



PSYCHOTROPIC MEDICATION UTILIZATION AT A GROUP HOME RESIDENTIAL CARE FACILITY

Gail L. Smith, B.S., Michael Handwerk, Ph.D., Ronald Thompson, Ph.D., Brigid K. Howard, M.A., M. Beth Chmelka, B.S., and Daniel Daly, Ph.D.
Girls and Boys Town, Boys Town, Nebraska



~ Introduction ~

Trends in utilization rates indicate an increase in the number of children and adolescents being prescribed psychotropic medication (Najjar et al., 2004). High psychotropic utilization rates for youth placed out-of-home are particularly concerning (Conner et al., 1998), and some evidence indicates that youth in group care may be more likely to be prescribed psychotropic medication than youth in foster care (Breland-Noble et al., 2004). Despite concerns, relatively few studies have examined psychotropic medication utilization in group-care residential placement. This study examined psychotropic medication usage for 706 adolescents admitted to a large residential facility over a four-year period.

~ Participants ~

- 706 youth who were admitted to the Girls and Boys Town Family Home Program for the first time between 2001 thru 2004
- 61.8% male, 38.2% female
- 55.1% Caucasian, 21.1% Afr Amer, 11% Hispanic, 12.6% Other
- Mean age at admission = 15.02
- Mean length-of-stay = 16.9 months
- 48 youth are still in residence

~ Procedures ~

Utilization of medication class was examined (See Table). Youth were counted as utilizing a medication if they took at least 1 medication in a particular class. Youth were divided into groups based on psychotropic medication usage at admission, during treatment, and departure. During treatment medication was determined based on whether a medication from a novel class was added while the youth was in the program (e.g., if a youth was admitted on a stimulant, and later prescribed an anti-depressant, this would have been counted as a medication added during treatment).

~ Psychotropic Medication Classes ~

Class	Examples
Anti-Anxiety	Buspar, Ativan, Xana, etc.
Anti-Depressant	Wellbutrin, Prozac, Zoloft, etc.
Anti-Psychotic	Olanzapine, Seroquel, Zyprexa, etc.,
Mood Stabilizer	Carbamazepine, Equetro, etc.
Stimulant	Adderall, Metadate ER, etc.

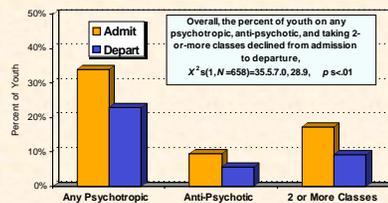
~ Youth Psychotropic Meds Grouping ~

Groups	At Adm	Class Added During	At Dep	% (n)
1	No	No	-	55.6% (366)
2	Yes	No	No	13.1% (86)
3	Yes	Yes	No	4.2% (28)
4	Yes	No	Yes	15.2% (100)
5	Yes	Yes	Yes	1.4% (9)
6	No	Yes	No	5.6% (37)
7	No	Yes	Yes	4.9% (32)

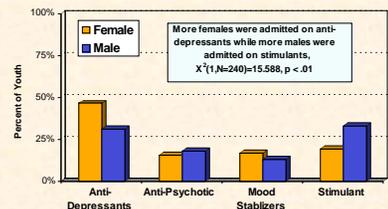
~ Results ~

- 33.9% were admitted on psychotropic medication; of these youth, 47.5% were discharged on psychotropic meds.
- Of youth not on psychotropic meds at admission, 14.8% were later put on psychotropics at some point during treatment.

Psychotropic Medication at Admission & Departure



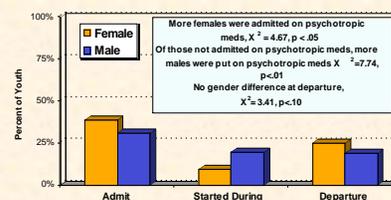
Medication by Gender at Admission



DISC Diagnoses at Admission

Sub-Scale	Percent of Youth		X ²	p-Value
	Psychotropics at Admit	Not on Psychotropics at Admit		
Anxiety Disorder	24.3	20.0	1.696	.193
Affective Disorder	8.0	3.3	7.432	.000
Conduct Disorder	30.5	31.8	.118	.731
Oppositional Defiant Disorder	13.9	10.1	2.242	.134
ADHD	4.9	1.8	4.660	.031
Other Dx's (e.g., tic, pica, eating)	11.6	4.0	14.298	.000

Gender and Medication Use Over Time



~ Additional Results ~

Child Behavior Checklist (CBCL):

- Youth admitted on psychotropic meds scored higher on both internalizing and externalizing ($p < .001$) than those not on psychotropics at admission.

Suicide Probability Scale (SPS):

- Youth admitted on psychotropic meds scored higher on Suicide Ideation ($p < .01$), Hopelessness ($p < .05$), and Hostility ($p < .001$) than those not on psychotropics at admission.

CHARACTERISTICS OF YOUTH . . .

On Psychotropic Meds at Admission:

- Caucasian ($X^2 = 59.24, p < .001$)
- Have attempted suicide ($X^2 = 9.97, p < .05$)
- More formal placements prior to admission ($t = 3.77, p < .001$)
- Referred by Social Services & Mental Health ($X^2 = 19.34, p < .01$)

Put on Psychotropic Meds During Treatment:

- Younger ($t = 2.76, p < .01$)

On Psychotropic Meds At Departure:

- Hispanic or African American ($X^2 = 9.6, p < .05$)

~ Conclusions ~

- Overall, the rate of psychotropic medication utilization was lower at this facility than other reports (cf., Breland-Noble et al., 2004; Conner et al., 1998). This does not appear to be primarily related to the severity of youth problems at the time of admission, as mean CBCL scores at admission for youth at this facility were very similar to those in other investigations.
- In general, youth at the facility were more likely to experience a reduction in psychotropic medication usage over the course of treatment. More than half the youth admitted on psychotropic medication were no longer taking medications at the time of departure.
- Consistent with previous reports, demographic and psychological variables were predictive of psychotropic medication usage. Gender, ethnicity, diagnostic status, level of impairment, and referral source differed between youth on and off psychotropic medication.
- While the data presented here provide evidence regarding predictors of psychotropic medication utilization at admission, during treatment, and at program completion, they do not allow us to know whether medication utilization corresponds to actual program outcomes. We are currently analyzing behavioral and outcome data collected during the youths stay at the facility to determine whether medication status was differentially related to program effectiveness.

Breland-Noble, A.M., Elbogen, E.B., Farmer, E.M.Z., Dubs, M.S., Wagner, H.R., & Burns, B.J. (2004). Use of psychotropic medications by youths in therapeutic foster care and group homes. *Psychiatric Services*, 55, 706-708.
 Conner, D.F., Ozbayrak, K.R., Harrison, R.J., & Melloni, Jr., R.H. (1998). Prevalence and patterns of psychotropic and anticonvulsant medication use in children and adolescents referred to residential treatment. *Journal of Child and Adolescent Psychopharmacology*, 8, 27-38.
 Najjar, F., Welch, C., Graphentine, W.L., Sachs, H., Simicich, J., Price, L.H. (2004). Trends in psychotropic drug use in a child psychiatric hospital from 1991-1998. *Journal of Child and Adolescent Psychopharmacology*, 14, 87-93.

Contact Information:

Michael Handwerk, Ph.D., handwerk@girlsandboystown.org