



Relationship Between Social Supports and Inpatient Mental Health Treatment of Adolescents

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BACKGROUND

- Each year, an increasing number of youth in the United States are admitted for inpatient mental health treatment of acute psychiatric, emotional and behavioral problems (Blader, 2011).
- Depression is the most common reason for inpatient mental health treatment among adolescents ages 12 to 17 (SAMHSA, 2012).
- Research has shown no clear relationship between sex/gender of youth and inpatient treatment—though adolescent females are more likely than adolescent males to obtain outpatient mental health treatment (Bickman et al., 1995; Bobier & Warwick, 2005; Kaltiala-Heino, 2010; Lapointe et al., 2010; Lyons et al., 1997; Pottick et al., 1995; SAMHSA, 2009).
- Age, sex/gender, and psychiatric diagnosis appear to have no statistically significant relationship to repeated inpatient stays among children and adolescents, while the presence of a learning disability/developmental delay, younger age of first hospital stay, medication non-compliance, childhood sexual abuse, and surrogate/foster care placement are strongly associated with repeated inpatient stays (Bickman et al., 1995; Bobier & Warwick, 2005; Brown et al., 2011; Gutterman, 1998; Lapointe et al., 2010; Romansky et al., 2003).
- Among inner-city youth identified as repeated users of inpatient treatment, Black/African American youth were hospitalized at significantly higher rates than Hispanic/Latino youth (Lapointe et al., 2010).
- Much of the research conducted thus far has relied upon “third-person” sources (e.g., treatment records; parent/guardian reports) rather than “first-person” reports by youth themselves.
- The potential power of social support as a risk/protective factor has rarely been examined in studies of adolescent inpatient treatment.

PURPOSE

- Contribute to the growing body of research into the factors associated with inpatient mental health treatment among adolescents.
- Assist social workers, teachers, and other professionals with identifying potential warnings signs or risk factors indicating that an adolescent in emotional crisis may require inpatient stabilization.

RESEARCH QUESTIONS

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- Is there a significant relationship between age, race/ethnicity, indicators of social support, and use of inpatient mental health treatment among adolescents ages 12 to 17?
- Is there a significant relationship between age, race/ethnicity, indicators of social support, and number of nights spent annually in inpatient mental health treatment among adolescents ages 12 to 17?

METHODOLOGY

RESEARCH DESIGN

- Analysis of a publicly available, de-identified secondary data set – the 2010 National Survey on Drug Use and Health (NSDUH), a nationally representative cross-sectional household survey conducted annually by the Substance Abuse and Mental Health Services Administration (SAMHSA)

POPULATION

- Non-institutionalized adolescents ages 12-17 residing in the United States ($N = 18,614$)

MEASUREMENTS

- Questionnaire covering topics of Demographics, Youth Experiences, and Youth Mental Health Treatment

VARIABLES

• Dependent Variables

- Stayed overnight or longer in a hospital for emotional problems not caused by alcohol or drugs within the past year (Yes; No)
- Number of nights spent in a hospital for treatment of emotional problems not caused by alcohol or drugs within the past year (0 nights; 1 night; 2 nights; 3-6 nights; 7-24 nights; 25+nights)

• Independent Variables

- Age (12; 13; 14; 15; 16; 17)
- Race/Ethnicity (White; Black/African American; Native American/Alaskan Native; Native Hawaiian/Other Pacific Islander; Asian; More than one race; Hispanic)
- Total Social Support
 - Computed variable comprised of:
 - Number of times youth moved in the past 5 years (0-1x; More than 1x)
 - Parents told youth they had done a good job in the past year (Seldom/Never; Always/Sometimes)
 - Parents told youth they were proud of things they had done (Seldom/Never; Always/Sometimes)
 - Number of times youth argued/had fight with parent in past year (9 or fewer; 10 or more)
 - Number of times youth had serious fight at school/work in past year (0; 1 or more)
 - Have someone to talk with about serious problems (No one; Someone)
 - Participated in youth activities (0-1 activity; 2+ activities)

ANALYSIS

- Logistic Regression (DV=Received inpatient mental health treatment in past year)
- Standard Multiple Regression (DV=Number of nights spent in inpatient treatment in past year)

RESULTS

LOGISTIC REGRESSION

- $\chi^2 (24, N = 17,492) = 203.89, p < .001$ – model was able to distinguish between respondents who reported receiving overnight inpatient psychiatric care from those who did not.
- The strongest predictor of receiving inpatient mental health treatment was race—specifically identifying as Non-Hispanic Black/African American, recording an odds ratio of 2.57.

STANDARD MULTIPLE REGRESSION

- Model was statistically significant— $F(3, 17468) = 54.35, p = .000$ — but explained only 0.9% of the variance in number of nights spent in the hospital.
- The standardized betas for total social support ($Beta = 0.10$), race/ethnicity ($Beta = 0.01$) and age ($Beta = 0.01$) show that total social support accounts for significantly more variance in frequency of hospitalization than race/ethnicity or age.

Variables in the Equation						
Step 1 ^a	TOTSUPPORT	B	S.E.	Wald	df	Sig.
	rPRGJOB2(1)	.448	.215	4.322	1	.038
	rPRPROUD2(1)	.584	.218	7.205	1	.007
	rARGUPAR(1)	.434	.168	6.714	1	0.10
	YOFIGHT2(1)	-.242	.170	2.016	1	1.56
	TALKPROB(1)	-.156	.224	.481	1	4.88
	YTHACT2(1)	.253	.181	1.957	1	1.62
	youthage	.061	.033	3.459	1	0.63
	NEWRA2			26.400	6	0.00
	NEWRA2(1)	.450	.144	9.817	1	0.02
	NEWRA2(2)	.943	.259	9.924	1	0.02
	NEWRA2(3)	.084	.722	.014	1	9.07
	NEWRA2(4)	-1.499	.714	4.411	1	0.36
	NEWRA2(5)	.333	.237	1.979	1	1.60
	NEWRA2(6)	-.087	.155	.316	1	.574
	Constant	2.600	.888	8.580	1	0.03

a. Variable(s) entered on step 1: TOTSUPPORT, rPRGJOB2, rPRPROUD2, rARGUPAR, YOFIGHT2, TALKPROB, YTHACT2, youthage, NEWRA2.

Logistic Regression Predicting Likelihood of Inpatient Treatment

Standard Multiple Regression Predicting Number of Nights of Inpatient Treatment

Coefficients ^a										
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		Collinearity Statistics
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	
1 (Constant)	.419	.031		13.294	.000	.350	.472			
2 TOTSUPPORT	-.029	.002	-.095	-12.588	.000	-.033	-.024	-.095	-.095	.987
3 only youth in sample	.002	.002	.009	1.167	.243	-.001	.005	0.169	.009	.994
4 RACEHISPANICITY RECODED (7 LEVELS)	-.001	.001	-.008	-1.105	.269	-.004	.001	.000	-.008	.992

a. Dependent Variable: # NIGHTS YTH STAYED IN HOSP FOR MH SRVC IN PY

LIMITATIONS

- Reliance upon secondary data
- Variables examined within the models did not include variables (e.g., diagnosis, high-risk behaviors, prior inpatient treatment) found to be closely related to inpatient treatment

DISCUSSION

- Recognizing indicators of serious emotional distress can aide social workers in assessing youth for potential inpatient stabilization.
- The influence of negative social functioning upon rates of inpatient treatment among adolescents will require further investigation.
- Social workers should be mindful of the disparities in inpatient mental health treatment among disadvantaged racial/ethnic groups and the structural inequalities that may exacerbate potentially life-threatening mental health symptoms among these groups.