



Virginia Youth Psychiatric Disorder, Sexual Abuse, and Substance Use Among Adolescent Inpatients

Violence Project



<http://youthviolence.edschool.virginia.edu>

Abstract

The following study explores the relationships between psychiatric disorders, sexual abuse and substance use among a sample of adolescent psychiatric inpatients. A retrospective medical chart review was conducted on three hundred and twenty patients. However, information relative to a number of discrete variables was frequently missing from the medical charts. Nonetheless, high frequencies of sexual abuse and substance use were found. The greatest risk factors for active substance use were: lifetime substance use, family history of mental illness and substance abuse, psychiatric discharge diagnosis, patient age at admission, and era of sexual abuse. Findings highlight the need for implementation of standardized protocols for the assessment and treatment of substance use and sexual abuse in adolescent inpatient settings.

Rationale

- Childhood sexual abuse and psychiatric disorders may be two significant precursors to use.
- Substance use is a common coping strategy adopted by many youth to help them adapt to early childhood trauma and/or alleviate psychiatric symptoms.
- Severity of childhood trauma affects psychiatric sequela and may lead to earlier initiation and greater frequency of substance use, poorer treatment compliance, and higher numbers of psychiatric hospitalizations.
- Accurate assessment and intervention with traumatized adolescents is imperative to reduce the risk of future substance use and further psychiatric dysfunction.

Study Questions

- Question 1:** Do psychiatric diagnoses correlate with age of initiation and frequency of substance use?
- Question 2:** Does a history of sexual abuse correlate with the age of initiation and frequency of substance use?
- Question 3:** Does a history of sexual abuse correlate with psychiatric diagnoses?
- Question 4:** Is there a relationship between substance use and psychiatric diagnoses within a sexually abused adolescent inpatient sample?

Methods

- A retrospective medical chart review was conducted on all patients from 12 to 17 years of age admitted to Hospital X* from July 1, 2003 to June 30, 2004 (157 males and 163 females).
- The exclusion criteria for the study included patients with:
 - * Moderate to Severe Mental Retardation
 - * Pervasive Developmental Disorders

Multiple inter-rater reliability checks and data collection procedures (i.e., consultation, staff collaboration, and a series of pilot testing) were instituted to insure accuracy in the chart review and data extraction processes.

- The 170 variables were grouped under six headings:
 - * Demographic Information
 - * Family History
 - * Substance Use History
 - * Psychiatric Disorder
 - * Objective Assessment Measures
 - * Sexual Abuse History

Results

Exploratory Findings

- Information for certain variables of interest was often "Not Documented" in patient medical charts. This finding suggests that specific data regarding substance use and sexual abuse histories was frequently overlooked.
- Results indicate that many clinicians either did not obtain the depth of necessary information or they were reluctant to document this information consistently.

Substance Use

- 79% of patients reported lifetime use and 52% used substances actively (e.g., once a week or more).
- The earliest mean age of first substance use was 11.4.
- The substances most actively used were tobacco (43.7%), marijuana (25.9%), and alcohol (17.2%).
- Sexually abused patients reported higher levels of lifetime and active marijuana use than nonabused patients.
- There was no significant relationship between sexual abuse history and the current level of patient substance use after controlling for primary psychiatric diagnoses.
- No significant relationships were found between sexual abuse history and categories of substance use (see Table 2).

Psychiatric Diagnosis

- Patients with primary disruptive behavior disorders initiated substances at younger ages than patients with other diagnoses.
- Patients with primary mood disorders were significantly more likely to be experimental substance users (see Table 1).
- No significant differences were found between patients' primary psychiatric diagnoses given upon discharge and their sexual abuse histories or the era of sexual abuse.

Sexual Abuse

- 119 patients (37.2%) reported a history of sexual abuse.
- The greatest frequency of abuse occurred at age 12 (M = 8.6).
- More patients with abuse histories were previously hospitalized (N = 84) than not (N = 35).
- Patients abused before age 12 were younger at the time of their hospitalization than those abused after age 12.
- Patients with sexual abuse histories were diagnosed with primary anxiety disorders at a significantly higher rate than nonabused patients.
- No significant differences were found between patients with a sexual abuse history and the earliest age of initiation or frequency of substance use.

Table 1 Patient Primary Psychiatric Diagnoses upon Discharge by Category of Substance Use

Variable	Non user (No LT* use) N = 96	Frequency Experimental user (<3x month) N = 57	Active user (1x wk or more) N = 167
Mood Disorder (N = 162)	40 (41.7%)	27 (47.4%)	95 (56.9%)
Adjustment Disorder (N = 46)	20 (20.8%)	7 (12.3%)	19 (11.4%)
DBD** (N = 56)	16 (16.7%)	13 (22.8%)	27 (16.2%)
Other Disorder (N = 26)	11 (11.5%)	3 (5.3%)	12 (7.2%)
Anxiety Disorder (N= 30)	9 (9.4%)	7 (12.3%)	14 (8.4%)

* LT = Lifetime Use refers to reporting use at least once in a patient's lifetime.
** DBD = Disruptive Behavior Disorder.
N = 320

Table 2 Sexually Abused Patient History by Current Level of Substance Use

Variable	Active User	Category of Use Experimental User	Non User
Tobacco	56 (47.1%)	3 (2.5%)	41 (34.5%)
Alcohol	22 (18.5%)	36 (30.3%)	35 (29.4%)
Marijuana	38 (31.9%)	23 (19.3%)	39 (32.8%)
Heroin	--	5 (4.2%)	109 (91.6%)
Opioids	--	4 (3.4%)	112 (94.1%)
Cocaine	6 (5.0%)	15 (12.6%)	93 (78.2%)
PCP	--	3 (2.5%)	113 (95.0%)
LSD	--	7 (5.9%)	110 (92.4%)
Inhalants	--	1 (0.8%)	111 (93.3%)
MDMA	--	10 (8.4%)	104 (87.4%)
OTC medications*	--	--	117 (98.3%)
Amphetamines	2 (1.7%)	1 (0.8%)	105 (88.2%)
Prescription meds	1 (0.8%)	4 (3.4%)	109 (91.6%)

Note. -- is indicated when no patients qualified for the category of use.
* OTC medication use refers to medications that were used for non-medical purposes.
N = 119

Prediction for Active Substance Use

- Four composite groups were found that represent the greatest risk factors for active substance use (see Table 3).

Table 3 Logistic Regression Predictors for Active Substance Use

Variable	b	SE	Wald	p	Odds Ratio	95% CI
Lifetime Drug Use						
Composite	4.87	0.56	76.09	.000	130.88	43.773 - 391.303
Tobacco	3.27	0.33	97.51	.000	26.23	13.714 - 50.162
Alcohol	-1.57	0.25	68.62	.000	11.43	6.423 - 20.345
Marijuana	2.60	0.28	85.04	.000	13.44	7.736 - 23.340
Cocaine	2.54	0.49	27.37	.000	12.65	4.888 - 32.731
PCP	2.36	1.05	5.10	.024	10.60	1.365 - 82.382
LSD	2.13	0.62	11.64	.001	8.37	2.469 - 28.366
Inhalants	2.71	1.04	6.79	.009	14.99	1.957 - 114.889
MDMA	2.76	0.74	13.93	.000	15.86	3.716 - 67.695
Amphetamines	2.17	0.62	12.22	.000	8.77	2.596 - 29.654
Prescription meds	1.39	0.51	7.36	.007	4.03	1.472 - 11.015

Table 3 cont. Logistic Regression Predictors for Active Substance Use

Variable	b	SE	Wald	p	Odds Ratio	95% CI
Family History						
Composite	0.77	0.25	9.73	.002	2.16	1.332 - 3.515
Sub. Abuse (SA)	0.74	0.33	5.07	.024	2.10	1.100 - 3.999
Mental Illness (MI)	0.68	0.33	4.44	.035	1.98	1.049 - 3.725
Biological Father SA	0.78	0.31	6.49	.011	2.19	1.198 - 3.989
Biological Father MI	0.82	0.36	5.21	.023	2.27	1.122 - 4.578

Discharge Diagnosis

Composite	-0.57	0.25	5.39	.020	0.57	0.348 - 0.915
Mood Disorder	0.53	0.23	5.45	.020	1.69	1.088 - 2.636
Primary Diagnosis	-0.17	0.08	5.28	.022	0.84	0.724 - 0.975
Secondary Diagnosis	-0.18	0.09	3.97	.046	0.84	0.705 - 0.997
Cluster Diagnosis	-0.06	0.02	6.94	.008	0.94	0.903 - 0.985

Individual History

Composite	1.00	0.31	10.36	.001	2.71	1.476 - 4.962
Age at Admission	0.46	0.08	33.71	.000	1.57	1.351 - 1.835
Era of Sexual Abuse	0.97	0.32	9.34	.002	2.65	1.417 - 4.940

Conclusion

- The frequent co-occurrence of psychiatric illness, sexual trauma, and substance use behaviors among adolescent inpatients supports the need for careful comprehensive diagnostic evaluations that better inform treatment planning.
- Identifying substance use and trauma histories for psychiatric inpatients critically affects diagnostic accuracy and appropriateness of treatment and discharge planning.
- Failure to detect underlying problems results in misdiagnosis, inappropriate treatment planning, overtreatment of psychiatric syndromes with medications, and neglect of appropriate interventions such as detoxification, substance abuse education, and survivor counseling.

* The hospital administration agreed to participate in the study; however, they requested that their identity remain confidential.