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Posttraumatic Stress Disorder and Comorbidity in Detained Youth

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Abstract

Objective—To examine the prevalence of posttraumatic stress disorder (PTSD) and comorbid psychiatric disorders among juvenile detainees.

Methods—Participants were a stratified random sample of 898 youth (10–18 years of age) arrested and detained in Chicago.

Results—Among participants with PTSD, 93% had at least 1 comorbid psychiatric disorder compared with 64% without PTSD. Over half of participants with PTSD had 2 or more types of comorbid disorders (i.e., affective, anxiety, behavioral, and substance use disorders), and 11% had all 4 types of comorbid disorders. Among males, having any psychiatric diagnosis significantly increased the odds of having comorbid PTSD. Among females, alcohol use disorder and comorbid alcohol and drug use disorder significantly increased the odds of having PTSD. No significant difference in prevalence rates of PTSD was found between males and females with specific psychiatric disorders.

Conclusions—High rates of PTSD and comorbid disorders among detainees argue for improved screening in detention centers. Implications for services are discussed in light of the clinical challenges of treating persons with comorbid disorders.

Most youth in detention have 1 or more psychiatric disorders (1). Posttraumatic stress disorder (PTSD) is one of the more prevalent disorders in detention, affecting at least 1 in 10 youth (2–4). One of the more debilitating aspects of PTSD is its tendency to co-occur with other psychiatric disorders (5–7). In a community sample, Giaconia and colleagues (8) found that nearly four-fifths of those with lifetime PTSD also had one or more additional disorders. Studies of detained adolescent males in Russia (9) and detained adolescent females in Australia (10) found that *all* of the detainees with PTSD had at least 1 comorbid disorder.

It is unclear if PTSD increases the vulnerability to other disorders or if there are common genetic or environmental factors underlying the disorders (5,11). Researchers agree, however, that comorbid disorders have an adverse impact on the prognosis and treatment of individuals with PTSD. Youth with PTSD and comorbid disorders have significantly more behavioral and health problems and more impaired interpersonal relationships than those without comorbid disorders (5).

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Effective treatment planning for detained youth with PTSD requires epidemiologic data on patterns of prevalence and comorbidity. Yet, to our knowledge, no epidemiologic study of detainees in the US has examined PTSD and comorbid psychiatric disorders. In this paper, we administered standardized diagnostic measures to a large, stratified random sample of detained youth to: (a) compare the prevalence of psychiatric disorders among juvenile detainees with and without PTSD and (b) examine the prevalence of PTSD among youth with and without other psychiatric disorders.

METHODS

Participants and Sampling Procedures

Participants were part of the Northwestern Juvenile Project, a longitudinal study of 1829 youth (10–18 years of age) arrested and detained between 1995 and 1998 at the Cook County Juvenile Temporary Detention Center (CCJTDC) in Chicago. The random sample was stratified by sex, race/ethnicity (African American, non-Hispanic white, Hispanic), age (10–13 years of age or 14 years and older), and legal status (processed as a juvenile or as an adult) to obtain enough participants to examine key subgroups (e.g., females, Hispanics, and younger children).

Interviewers described the study to participants and obtained written informed assent (if participants were <18 years) or consent (if they were ≥18 years). The Northwestern University Institutional Review Board, the Centers for Disease Control and Prevention Institutional Review Board, and the US Office of Protection from Research Risks, who all approved the study, waived parental consent, consistent with federal regulations regarding research with minimal risk. We nevertheless tried to contact parents or guardians to provide them information and offer them an opportunity to decline participation. Despite repeated attempts to contact a parent or guardian, for 43.8% of the participants, none could be found. In lieu of parental consent, youth assent was overseen by an independent participant advocate representing the interests of the participants. Federal regulations allow for a participant advocate if parental consent is not feasible.

We began collecting data on PTSD 13 months after the larger study began because this was when the Diagnostic Interview Schedule for Children, version IV (DISC-IV) module was available for use. PTSD data were collected on 898 youth, 532 males (59%) and 366 females (41%); 490 (54.6%) were African American, 154 (17.1%) were non-Hispanic whites, 252 (28.1%) were Hispanic and 2 (0.2%) were “other.” Participants ranged in age from 10 to 18 years (mean age, 14.8 years; median, 15.0 years). Additional information on our methods is published elsewhere (1,2).

Measuring PTSD and Comorbid Disorders

Independent, Master's level clinical research interviewers administered the DISC-IV to assess past-year PTSD using *DSM-IV* criteria. The DISC 2.3, the most recent version available when the study began, was used to assess comorbid psychiatric disorders in the last 6 months based on *DSM-III-R* criteria. Our data are based on the youth's self-reported data because it was not feasible to interview caretakers. We chose the PTSD module of the DISC-IV because it is the most widely used diagnostic instrument for child and adolescent research (12); it is relatively brief, it can be administered by non-clinicians, and it is designed to assess youth who have and have not been traumatized.

The PTSD module assesses whether youth have ever experienced any of 8 traumatic experiences: (1) ever been in a situation where you thought you/someone close to you was going to be hurt very badly or die; (2) ever been attacked physically, or beaten badly; (3) ever been threatened with a weapon; (4) ever forced to do something sexual that you did not want

to do; (5) ever been in a bad accident, like a car accident; (6) ever in a fire, flood, tornado, earthquake, or other natural disaster where you thought you were going to die or be seriously injured; (7) other than on T.V./movies, ever seen/heard someone get hurt very badly or be killed; and (8) ever very upset by seeing a dead body/pictures of a dead body of someone you knew well. Participants then identify the event that was "the most difficult for you in your entire life." The DISC assesses PTSD diagnosis within the past year for this "worst" trauma. Because the diagnosis of PTSD by the DISC requires that the symptoms last at least one month, PTSD could not have been due to the stress of the current incarceration.

Because we stratified our sample by sex, race/ethnicity, age, and legal status, we weighted all prevalence estimates to reflect the population of the detention center. All reported inferential tests were corrected for design characteristics with Taylor series linearization using the survey estimation procedures of Stata SE statistical software, version 9.0. We conducted tests of prevalence rates between groups with logistic regression using an adjusted Wald F statistic.

RESULTS

Prevalence of comorbid psychiatric disorders among participants with and without PTSD

Among participants with PTSD, 93% had at least 1 comorbid psychiatric disorder compared with 64% without PTSD (odds ratio [OR], 7.3; 95% confidence interval [CI], 3.2–16.5; $p<.001$). Among participants with PTSD, 54% had 2 or more types of comorbid disorders (i.e., affective, anxiety, behavioral, and substance use disorders), and 11% had all 4 types of comorbid disorders.

Table 1 shows the prevalence (and ORs) of psychiatric disorders among participants with and without PTSD. Males with PTSD had significantly greater odds of having any comorbid psychiatric disorder and drug use disorder than males without PTSD. Both males and females with PTSD had significantly greater odds of having any substance use disorder, alcohol use disorder, and both alcohol and drug use disorders than those without PTSD. Having PTSD did not significantly increase the odds of having an affective, anxiety, or behavioral disorder for either males or females. The prevalence of any comorbid psychiatric disorder was significantly greater for males with PTSD than females with PTSD (OR, 3.4; 95% CI, 1.1–10.6; $p<.05$).

Prevalence of PTSD among youth with and without specific psychiatric disorders

Table 2 shows that among males, having any psychiatric diagnosis, including any affective, anxiety, behavioral or substance use disorder, significantly increased the odds of having comorbid PTSD compared to those with no other psychiatric disorder. Among females, only alcohol use disorder and comorbid alcohol and drug use disorders significantly increased the odds of having PTSD. No significant difference in prevalence rates of PTSD was found between males and females with specific psychiatric disorders.

DISCUSSION

Juvenile detainees with PTSD almost invariably have a comorbid disorder; over half have 2 or more types of comorbid disorders. The prevalence rate of drug use disorder — the most common comorbid disorder among youth with PTSD — is 2–3 times higher than rates of drug dependence found in a sample of high school seniors with PTSD (8). Rates of PTSD among detainees with substance use disorders are also similar to or higher than rates among youth with substance use disorders receiving psychiatric or substance use treatment (13,14).

Although comorbidity is a significant problem for both male and female detainees with PTSD, males were more likely to have comorbid disorders than females. Similar findings were reported among adults in the National Comorbidity Study (15); however, the opposite pattern

was reported in a sample of chemically dependent adolescents (13). This gender difference warrants further study.

Limitations

Our findings may pertain only to youth in urban detention centers with similar demographic composition. Because it was not feasible to interview caretakers, our data are subject to the reliability and validity of youths' self-report; however, youth and their caretakers provide comparable reports of youths' anxiety disorders (16). The DISC-IV — like most measures of PTSD — uses the single-worst trauma as the stem question; hence, we are unable to estimate the age at onset of PTSD. Finally, our rates might differ somewhat if we had been able to use *DSM-IV* instead of *DSM-III-R* criteria to measure comorbid disorders.

CONCLUSION

Our findings have implications for the treatment of PTSD among at-risk youth.

Improve detection of comorbid PTSD among detained youth

PTSD is often missed, even in psychiatric settings (17), because traumatic experiences are rarely included in standard screens or volunteered by patients (6). Screening should also determine the relative onset of disorders, which may indicate which disorder should be the primary target for treatment.

Consider the treatment ramifications of comorbid disorders

Even brief psychosocial and pharmacologic interventions for detainees with PTSD must address comorbid disorders, especially substance use disorders. Detoxification or withdrawal from substances can worsen the symptoms of PTSD (6). Exploration of traumatic experiences -- a common psychotherapeutic tool for treatment of PTSD -- may worsen symptoms of comorbid mood disorders or precipitate self-medication and relapse for those in recovery (6). Medication management requires special attention to abuse potential and drug interactions (7,18). Finally, the high-risk behaviors associated with certain psychiatric disorders, such as attention-deficit/hyperactivity disorder, mania, and substance use (13,19), may increase the likelihood of experiencing additional traumas.

Juvenile detainees typically remain in facilities for only 2 weeks before release (20). Hence, their mental health needs must be addressed by community psychiatry as well as correctional service systems. The treatments most likely to succeed will address past traumas and the diagnostic complications which often follow.

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REFERENCES

1. Teplin LA, Abram KM, McClelland GM, et al. Psychiatric disorders in youth in juvenile detention. Archives of General Psychiatry 2002;59:1133–1143. [PubMed: 12470130]
2. Abram KM, Teplin LA, Charles DR, et al. Posttraumatic stress disorder and trauma in youth in juvenile detention. Archives of General Psychiatry 2004;61:403–410. [PubMed: 15066899]
3. Cauffman E, Feldman S, Waterman J, et al. Posttraumatic stress disorder among female juvenile offenders. Journal of the American Academy of Child and Adolescent Psychiatry 1998;37:1209–1216. [PubMed: 9808933]
4. Steiner H, Garcia IG, Matthews Z. Posttraumatic stress disorder in incarcerated juvenile delinquents. Journal of the American Academy of Child & Adolescent Psychiatry 1997;36:357–365. [PubMed: 9055516]
5. Giaconia RM, Reinherz HZ, Hauf AC, et al. Comorbidity of substance use and post-traumatic stress disorders in a community sample of adolescents. American Journal of Orthopsychiatry 2000;70:253–262. [PubMed: 10826037]
6. Brady KT. Posttraumatic stress disorder and comorbidity: recognizing the many faces of PTSD. Journal of Clinical Psychiatry 1997;58:12–15. [PubMed: 9329446]
7. Jacobsen LK, Southwick SM, Kosten TR. Substance use disorders in patients with posttraumatic stress disorder: a review of the literature. American Journal of Psychiatry 2001;158:1184–1190. [PubMed: 11481147]
8. Giaconia RM, Reinherz HZ, Silverman AB, et al. Traumas and posttraumatic stress disorder in a community population of older adolescents. Journal of the American Academy of Child & Adolescent Psychiatry 1995;34:1369–1380. [PubMed: 7592275]
9. Ruchkin VV, Schwab-Stone M, Koposov R, et al. Violence exposure, posttraumatic stress, and personality in juvenile delinquents. Journal of the American Academy of Child & Adolescent Psychiatry 2002;41:322–329. [PubMed: 11886027]
10. Dixon A, Howie P, Starling J. Trauma exposure, posttraumatic stress, and psychiatric comorbidity in female juvenile offenders. Journal of the American Academy of Child & Adolescent Psychiatry 2005;44:798–806. [PubMed: 16034282]
11. Breslau N, Davis GC, Peterson EL, et al. A second look at comorbidity in victims of trauma: the posttraumatic stress disorder-major depression connection. Biological Psychiatry 2000;48:902–909. [PubMed: 11074228]
12. Shaffer, D.; Fisher, P.; Lucas, C. The Diagnostic Interview Schedule for Children (DISC). In: Hilsenroth, MJ.; Segal, DL., editors. Comprehensive Handbook of Psychological Assessment. Vol. Vol. 2. John Wiley & Sons; Hoboken, NJ: 2003.
13. Deykin EY, Buka SL. Prevalence and risk factors for posttraumatic stress disorder among chemically dependent adolescents. American Journal of Psychiatry 1997;154:752–757. [PubMed: 9167501]
14. Garland AF, Hough RL, McCabe KM, et al. Prevalence of psychiatric disorders in youths across five sectors of care. Journal of the American Academy of Child & Adolescent Psychiatry 2001;40:409–418. [PubMed: 11314566]
15. Kessler RC, Sonnega A, Bromet E, et al. Posttraumatic stress disorder in the National Comorbidity Survey. Archives of General Psychiatry 1995;52:1048–1060. [PubMed: 7492257]
16. Jensen PS, Rubio-Stipec M, Canino G, et al. Parent and child contributions to diagnosis of mental disorder: are both informants always necessary? Journal of the American Academy of Child and Adolescent Psychiatry 1999;38:1569–1579. [PubMed: 10596258]
17. Mueser KT, Goodman LB, Trumbetta SL, et al. Trauma and posttraumatic stress disorder in severe mental illness. Journal of Consulting and Clinical Psychology 1998;66:493–499. [PubMed: 9642887]
18. Arroyo, W. PTSD in children and adolescents in the juvenile justice system. In: Eth, S., editor. PTSD in Children and Adolescents. American Psychiatric Publishing Inc.; Washington DC: 2001.
19. Wozniak J, Crawford MH, Biederman J, et al. Antecedents and complications of trauma in boys with ADHD: findings from a longitudinal study. Journal of the American Academy of Child & Adolescent Psychiatry 1999;38:48–56. [PubMed: 9893416]
20. Teplin LA, Abram KM, McClelland GM, et al. Detecting mental disorder in juvenile detainees: who receives services. American Journal of Public Health 2005;95:1773–1780. [PubMed: 16186454]

Table 1

) of psychiatric disorders among juvenile detainees with PTSD and without PTSD, by gender[a]

	Males (n=531)								Females (n=360)								Test of gender differences in disorder among those with PTSD				
	PTSD (n=54)								No PTSD (n=307)			PTSD (n=53)									
r	N	%	Standard error	OR[b]	95% CI	F	df	p	N	%	Standard error	N	%	Standard error	OR[b]	95% CI	F	df	p	OR[c]	95% CI	F	df	p
44	94		9.0	3.4 – 23.7	20.1	1 , 515	0.00001	225	74	2.6	43	82	5.5	1.6	0.7 – 3.5	1.5	1 , 351	0.22	3.4	1.1– 10.6	4.3	1 , 852	0.04
0	-		-	-	-	-	-	4	1	0.6	0	-	-	-	-	-	-	-	-	-	-	-	-
11	17		1.0	0.3 – 4.0	0.001	1 , 518	0.97	74	24	2.5	13	24	5.9	1.0	0.5 – 1.9	0.006	1 , 355	0.94	0.6	0.2– 2.7	0.4	1 , 859	0.54
15	38		12.7	3.2	1.0 – 10.2	3.9	1 , 519	0.050	96	31	2.7	14	27	6.3	0.8	0.4 – 1.6	0.3	1 , 353	0.58	1.6	0.5– 5.6	0.6	1 , 858	0.42
26	43		12.6	1.4	0.5 – 3.9	0.3	1 , 521	0.58	140	44	2.8	25	46	6.9	1.1	0.6 – 2.0	0.06	1 , 355	0.81	0.9	0.3– 2.8	0.04	1 , 862	0.85
36	79		9.3	3.2	1.0 – 10.3	3.9	1 , 515	0.048	143	46	2.9	33	63	6.9	2.0	1.1 – 3.8	5.0	1 , 350	0.03	2.2	0.6– 7.6	1.5	1 , 851	0.22

	Males (n=531)								Females (n=360)														
	PTSD (n=54)								No PTSD (n=307)			PTSD (n=53)							Test of gender differences in disorder among those with PTSD				
r	N	%	Standard error	OR[b]	95% CI	F	df	p	N	%	Standard error	N	%	Standard error	OR[b]	95% CI	F	df	p	OR[c]	95% CI	F	df	p
	35	78		3.6	1.2 – 11.1	4.9	1 , 517	0.027	126	41	2.9	29	55	7.0	1.7	0.9 – 3.2	3.2	1 , 348	0.07	2.9	0.9– 9.8	3.1	1 , 851	0.08
	18	49		2.9	1.0 – 8.6	3.9	1 , 516	0.0489	77	24	2.4	22	42	7.0	2.2	1.2 – 4.2	6.5	1 , 349	0.01	1.3	0.4– 4.2	0.2	1 , 851	0.63
	17	48		3.7	1.2 – 11.0	5.4	1 , 511	0.021	60	19	2.2	18	35	6.8	2.2	1.2 – 4.3	5.8	1 , 341	0.02	1.7	0.5– 5.6	0.9	1 , 838	0.35

er. Each cell is weighted to reflect the population of the detention center. CI indicates confidence interval. OR indicates odds ratio. Posttraumatic Stress Disorder
ants because of missing data. Diagnostic information was not available for 1 female participant. One male and one female are excluded from this analysis because
All available data from the 891 remaining participants are used for each cell. Of these, 13 participants are missing any disorder, 6 participants are missing affective
isorder, 3 are missing ADHD behavioral disorder, 14 are missing any substance use disorder, drug use disorder, and alcohol use disorder, and 27 participants are

s those without PTSD. Statistically significant odds ratios > 1 indicate that persons who have PTSD are significantly more likely to have a specific disorder than

s females with PTSD. Statistically significant odds ratios > 1 indicate that males with PTSD are significantly more likely to have the disorder than females with

e episode, dysthymia, and manic episode; Anxiety Disorder includes panic, separation anxiety, overanxious, generalized anxiety, and obsessive-compulsive disorders;
positional defiant disorders; Substance Use Disorder includes alcohol and drug use disorders (abuse or dependence).

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Table 2

Prevalence and odds ratios (ORs) of posttraumatic stress disorder (PTSD) among juvenile detainees with specific mental health diagnoses, by gender[a]

	Males (n=531)								Females (n=360)								Test of gender differences in PTSD among those with disorder				
Disorder	N	Prevalence of PTSD %	Standard error	OR[b]	95% CI	F	df	p	N	Prevalence of PTSD %	Standard error	OR[b]	95% CI	F	df	p	OR[c]	95% CI	F	df	p
No Disorder (Males: n=157; Females: n=86)	5	2	0.8						9	11	3.4										
Any Disorder (Males: n=367; Females: n=268)	41	15	3.8	9.0	3.4 – 23.7	20.1	1 , 515	0.00001	43	16	2.3	1.6	0.7 – 3.5	1.5	1 , 351	0.22	1.0	0.5– 1.8	0.02	1 , 866	0.88
Psychosis (Males: n=7; Females: n=4)	1	-	-	-		-			0	-	-	-		-							
Affective Disorder[d] (Males: n=81; Females: n=87)	14	11	6.2	6.3	1.5 – 26.9	6.2	1 , 514	0.01	13	15	3.8	1.4	0.6 – 3.6	0.6	1 , 350	0.43	0.7	0.2– 2.9	0.19	1 , 859	0.66
Anxiety Disorder[d] (Males: n=93; Females n=110)	15	22	8.5	14.3	4.2 – 49.0	18.1	1 , 513	0.0000	14	13	3.2	1.2	0.5 – 3.1	0.2	1 , 347	0.63	2.0	0.6– 6.0	1.41	1 , 872	0.24
ADHD or Behavioral Disorder[d] (Males: n=232; Females: n=165)	26	13	4.6	7.4	2.4 – 22.5	12.3	1 , 514	0.0005	25	15	2.8	1.5	0.7 – 3.4	1.0	1 , 349	0.32	0.8	0.3– 2.1	0.16	1 , 876	0.69
Substance Use Disorder[d]	36	15	4.2	8.8	3.3 – 24.0	18.4	1 , 513	0.00002	33	19	3.0	2.0	0.9 – 4.4	2.8	1 , 349	0.09	0.8	0.4– 1.6	0.50	1 , 865	0.48

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	Males (n=531)								Females (n=360)								Test of gender differences in PTSD among those with disorder				
Disorder	**N**	**Prevalence of PTSD %**	**Standard error**	**OR[b]**	**95% CI**	**F**	**df**	**p**	**N**	**Prevalence of PTSD %**	**Standard error**	**OR[b]**	**95% CI**	**F**	**df**	**p**	**OR[c]**	**95% CI**	**F**	**df**	**p**
(Males: n=290; Females: n=176)																					
Drug Use Disorder (Males: n=261; Females: n=155)	31	16	4.4	9.5	3.5 – 26.0	19.3	1 , 514	0.00001	29	19	3.2	2.0	0.9 – 4.5	2.7	1 , 346	0.10	0.8	0.4– 1.8	0.26	1 , 865	0.61
Alcohol Use Disorder (Males: n=154; Females: n=99)	18	20	6.8	12.2	3.9 – 37.9	18.8	1 , 510	0.00002	22	22	4.3	2.4	1.0 – 5.7	4.3	1 , 345	0.04	0.9	0.3– 2.3	0.10	1 , 865	0.75
Both Alcohol and Drug Use Disorder (Males: n=125; Females: n=78)	17	23	7.8	14.3	4.5 – 45.4	20.4	1 , 509	0.00001	18	23	4.9	2.6	1.1 – 6.2	4.4	1 , 340	0.04	1.0	0.3– 2.7	0.006	1 , 841	0.94

[a] Participants may have more than one disorder. Each cell is weighted to reflect the population of the detention center. CI indicates confidence interval. OR indicates odds ratio. Posttraumatic Stress Disorder could not be determined for 4 female participants because of missing data. Diagnostic information was not available for 1 female participant. One male and one female are excluded from this analysis because they self-identified as "other" race/ethnicity. All available data from the 891 remaining participants are used for each cell. Of these, 13 participants are missing any disorder, 6 participants are missing affective disorder, 7 participants are missing anxiety disorder, 3 are missing ADHD or behavioral disorder, 14 are missing any substance use disorder, drug use disorder, and alcohol use disorder, and 27 participants are missing *both*

[b] Odds ratios contrast those with specific disorder versus those with no disorder. Statisticaly significant odds ratios > 1 indicate that persons who have PTSD are significantly more likely to have a specific disorder.

[c] Odds ratios contrast males with the specific disorder versus females with the specific diagnosis. Statistically significant odds ratios >1 indicate that males with the specific disorder are significantly more likely to have PTSD than females with the specific disorder.

[d] Affective Disorder includes major depressive episode, dysthymia, and manic episode; Anxiety Disorder includes panic, separation anxiety, overanxious, generalized anxiety, and obsessive-compulsive disorders; Behavioral Disorder includes attention-deficit/hyperactivity, conduct, and oppositional defiant disorders; Substance Use Disorder includes alcohol and drug use disorders (abuse or dependence).