4. Substance Abuse, Posttraumatic Stress Disorder and Adolescents

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2004

Whalen, C. K., et al. (2004). Adolescents react to the events of September 11, 2001: Focused versus ambient impact. Journal of Abnormal Child Psychology. **Vol 32(1):** 1-11.

This study examined the perceived impact of the events of September 11, 2001, on adolescents distant from the disaster sites and compared these perceptions with changes in everyday moods. A survey of reactions to September 11 was completed 2-5 months after the events by 171 adolescents participating in a longitudinal study of stress and health. Electronic diary ratings of contemporaneous moods before and after the attacks were also compared. Many adolescents distant from the disaster sites reported changes in everyday activities and signs of distress along with some positive outcomes. Elevated levels of negative affect emerged when adolescents were asked directly about the event (focused impact), but no changes were detected in their ongoing, momentary mood reports before and after September 11 (ambient impact). Trait and electronic diary measures of anxiety independently predicted posttraumatic distress. Refined assessments are needed to evaluate the degree to which self-reported traumatic symptoms reflect significant clinical distress versus an attentional focus generated by the question-asking process. (PsycINFO Database Record (c) 2004 APA, all rights reserved)

2003

Abo, A. and G. Zalsman (2003). "Terrorism and the adolescent: a review." Int J Adolesc Med Health **15**(3): 201-6.

In recent years suicide bombings have became a part of life in Israel. Adolescents seem to be more vulnerable to the issues of life and death since they have to choose psychologically whether to live or die ("the fourth organizer"). The reaction to terrorism in this age group is unique. After September 11th, a great interest on the subject has arisen in the United States and some new data has been gathered. One of the important messages is that terrorism does not simply equal trauma. The aim of this article is to review current literature on emotional reaction, impact, and therapeutic strategies to terrorism in the adolescent population.

Cohen, J. A., A. P. Mannarino, et al. (2003). "Treating child abuse-related posttraumatic stress and comorbid substance abuse in adolescents." Child Abuse & Neglect **27**(12): 1345-1365.

Objective: Child abuse is a risk factor for developing Posttraumatic Stress Disorder (PTSD) and subsequent Substance Use Disorder (SUD). The purpose of this review is to summarize current knowledge about effective treatments for adolescent abuse-related PTSD, SUD, and the co-occurrence of these conditions. Method: The literature on empirical treatment studies for these conditions in adolescence was reviewed, summarized, and synthesized. Results: Randomized controlled studies of abuse-related PTSD and SUD in adolescents have supported the efficacy of cognitive behaviorally-based individual and family treatment components. Components overlap considerably in empirically supported treatments for each disorder. An integrated treatment approach is described for use in adolescents with abuse-related PTSD and SUD, with recommendations for optimizing services for this population and for future research.

Conclusions: The available evidence on effective treatments suggests that integrated PTSD- and SUD-focused cognitive-behavioral and family treatment for adolescents with comorbid abuse-related PTSD and SUD may optimize outcomes for this population.

Fronczak, E. (2003). Posttraumatic stress disorder in high risk urban youth. Dissertation Abstracts International: Section B: The Sciences & Engineering. **Vol 64(3-B):** 1488.

Urban adolescents, especially those who have experienced homelessness, may be particularly vulnerable to developing symptoms of Post-Traumatic Stress Disorder (PTSD) due to the prevalence and severity of stressors they experience. The purposes of this study were to examine the prevalence rates of PTSD within a sample of homeless and matched housed adolescents from a major metropolitan area, to identify whether several social and environmental factors were associated with increased PTSD symptomatology, to identify whether PTSD symptomatology in these youth was associated with negative outcomes of Psychological Distress and Alcohol and Drug Use and Abuse symptoms over time, and to examine several potential buffering variables that may moderate the relationship between Community Violence Exposure and PTSD, as well as between PTSD symptomatology and the aforementioned negative outcomes at follow-up. High rates of diagnosable PTSD (23.7%) were found in this sample of urban youth. As predicted, homeless youth evidenced significantly more PTSD symptoms and reported greater severity of PTSD symptomatology. Higher community violence exposure was significantly associated with more severe PTSD symptomatology. PTSD symptomatology was associated with more psychological distress symptoms at the six-month follow-up. None of the variables tested were found to significantly moderate the relationship between community violence exposure and PTSD, nor between PTSD and subsequent Psychological Distress symptoms nor Alcohol and Drug use and Abuse symptoms at follow-up. These results suggest that urban and urban homeless youth are particularly at-risk for developing PTSD symptomatology and the associated negative outcome of subsequent increased psychological distress. (PsycINFO Database Record (c) 2004 APA, all rights reserved)

Giaconia, R. M., H. Z. Reinherz, et al. (2003). Comorbidity of substance use disorders and posttraumatic stress disorder in adolescents. Trauma and substance abuse: Causes, consequences, and treatment of comorbid disorders. P. Ouimette and P. J. Brown, Washington, DC, US: American Psychological Association**:** 227-242.

This chapter focuses on substance use disorder-posttraumatic stress disorder (SUD-PTSD) comorbidity research studies conducted with clinical and community samples of adolescents. The goals of this review are to: (a) evaluate the prevalence, patterns of onset, and impact of SUD-PTSD comorbidity on psychosocial functioning; (b) assess whether research with adolescents supports current explanations for the link between SUD and PTSD; (c) identify key areas in which additional research is needed; and (d) provide implications for the identification, assessment, and treatment of comorbid SUD-PTSD. (PsycINFO Database Record (c) 2002 APA, all rights reserved)

Kilpatrick, D. G., K. J. Ruggiero, et al. (2003). "Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: results from the National Survey of Adolescents."

J Consult Clin Psychol **71**(4): 692-700.

With a national household probability sample of 4,023 telephone-interviewed adolescents ages 12-17, this study provides prevalence, comorbidity, and risk-factor data for posttraumatic stress disorder (PTSD), major depressive episode (MDE), and substance abuse/dependence (SA/D). Roughly 16% of boys and 19% of girls met criteria for at least 1 diagnosis. Six-month PTSD prevalence was 3.7% for boys and 6.3% for girls, 6-month MDE prevalence was 7.4% for boys and 13.9% for girls, and 12-month SA/D prevalence was 8.2% for boys and 6.2% for girls. PTSD was more likely to be comorbid than were MDE and SA/D. Results generally support the hypothesis that exposure to interpersonal violence (i.e., physical assault, sexual assault, or witnessed violence) increases the risk of these disorders and of diagnostic comorbidity.

Lipschitz, D. S., A. M. Rasmusson, et al. (2003). "Posttraumatic stress disorder and substance use in inner-city adolescent girls." J Nerv Ment Dis **191**(11): 714-21.

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

Lubit, R., D. Rovine, et al. (2003). "Impact of trauma on children." Journal of Psychiatric Practice **Vol 9(2)**: 128-138.

Discusses the epidemiology of trauma in children, and then reviews the psychiatric and neurodevelopmental impact of trauma on children as well as the effects of trauma on children's emotional development. Trauma in children can lead to the development of posttraumatic stress disorder as well as to a variety of other psychiatric disorders, including depression, generalized anxiety disorder, panic attacks, borderline personality disorder, and substance abuse in adult survivors of trauma. Research has found that early exposure to stress and trauma causes physical effects on neurodevelopment which may lead to changes in the individual's long-term response to stress and vulnerability to psychiatric disorders. Exposure to trauma also affects children's ability to regulate, identify, and express emotions, and may have a negative effect on the individual's core identity and ability to relate to others. The authors also discuss what has been learned, based on recent experiences such as the World Trade Center catastrophe, about the role of television viewing in increasing the effects of traumatic events. Finally, guidance concerning the identification and clinical treatment of children and adolescents who are having emotional problems as a result of exposure to trauma is offered. (PsycINFO Database Record (c) 2003 APA, all rights reserved)

Newman, E. and D. Kaloupek (2003). Posttraumatic Stress Disorder Among Criminally Involved

Youth: Comment. Archives of General Psychiatry. **Vol 60(8):** 849.

Comments on the article by L. A. Teplin et al (see record 2002-11369-010) which made a methodologic advance by assembling a large sample of youth involved in the juvenile justice system to examine rates of psychiatric diagnosis. The current authors comment on the absence of information regarding PTSD in this study, and strongly recommend that PTSD be included in future studies of such type. (PsycINFO Database Record (c) 2003 APA, all rights reserved)

Reijneveld, S. A., M. R. Crone, et al. (2003). "The effect of a severe disaster on the mental health of adolescents: a controlled study." Lancet **362**(9385): 691-6.

BACKGROUND: Disasters greatly affect the mental health of children and adolescents, but quantification of such effects is difficult. Using prospective predisaster and postdisaster data for affected and control populations, we aimed to assess the effects of a severe disaster on the mental health and substance use of adolescents. METHODS: In January, 2001, a fire in a café in Volendam, Netherlands, wounded 250 adolescents and killed 14. In the 15 months before the disaster, all grade 2 students (aged 12-15 years) from a school in Volendam (of whom 31 were in the café during the fire), and from two other schools, had been selected as controls for a study. 124 Volendam students and 830 from the other two schools had provided data for substance use, and completed the youth self-report (YSR) questionnaire about behavioural and emotional problems. 5 months after the disaster, we obtained follow-up data from 91 (response rate 73.4%) Volendam adolescents and 643 (77.5%) controls from the other two schools. The primary outcome measures were changes in score in YSR categories of total problems, alcohol misuse, smoking, and substance use. We compared changes in scores between groups using logistic regression. FINDINGS: Volendam adolescents had larger increases in clinical scores than controls for total problems (odds ratio 1.82, 95% CI 1.01-3.29, p=0.045) and excessive use of alcohol (4.57, 2.73-7.64, p<0.0001), but not for smoking or use of marijuana, MDMA (ecstasy), and sedatives. Increases in YSR scores were largest for being anxious or depressed (2.85, 1.23-6.61), incoherent thinking (2.16, 1.09-4.30), and aggressive behaviour (3.30, 1.30-8.36). Intention-to-treat analyses showed significantly larger for increases in rates of excessive drinking and YSR symptom subscales in Volendam adolescents than controls. Effects were mostly similar in victims and their classmates. INTERPRETATION: Mental health interventions after disasters should address anxiety, depression, thought problems, aggression, and alcohol abuse of directly affected adolescents and their peer group.

Stevens, S. J., B. S. Murphy, et al. (2003). "Traumatic stress and gender differences in relationship to substance abuse, mental health, physical health, and HIV risk behavior in a sample of adolescents enrolled in drug treatment." Child Maltreat **8**(1): 46-57.

Research on traumatic stress (TS) among adolescent substance users is limited, with research indicating that not all adolescents who experience trauma are substance users and not all adolescent substance users report symptoms of TS. In the general adolescent population, research on TS symptoms indicates gender differences, with more females reporting traumatic life events and more symptoms associated with traumatic stress. A gap in research exists, however, with regard to gender differences among adolescent substance users who report low versus acute levels of TS symptoms. This study included 274 male and 104 female adolescents enrolled in four drug treatment programs in Arizona. Comparisons between males and females and those with low versus acute levels of TS symptoms were examined with regard to substance

use, mental health, physical health, and HIV risk-taking behavior. Results indicate significant differences between males and females and between those reporting low versus acute TS. In general, females and those with acute levels of TS symptoms had higher levels of substance use, mental health, and physical health problems as well as greater HIV risk behaviors when compared to males and those with low levels of TS symptoms. Results of this study indicate the need to assess adolescents for TS, including victimization and maltreatment histories, when entering substance abuse treatment and the need to simultaneously address issues of substance use, TS, and related mental health, physical health, and HIV sex risk behavior while in treatment.

Teplin, L. A., K. M. Abram, et al. (2003). Posttraumatic Stress Disorder Among Criminally Involved Youth: In reply. Archives of General Psychiatry. **Vol 60(8):** 849-850.

Replies to comments by E. Newman and D. Kaloupek (see record 2003-99940-013) on not including PTSD in the current authors' original study of youths in the juvenile justice system (see record 2002-11369-010). The instrument used in the original study did not include a module on PTSD initially. PTSD was excluded for three reasons: Lack of comparability, clarity and depth. (PsycINFO Database Record (c) 2003 APA, all rights reserved)

2002

Brown, E. J. (2002). "Mental health trauma response to the events of September 11th: challenges and lessons learned." Journal of Child and Adolescent Psychopharmacology **12**(2): 77-82.

(Editorial)

De Bellis, M. D. (2002). "Developmental traumatology: a contributory mechanism for alcohol and substance use disorders." Psychoneuroendocrinology **27**(1-2): 155-70.

Early childhood traumatic experiences, such as childhood maltreatment, are associated with an enhanced risk of adolescent and adult alcohol and substance use disorders (defined as DSM-IV alcohol or substance abuse or dependence). Maltreated children and adolescents manifest dysregulation of major biological stress response systems including adverse influences on brain development. Dysregulation of biological stress response systems may lead to an enhanced vulnerability for psychopathology, particularly posttraumatic stress disorder (PTSD) and depression. These negative affect disorders may put a child at increased risk for adolescent or young adult onset alcohol or substance use disorders. Thus, studies in developmental traumatology may prove to be critical in the effort to attempt to link the neurobiology of maltreatment-related PTSD with the neurobiology of alcohol and substance use disorders and in developing early strategies for the prevention of adolescent and adult alcohol and substance use disorders.

Leduc, K. L. (2002). Alexithymia, trauma, and posttraumatic stress disorder in incarcerated juvenile offenders. Dissertation Abstracts International: Section B: The Sciences & Engineering. **Vol 63(2-B):** 1036.

Alexithymia, which literally means 'no words for feelings' (Sifneos, 1973), is an emotional processing deficit that is believed to be caused by an inability to cognitively represent

affective states (Bagby, Parker, & Taylor, 1994). Alexithymia is believed to be caused by trauma (Krystal, 1978), and elevated rates of alexithymia have been found in various traumatized populations. It has also been clinically observed, but never formally assessed in juvenile offenders. This study aims to do so. The prevalence of alexithymia, trauma, posttraumatic stress disorder (PTSD), and substance abuse were assessed in 131 male and female adolescents incarcerated in Juvenile Hall. Demographic information, self-report criminological data, and estimated IQ scores were assessed for each respondent, and participants with an estimated IQ score, as measured by the Shipley Institute of Living Scale (Zachary, 1991), of less than 80 were omitted from the analyses. With this criterion, only 70 participants remained. Trauma and PTSD were assessed with the Posttraumatic Stress Diagnostic Scale (Foa, 1995), alexithymia was measured with a modified version of the 20-item Toronto Alexithymia Scale (Bagby et al., 1994), and substance abuse was assessed with the Personal Experience Screening Questionnaire (Winters, 1991). A total of 78% of the sample reported that they had experienced a trauma of sufficient severity to qualify for a DSM-IV PTSD diagnosis, and 67% reported that they had experienced more than one such trauma. The mean number of traumas per participant was 2.77 (SD = 2.22). A total of 27% of the sample met criteria for a diagnosis of PTSD. Of those respondents who had a history of trauma, 35% met criteria for PTSD. Participants diagnosed with PTSD reported that they had experienced a mean number of 4.83 (SD = 2.04) traumas, while those without the diagnosis reported that they had experienced a mean number of 1.98 (SD = 1.72) traumas. This was a significant group difference ($p < .001$). A total of 74% of the sample were assessed as likely having a substance abuse disorder, and 46% of the respondents were found to be alexithymic. The mean alexithymia score for the sample was significantly higher than that found in community samples (Parker, Taylor, & Bagby, 1989) but was no different than that found in psychiatric samples (Schmidt, Jiwany, & Treasure, 1993). Contrary to expectation, participants with a trauma history were not more alexithymic than were those without such a history. However, respondents diagnosed with PTSD were more alexithymic than were those not so diagnosed. Severity of PTSD was also correlated with degree of alexithymia. In a multiple regression analysis of factors associated with alexithymia, PTSD severity and severity of drug or alcohol abuse served as predictor variables, whereas number of previous traumas and demographic variables did not. Theoretical, practical, and treatment implications of the study are discussed. (PsycINFO Database Record (c) 2002 APA, all rights reserved)

Schonfeld, D. J. (2002). "Supporting adolescents in times of national crisis: Potential roles for adolescent health care providers." Journal of Adolescent Health **Vol 30(5)**: 302-307.

Discusses adolescents' reactions to the terrorist attacks of September 11th, and possible counseling strategies. Manmade disasters, especially when there is an underlying human intent to cause harm, often result in more psychological distress than do natural disasters. Potential symptoms of adjustment reactions may include sleep problems, anxiety and trauma-related fears, separation anxiety, school avoidance, difficulties in concentration, sadness, depression, avoidance of previously enjoyed activities, regression, somatization, onset of or increase in substance abuse, and posttraumatic stress disorder (PTSD) symptoms. Adolescents may attempt to withhold complaints of symptoms because of concerns that they are abnormal. Adolescents should be advised to consider limiting the amount of television viewing, especially those most affected. (PsycINFO Database Record (c) 2002 APA, all rights reserved)

2001

Fehon, D. C., C. M. Grilo, et al. (2001). "Correlates of community violence exposure in hospitalized adolescents." Compr Psychiatry **42**(4): 283-90.

To examine psychological and behavioral correlates of community violence exposure in psychiatrically hospitalized adolescents, 89 inpatients were administered a battery of psychometrically well-established self-report instruments. Violence exposure was assessed using the Child's Exposure to Violence Checklist (CEVC). Half of the patients reported exposure to multiple incidents violence in their community (52%) and home (53%). Sixty-one percent were victims of physical assault, and 39% were victims of sexual assault. Patients who had witnessed community violence reported significantly more post-traumatic stress disorder (PTSD) symptoms, drug use, and violence potential than patients without a history of witnessing community violence. Patients exposed to community violence were also more likely to be the victim of childhood maltreatment, as well as a perpetrator of violence. In conclusion, traumatization via exposure to community violence may serve as one important determinant in the development of mixed internalizing and externalizing psychopathology in adolescent inpatients, thus necessitating accurate assessment and treatment planning.