This report discusses a study that examined clinical outcomes for 145 children (ages 5-17) with severe emotional disturbances attending a Children's Behavior Therapy Unit (CBTU) day treatment program across several locations. Children are referred to CBTU following failed placement with the respective school districts in less-restrictive settings, such as individual counseling, resource classes, and self-contained special education classes. The behavioral model at CBTU has a dual focus of treatment: reducing behavioral excesses (e.g., physical/verbal aggression, inattention, and noncompliance), and increasing behavioral skills (e.g., ability to identify and verbalize emotions in self and others, impulse control, and completion of tasks). Academic instruction is delivered within an environment utilizing core behavioral techniques, such as a level system, frequent feedback, and individual behavior contracts. Daily training is provided for interpersonal and self-management skills, such as communication, impulse-control, and problem-solving skills, using a mixture of didactic, role-playing, and generalization opportunities. Preliminary findings from the study indicate that the children attending the CBTU day treatment program demonstrated improved behavioral symptoms during approximately 12 months of treatment. Elementary school children showed slightly better improvement than the adolescent group. (Contains 14 references.) (CR)
Outcomes of a School-Based Mental Health Program for Referred Youth

Kristin E. Robinson

Introduction

The concept of day treatment for children with severe emotional disability (SED) was introduced over 40 years ago (Zimet & Farley, 1985). However, the widespread application of day treatment models has been a more recent development. This treatment modality was strengthened with the 1963 Community Mental Health Center Act, which mandated comprehensive mental health services, including partial hospitalization (day treatment) for children and adolescents. Day treatment models further gained attention with the advent of consumer-driven health care and a call for providing children with a "continuum of care," a comprehensive network of community-based mental health services in the least restrictive setting possible (Stroul & Friedman, 1996). A variety of day treatment models have been developed across the United States, in most cases located within inpatient facilities (Prevost, 1981), but with increasing numbers of programs being school-based (Nothmann & Acosta, 1999). Several studies have found day treatment to be an economical and effective treatment for children and adolescents (Gabel & Finn, 1987; Kiser, Ackerman, & Pruitt, 1987; Sayegh & Grizenko, 1991; Pruitt & Kiser, 1991). There continues to be a need to strengthen methodology for studying outcomes of day treatment programs. The present study utilized a standardized, norm-referenced outcome measure, repeated over time, to examine symptom reduction of children attending a day treatment program.

The Children's Behavior Therapy Unit

The Children's Behavior Therapy Unit (CBTU) opened its first day treatment program in 1976, serving 10 children in collaboration with the Salt Lake City school district. Since that time, CBTU has expanded its contracts to include nine school-based sites located in four elementary schools, three middle-schools, and one high school, serving over 200 children per year. Each classroom is staffed by a special education teacher and an academic aide, provided by the school district, and a social worker and behavioral aide who are employees of CBTU. A child psychiatrist meets with the team weekly, and other professionals (e.g., psychologists, nurses, and speech therapists) are readily available for consultation.

Children are referred to CBTU following failed placements with the respective school districts in less-restrictive settings, such as individual counseling, resource classes, and self-contained special education classes. Previous treatment may also include mental health interventions, such as outpatient individual/group therapy and inpatient hospitalization. Children referred to CBTU programs are assessed by both school district and mental health professionals prior to admission to ensure the program is the least-restrictive alternative at the time. The behavioral model at CBTU has a dual focus of treatment: reducing behavioral excesses (e.g., physical/verbal aggression, inattention, and noncompliance), and increasing behavioral skills (e.g., ability to identify and verbalize emotions in self and others, impulse control, and completion of tasks). Academic instruction is delivered within an environment utilizing core behavioral techniques, such as a level system, frequent feedback, and individual behavior contracts (Reavis, et al., 1996; Rhode, Jenson, & Reavis, 1993). Daily training is provided for interpersonal and self-management skills, such as communication, impulse-control, and problem-solving skills, using a mixture of didactic, role-playing, and generalization opportunities (McGinnis & Goldstein, 1997a; McGinnis & Goldstein, 1997b; Sheridan, 1995). The present study examined clinical outcomes for children attending the CBTU day treatment program across several locations. These preliminary findings focus on data gathered during the 1997-1998 academic year.
Method

Participants

The outcome sample consisted of data for 145 children (79% boys and 21% girls), 5 to 17 years of age. All children were exhibiting emotional symptoms beyond the scope of outpatient services, with 97% being classified as having a severe emotional disability. The majority of referrals were Caucasian, reflective of Utah and Valley Mental Health demographics. Children with disruptive behavior disorders (Attention Deficit Disorder, Oppositional Defiant Disorder, Conduct Disorder) were most commonly referred (77% of the sample). Mood and Anxiety Disorders were the primary diagnosis for 21% of children referred. Other primary Axis I diagnoses included developmental disorders and adjustment disorders. Children in the present study were representative overall of children attending CBTU over past years, in terms of demographic and diagnostic characteristics.

Clinical Outcome Measurement

Group means were collected from successive admissions to the program during 1997-98, and analyzed for change using a behavioral outcome measure, the Youth Outcome Questionnaire (YOQ; Burlingame, et al., 1996). This 64-item, parent-completed checklist is designed to measure parent perceptions of treatment progress for children and adolescents (ages 4-17). The clinical cutoff score for the YOQ, suggesting the need for treatment, is a total score of 46. The initial YOQ is completed by the parent upon admission to the program, and approximately every 3 months during treatment.

Results

Preliminary findings indicated that children in day treatment show significant progress. Group YOQ scores decreased from an initial mean of 82.33 to a mean of 70.62 at the final administration (see Table 1). Paired t-tests indicated that the reduction in symptoms was statistically significant (p < .001). Forty-one children (28.3%) in the total group obtained YOQ scores below the clinical cutoff level at the fourth administration, suggesting perceived symptom remission at that point in time. The sample was further analyzed in terms of grade levels, comparing elementary children (N = 71) with adolescents (N = 74). The elementary group (K-6th grade) was more diverse in age than the adolescent group (7th-9th grade). Older children in the sample showed more consistent improvement, but to a lesser degree, than younger children (see Figure 1). The adolescent group had an initial mean of 76.46, which decreased to a mean of 67.24 (p < .05). The elementary group had an initial mean of 88.45, which decreased to a mean of 74.14 at the fourth YOQ administration. Paired t-tests indicated that improvement between time 1 and time 4 was statistically significant (p < .001).

Conclusions

Preliminary findings suggest that children attending the CBTU day treatment program demonstrated improved behavioral symptoms during approximately 12 months of treatment. The elementary children in this sample entered day treatment with higher scores on the YOQ than did the adolescents. The elementary group also showed slightly better improvement at the final administration of the YOQ than the adolescent group. These differences may be due to heterogeneity of the groups. The adolescent group had a smaller range of age, and was comprised of children who had been exposed to more special education and mental health services than the elementary group. Further analyses will examine the

Table 1

<table>
<thead>
<tr>
<th>Time 1</th>
<th>Time 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>SD</td>
<td>SD</td>
</tr>
<tr>
<td>Time 1</td>
<td>Time 4</td>
</tr>
<tr>
<td>YOQ</td>
<td></td>
</tr>
<tr>
<td>Total Group</td>
<td>82.33 (34.51)</td>
</tr>
<tr>
<td>Elementary</td>
<td>88.45 (32.10)</td>
</tr>
<tr>
<td>Adolescent</td>
<td>76.46 (35.92)</td>
</tr>
</tbody>
</table>

142 – Research and Training Center for Children’s Mental Health – Tampa, FL – 2001
Outcomes of a School-based Mental Health Program

The relationship between outcomes and variables such as age, diagnosis, and service utilization. Findings from the day treatment sample will also be compared with matched samples from inpatient, residential, and outpatient groups.

References


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**Figure 1**

*Comparison of Mean Scores (Elementary N = 71; Adolescent N = 74)*)

![Figure 1 Comparison of Mean Scores](image)


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