Trauma Exposure and Posttraumatic Stress Disorder in a National Sample of Adolescents

Katie A. McLaughlin, Ph.D., Karestan C. Koenen, Ph.D., Eric D. Hill, M.S.P.H., Maria Petukhova, Ph.D., Nancy A. Sampson, B.A., Alan M. Zaslavsky, Ph.D., Ronald C. Kessler, Ph.D.

Objective: Although exposure to potentially traumatic experiences (PTEs) is common among youths in the United States, information on posttraumatic stress disorder (PTSD) risk associated with PTEs is limited. We estimate lifetime prevalence of exposure to PTEs and PTSD, PTE-specific risk of PTSD, and associations of sociodemographics and temporally prior *DSM-IV* disorders with PTE exposure, PTSD given exposure, and PTSD recovery among U.S. adolescents. **Method:** Data were drawn from 6,483 adolescent–parent pairs in the National Comorbidity Survey Replication Adolescent Supplement (NCS-A), a national survey of adolescents aged 13 through 17 years. Lifetime exposure to interpersonal violence, accidents/injuries, network/witnessing, and other PTEs was assessed along with *DSM-IV* PTSD and other distress, fear, behavior, and substance disorders. **Results:** A majority (61.8%) of adolescents experienced a lifetime PTE. Lifetime prevalence of *DSM-IV* PTSD was 4.7% and was significantly higher among females (7.3%) than among males (2.2%). Exposure to PTEs, particularly interpersonal violence, was highest among adolescents not living with both biological parents and with pre-existing behavior disorders. Conditional probability of PTSD was highest for PTEs involving interpersonal violence. Predictors of PTSD among PTE-exposed adolescents included female gender, prior PTE exposure, and pre-existing fear and distress disorders. One-third (33.0%) of adolescents with lifetime PTSD continued to meet criteria within 30 days of interview. Poverty, U.S. nativity, bipolar disorder, and PTE exposure occurring after the focal trauma predicted nonrecovery. **Conclusions:** Interventions designed to prevent PTSD in PTE-exposed youths should be targeted at victims of interpersonal violence with pre-existing fear and distress disorders, whereas interventions designed to reduce PTSD chronicity should attempt to prevent secondary PTE exposure. J. Am. Acad. Child Adolesc. Psychiatry, 2013;52(8):815–830. **Key Words:** posttraumatic stress disorder (PTSD), trauma, violence

Epidemiological data show that adolescence is the developmental period of highest risk of exposure to many types of potentially traumatic events (PTEs), including interpersonal violence, accidents, injuries, and numerous traumatic network events (i.e., PTEs occurring to loved ones).[1-3] Public health efforts to prevent potential adolescent traumatic event exposure require accurate risk factor data. National surveys have examined sociodemographic variation in exposure to child–adolescent PTEs involving interpersonal violence,[2,4] and basic correlates of other child–adolescent PTEs have been reported in community studies.[5-8] These studies indicate that PTE exposure varies by basic sociodemographics (e.g., age, sex, race/ethnicity, socioeconomic status),[2,4,7-9] although most studies have examined a relatively narrow range of both risk factors and PTEs. Recent evidence from 2 cohort studies suggests that externalizing, but not internalizing, psychopathology also predicts child–adolescent PTE exposure, particularly interpersonal violence,[10,11] although neither study was based on a broadly representative sample.

Posttraumatic stress disorder (PTSD) can develop after PTE exposure.[12] PTSD is associated

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Supplemental material cited in this article is available online.

with substantial role impairment and heightened risk of secondary mental and physical disorders.[13,14] Although numerous studies have examined youth PTSD in relation to specific types of PTEs, no data are available on the associations of a full range of sociodemographic factors, PTE characteristics, and prior psychopathology with PTSD risk in a national sample of youths in the United States. It is consequently unknown whether PTSD prevalence, distribution, and vulnerability factors follow the same population patterns among youths as among adults. Although useful data on PTSD risk factors exist in focused studies of youths exposed to specific types of PTEs, such as natural disaster,[15] terrorism,[16] and war,[17] methodological differences across studies make comparisons across different types of PTEs difficult. Community studies have produced mixed findings regarding risk factors for PTSD in youths, with both sociodemographics and pre-existing mental disorders only inconsistently associated with PTSD. For example, after controlling for PTEs, some studies find higher PTSD risk for females than for males[8,9] and others no gender difference.[6] Among youths exposed to PTEs, heightened PTSD risk has inconsistently been linked to prior externalizing[10] and internalizing[11] disorders.

Roughly 50% of cases of PTSD become chronic and persist for many years.[18,19] Much of the public health burden of PTSD is consequently associated with chronic cases, highlighting the importance of identifying predictors of chronic course. However, we are aware of only 1 population-based study examining patterns and predictors of PTSD persistence among youths.[19]

The current report uses data from the National Comorbidity Survey Replication Adolescent Supplement (NCS-A), a population-based sample of U.S. adolescents, to describe the epidemiology of PTE exposure and PTSD among youths, including prevalence and correlates of PTE exposure, variation in conditional probability of PTSD given PTE exposure, and PTSD recovery. The predictors considered here include type of PTE, sociodemographics, and temporally prior mental disorders.

METHOD

Sample

As described in more detail elsewhere,[20,21] the NCS-A was based on a national dual-frame household and school sample of adolescents aged 13 through 17 years. Face-to-face interviews were administered to adolescents, and self-administered questionnaires (SAQs) were given to 1 parent or guardian of each adolescent. Data were collected between February 2001 and January 2004. Written informed consent was obtained from parents before approaching adolescents. Written adolescent assent was then obtained before surveying either adolescents or parents. Both adolescents and parents were paid $50 for participation. Recruitment and consent procedures were approved by the Human Subjects Committees of Harvard Medical School and the University of Michigan.

The NCS-A household sample included adolescents recruited from households that participated in the National Comorbidity Survey Replication (NCS-R), a national household survey of adult mental disorders.[22] A total of 879 school-attending adolescents participated in the household survey, with a conditional (on adult NCS-R participation, which had a 72.6% response rate) response rate of 86.8%. An additional 9,244 adolescents were recruited from a representative sample of schools in NCS-R sample areas. The adolescent response rate in the school sample (conditional on school participation) was 82.6%. Although the proportion of initially selected schools that participated in the NCS-A was low (28.0%), replacement schools were carefully matched to the original schools. Comparison of household sample respondents from nonparticipating schools with school sample respondents from replacement schools found no evidence of bias in estimates of either prevalence or correlates of mental disorders.[20] The total NCS-A sample, combining household and school samples, included 10,123 adolescents.

The conditional (on adolescent response) response rate of the parent SAQ, which asked about developmental history and mental health of the participating adolescent, was 82.5% to 83.7% in the household–school samples. The 8,470 parents who completed SAQs included 6,483 who completed the long form (which took approximately 1 hour to complete) and 1,987 the short form (which took approximately half an hour to complete). An initial attempt was made to obtain a long-form SAQ from all participating parents. The short form was obtained, often by telephone, only when it was not possible to obtain the long-form SAQ.

The current report focuses on the 6,483 adolescent–parent pairs for whom data were available from both adolescent interviews and long-form SAQs. Cases were weighted for variation in within-household probability of selection in the household sample and then separately in the household and school samples, for differential nonresponse based on available data about non-respondents as well as for residual discrepancies between sample and population sociodemographic and geographic distributions. Sociodemographic information on the NCS-A sample is provided in Table S1, available online. The weighted household and school samples were merged, with sums of