levels. Second, we will highlight some benefits and obstacles of conducting a multi-site collaborative research project in a post-disaster environment. These factors include the diverse settings in which services are delivered. Lastly, we will discuss some of the ethical and methodological dilemmas in the field of trauma research, including those associated with the tension around efficacy and effectiveness research.

Friday, October 31

F08-11

disaster

Reactions of 9/11 in 2001 and 2002

*Rowell, Dianna, University at Albany, State University of New York; Gusmano, Rebecca, University at Albany, State University of New York; Kuhn, Eric, MA, University at Albany, State University of New York; Blanchard, Edward, PhD, University at Albany, State University of New York*

To examine the long-term effects of September 11, 2001 (9/11), the present investigation compared traumatic reactions of 507 university students in Albany, NY, surveyed six to ten weeks after the attacks, to those of 491 students at the same location, surveyed approximately one year later. The 2001 sample completed a survey prepared for this study with questions regarding exposure to 9/11, participation in reparative acts, and proximity and connection to New York. The 2002 sample completed a revised survey including additional questions about exposure to anniversary coverage. Both samples completed the Life Events Checklist (LEC) to assess for past trauma, and the PTSD Checklist (PCL) and the Beck Depression Inventory (BDI) to assess for PTSD and depression symptoms, respectively. Interestingly, the two samples did not significantly differ on PTSD symptom severity, or percent of cases with probable PTSD or relatively high levels of depression. However, the 2002 sample reported fewer current depression symptoms than the 2001 sample, on average. Participant variables and potential explanations and implications of these results are discussed. Most notably, the results would suggest that terrorism of the magnitude of 9/11 may create long-term psychological effects for a considerable portion of the population.

F08-12

disaster

In the Wake of 9/11: Emotional Distress in Emergency Service Workers

*Sherry, Patrick, PhD, University of Denver; Philbrick, Karen, PhD, University of Denver*

How did responding to the mass destruction caused by the terrorist attack on the World Trade Center affect reported symptoms of Emotional Distress in NYC firefighters? The purpose of this study was to determine how degree of individual exposure to a traumatic event, and the Social Support and Coping strategies one received or utilized, affected the occurrence of Emotional Distress following exposure to the aftermath of the WTC terrorist attack. Structural equation modeling was used to test a model, which posited the occurrence of Emotional Distress as a direct effect of the extent to which an individual had been exposed to a traumatic event and as an indirect effect of Degree of Exposure as mediated by Social Support and Coping. While the proposed model did not fit the data, the results of a revised model did indicate that Degree of Exposure to trauma is a significant predictor of Emotional Distress. Similarly, the results did provide some evidence that the use of Coping strategies (problem-focused and emotion-focused) mediate Emotional Distress when degree of individual exposure to trauma is great. Social Support however, was not found to mediate the development of Emotional Distress when Degree of Exposure to trauma was extensive.

F09-01

train

The Impact of Child Trauma Therapy Training on Participants

*Greenwald, Ricky, PsyD, Child Trauma Institute; Stamm, B. Hudnall, PhD, Institute of Rural Health and Department of Psychology, Idaho State University; Larsen, Debra, PhD, Institute of Rural Health and Department of Psychology, Idaho State University; Davis-Griffel, Kelly, Institute of Rural Health and Department of Psychology, Idaho State University*

Research on effective treatment for child trauma is considerably ahead of practice, and the interventions with the best empirical support have not been widely used in the field. Since dissemination is urgent, child trauma treatment training programs are proliferating, but data is rarely reported on the impact of such training, either on participants or on their clients. Such data, if gathered and reported, could help to identify promising/effective training methods. This paper reports on the impact of the 5-day "Child Trauma Institute" training program for school-based mental health professionals in NYC following 9/11. Seventy-one participants completed an early version of the Compassion Satisfaction and Fatigue screening form, as well as a form assessing their child trauma treatment attitudes and practices, at the beginning and again at the end of the training. The training appeared to have a significant positive impact on participants' Compassion Satisfaction, with non-significant trends towards reductions in Compassion Fatigue and Burnout. The training also appeared to produce significant gains (with large effect sizes) on many of the competency items. These findings provide preliminary support for the value of this training program.

F09-02

train

Minimising Harm Through Communication Skills Training

*Young, Kathryn, PhD, University of Liverpool; Ford, Fiona, MBChBHB, University of Liverpool; Nancarrow, Roberta, MA, University of Liverpool; Peters, Sarah, PhD, University of Liverpool; Kaney, Susan, PhD, University of Liverpool*

Many studies point to the role of healthcare professionals in exacerbating survivors' reactions post incident. Early, evidence-based interventions have been advocated, one of which is debriefing. However, an ongoing systematic review consistently finds no evidence of the effectiveness of debriefing, rather its potential for harm. A further review of psychological debriefing concluded that interventions tailored to the experience of the individual were likely to be more effective. From this came a call for the correct training for practitioners required to intervene in times of crisis. As healthcare professionals are first-line workers in managing the mental as well as physical well-being of survivors, it follows that they should receive appropriate training. This poster illustrates how we, at Liverpool, are fulfilling this requirement. The theoretical framework informing our Communication Skills Training is set out followed by a demonstration of how key learning objectives, thus derived, are achieved and integrated with medical curricula. The poster concludes with how we evaluate and develop our training to meet the goal of minimising harm and thereby improving the health-related quality of life of patients and professional alike.

Friday, October 31

F10-01

frag

**Sexual Abuse, PTSD and Serious Mental Illness in Women: A Pilot Study***Bonugli, Rebecca, MSN, The University of Texas Health Science Center at San Antonio*

Research findings confirm the increased prevalence of sexual victimization in women with severe mental illness (SMI). Over time, untreated PTSD can lead to a myriad of serious symptoms impacting overall functioning and quality of life. Because symptoms of SMI and PTSD overlap, PTSD often goes as an unrecognized entity. The problem of misdiagnosis is compounded by clinicians who are often uncomfortable in discussing issues of sexual abuse with females experiencing SMI. Thus, the attribution of the debilitating symptoms to the more prominent psychological disorders leads to incomplete treatment. The specific aims of this pilot study were to examine symptom presentations in women with SMI indicative of PTSD. Using mixed methodology, 20 participants were interviewed. Several established diagnostic tools and field notes were analyzed producing both qualitative and quantitative data. Feasibility issues were examined. Findings indicate a high prevalence of undiagnosed PTSD in women with SMI and histories of sexual abuse. The participants demonstrated a willingness to verbalize the abuse events and indicated this was helpful in the healing process. Implications for practice include the need to address abuse histories and assess for PTSD in women with SMI. Specific treatment programs addressing needs women with SMI and PTSD must be developed.

F10-02

frag

**Spiritual Correlates of Long-Term Adjustment to Combat-Related Trauma***Nelson-Pechota, Margaret, Illinois Institute of Technology; Mitchell, M. Ellen, PhD, Illinois Institute of Technology*

Guilt, spiritual isolation, and loss of meaning have been identified as factors contributing to psychological distress in many Vietnam veterans. Spiritual issues have not been rigorously investigated with combat veterans although there is some support for the efficacy of prayer, meditation, forgiveness, and religious coping in improving health for individuals coping with a variety of adverse conditions. A predictor model is being used to investigate the relationships among combat exposure, guilt, religiousness/spirituality, and PTSD in Vietnam veterans. Spiritual variables of interest are Religious Practices, Spiritual Alienation and Collaborative Relationship with God (forms of religious coping), Forgiveness, Life Purpose, and Global Spirituality. 135 community veterans are being recruited nationwide, primarily through veterans' organizations. Packets of survey instruments were mailed to individual participants or recruiters and returned via postage-paid return envelopes. Preliminary results are based upon 95 individuals who responded during the first two months of data collection. Regression analyses suggest that some aspects of spirituality are significantly related to guilt and/or PTSD symptom severity. More specifically, higher scores on global spirituality, forgiveness, and/or life purpose are related to lower levels of guilt and/or PTSD symptomatology. Preliminary results also suggest that forgiveness mediates the relationship between guilt and PTSD symptom severity.

F10-03

frag

**Child Abuse Moderates Interpersonal Loss Effects on PTSD Among Women***Schumm, Jeremiah, MA, Kent State University; Hobfoll, Stevan, PhD, Kent State University; Jackson, Anita, PhD, Kent State University; Briggs-Phillips, Melissa, MA, Kent State University; Hobfoll, Ivonne, PhD, Kent State University*

Childhood abuse (CA) was hypothesized to sensitize women to interpersonal loss spirals in adulthood such that loss spirals would exacerbate posttraumatic stress disorder (PTSD), particularly for women with histories of CA. A community sample of women (N = 245) was recruited and followed prospectively. Change scores in interpersonal resource loss measures from time 1 to time 2 provided indices of interpersonal loss spirals. Childhood physical but not sexual abuse moderated the impact of prospective loss cycles on time 2 PTSD. Specifically, interpersonal loss spirals exacerbated time 2 PTSD for women reporting physical abuse but not for women without histories of physical abuse. Results suggest that interventions for women with histories of CA and PTSD should incorporate components aimed at halting interpersonal loss cycles and building and initiating supportive and nurturing relationships.