



Exploration of Use of Psychosocial Treatments in a Clinical ADHD Sample from Childhood Through Young Adulthood

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Introduction

- Three treatments have been validated as being effective, short-term treatments for Attention-Deficit Hyperactivity Disorder (ADHD): (1) stimulant medication, (2) behavior modification, and (3) the combination of (1) and (2).
- ADHD, however, is a chronic disorder in need of chronic treatment (AAP, 2001).
- Limited evidence exists supporting the long-term effectiveness of stimulant and behavioral interventions for treating ADHD (Ingram, Hechtman, & Morganstern, 1999).
- The inability of stimulant medication to improve later functioning may in part be due to the poor rate of maintenance of treatment during adolescence and young adulthood (Meichenbaum, Gnagy, Flammer, Molina, & Pelham, 2001).
- Less is known about the maintenance and prolonged use of psychosocial treatments, such as implementing behavioral strategies at home and school, throughout childhood and adolescence.
- This study explores the use of non-pharmacological treatments across childhood and adolescence for a group of ADHD adolescents and young adults.

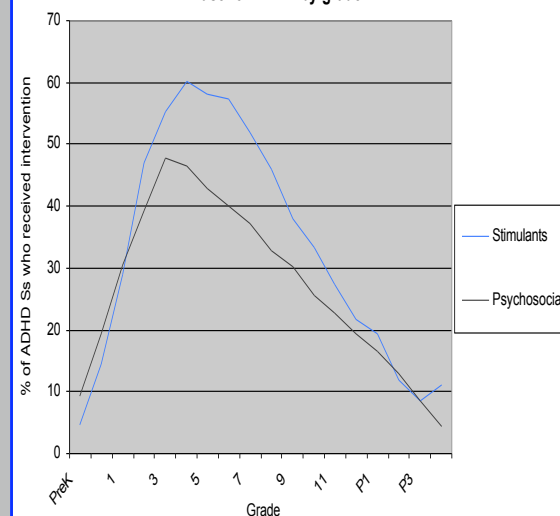
Procedure

- A comprehensive, clinical and diagnostic evaluation was conducted for all participants during childhood, at the time they participated in the STP.
- Follow-up data are collected through parent and proband interviews and completion of a comprehensive self-report battery
- The PALS involves annual interviews with the participants. For the purpose of this present study, we only investigated the subjects' responses and functioning at Wave 1.
- The MTC is completed by parents and youth and details the chronology of treatment services a child had ever received, including current and past use of medication and non-pharmacological treatment services, and parents' report of behavioral strategies used at home and school.
- To facilitate recall of treatment history, MTC is organized by school grade.

Dependent Measure

- The Medication and Treatment Chronology (MTC; PALS Cooperative Group, 1998) is a detailed retrospective self-report measure developed specifically for the PALS.
- The MTC is completed by parents and youth and details the chronology of treatment services a child had ever received, including current and past use of medication and non-pharmacological treatment services, and parents' report of behavioral strategies used at home and school.

Figure 1. Stimulant medication and psychosocial treatments use for ADHD by grade.



Discussion

- Findings from this study indicate that behavioral interventions are being used, and being used in conjunction with stimulant medication, at the highest frequency in elementary school.
- However, the prolonged use of psychosocial treatments for managing ADHD is minimal. The rapid decrease in use of treatments each year after elementary school suggests that a very large proportion of children with ADHD are untreated while in middle-school and high-school.
- Surprisingly, effective elementary and middle school-based behavioral interventions (e.g., Daily Report Card) are not being maintained or replaced with alternative age-appropriate behavioral interventions in high school (e.g., Weekly notebook reports and assignment sheets).
- Moreover, contrary to our expectation, there is even a significant decrease in the use of non-intensive and easy to administer behavioral interventions (e.g., offering praise and rewards, imposing structure in the home and class-room, establishing house rules, and having a daily homework reminder sheet).
- Having few behavioral interventions implemented at home or school during mid- to late-adolescence increases the risk for negative outcomes. For example, this study indicates that the use of house rules decreases dramatically during adolescence, a developmental period when more consistent and firm rules may be needed to reduce risk for engaging in dangerous and high-risk behaviors (e.g., substance use).
- Given ADHD is a pervasive chronic disorder it would follow that treatments need to be maintained throughout childhood and adolescence to reduce the risk for dysfunctional outcomes.
- The data in this study, and from our previous work (Meichenbaum et al. 2001) suggests that neither stimulant medication use nor behavioral interventions are being implemented consistently throughout one's development.

Methods

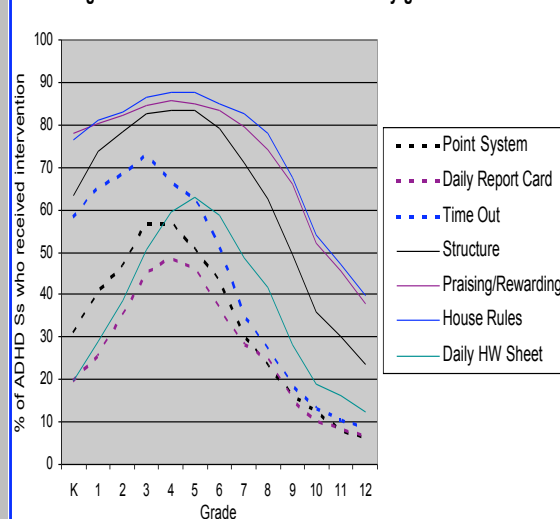
Participants

- 355 adolescents and young adults with childhood ADHD (ages range 11-25)
- Subjects were seen, initially, during childhood as patients in the ADHD Summer Treatment Program (STP; Pelham & Hoza, 1996) at Western Psychiatric Institute and Clinic (WPIC), University of Pittsburgh School of Medicine, between 1987 and 1996. The participants ranged in age from 5.00-16.92 years old when they were initially evaluated during childhood at the STP
- Participants were re-evaluated at follow-up; an average of 8.25 years elapsed between the probands' initial assessment in the STP and follow-up.
- All subjects are part of the Pittsburgh Adolescent Longitudinal Study (PALS), a federally-funded study exploring the risk association between ADHD and future alcohol and drug use and abuse.

Results

- Figure 1 illustrates a dramatic decrease in the use of pharmacological and psychosocial treatments across grades
 - Peak stimulant medication use is in 4th grade, with 60.3% of the sample using;
 - Less than 22% of the sample report taking stimulants in 12th grade
 - Peak psychosocial treatment use is in 3rd grade, with 47.7% of ADHD sample using
 - Less than 20% of the sample report receiving psychosocial treatment in 12th grade
- Figure 2 illustrates the decrease in specific behavioral intervention strategies across grade.
 - Both intensive (e.g., point system) and less intensive (e.g., praising) behavioral interventions decrease in a linear fashion following 3rd and 4th grades
 - Less than 10% of the sample received intensive behavioral interventions by 12th grade
 - Less than 40% of the sample received non-intensive behavioral interventions by 12th grade

Figure 2. Use of behavioral interventions by grade.



Copies of this poster can be accessed by emailing: dmd@acsu.buffalo.edu

Interested in working with ADHD children in our STP? Visit our website for more information: <http://wings.buffalo.edu/adhd>

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