Virtual Parent Training for Challenging Behaviors in Children with Neurodevelopmental Disorders

Candace Chamberlain MSW, LISW-CP and Stacey Cobb, MD
Department of Pediatrics Prisma Health

PRISMA HEALTH®

Project Statement

Prisma Health Developmental Behavioral Pediatrics noted a gap in therapy providers able to provide parent training to address disruptive and challenging behaviors with our pediatric patients with neurodevelopmental disorders. During appointments, parents were requesting assistance managing challenging behaviors at home. Many families with children with autism spectrums disorders (ASD) were on wait lists for Applied Behavioral Analysis therapy but were needing support and skills in the meantime to use immediately at home. Additionally, children who did not have an autism diagnosis were left with few options on parenting support. In response, the practice clinical social worker expanded service offerings to patients to provide evidence-based parent management training for disruptive behavior (RUBI Parent Training for Disruptive Behavior). The clinic was already offering Primary Care Positive Parenting Program (Triple P) occasionally for brief intervention for more mild behaviors and expanded that service offering as well. Both services were offered to parents primarily via telehealth.

Methods

1) Psychologists and physicians in the clinic would place internal referral for either Triple P or RUBI for families indicating concerns with their child's disruptive and challenging behaviors at home.

2) Family would be scheduled for telehealth sessions using Triple P (3-4 visits) if the concerns were more mild behaviors or more general parenting strategies needed.

3) Family would be scheduled for RUBI (11 visits) via telehealth for multiple behavioral concerns, more complex presentation, and more social stressors in the home.

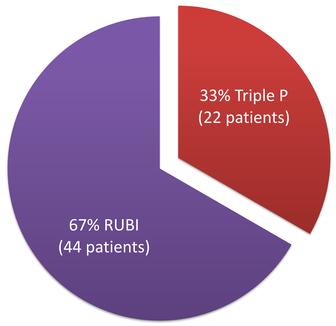

Figure 1. Patients referred to each program.

Developmental Delay	29
Autism Spectrum Disorder (ASD)	36
ADHD	15
Trisomy 21	1

Figure 2. Neurodevelopmental disorders of children referred for RUBI or Triple P.

Results

- Once referred, parents were scheduled for first visit within a month of referral.
- Most common neurodevelopmental disorder of patients referred was ASD. 48% of patients had 2 or more neurodevelopmental diagnoses.
- Median age of referral was 5 with patients ranging in age from 2 to 16.
- Parents overwhelmingly preferred to meet via telehealth with only 6 out of 66 parents meeting in-clinic and even then, only chose in-person for one visit out of the series.
- Parents were more likely to complete the shorter Triple P modality.
- Parents who completed Triple P reported substantial improvement in their child's behaviors including reductions in tantrums ranging from 50-100% decrease over the course of 3-4 visits.
- Families that did not complete RUBI attended an average of 2.36 sessions.

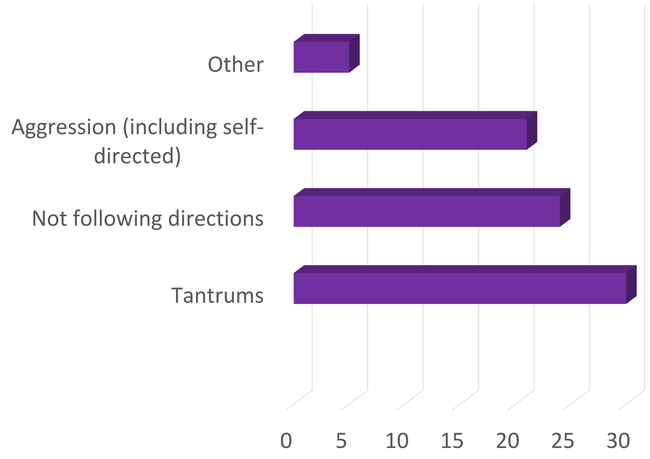

Figure 3. Referral reasons – 66 patients total, multiple referral reasons allowed.

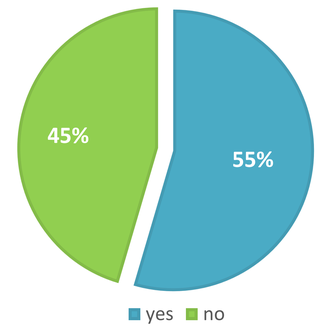

Figure 4. Triple P completion rates

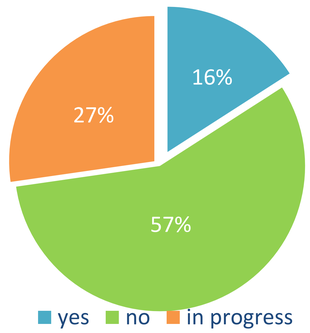

Figure 5. RUBI completion rates

Background Theory

Population-based and clinical studies consistently report elevated rates of disruptive behaviors—including aggression, tantrums, defiance, and noncompliance—in children with ASD. Estimates range from approximately 25% to over 75% depending on the definition, assessment method, and sample characteristics. [1-3]
The prevalence of elevated parent stress in families of children with ASD is high, with most studies reporting rates between 50–70% or higher. [4]
Multiple parent training programs have been developed or adapted to help support families affected by disruptive behavior related to autism. The RUBI Autism Network Parent Training Program and Triple P, particularly the Stepping Stones program, have growing evidence supporting their effectiveness, feasibility, and acceptability for children with ASD, including when delivered via telehealth. Studies have demonstrated strong parent engagement and high satisfaction, with significant reductions in parenting stress. Impact on direct measures of behavior have varied in efficacy, but a recent study of RUBI showed clinically significant improvement on global impression ratings in addition to parental gains. [5-6]

Discussion

Offering telehealth parent management training appointments to address immediate behavior concerns filled a care gap for patients and their families in the clinic. Despite reducing barriers to access for families living in rural areas, majority of families still did not complete the 11 session RUBI treatment modality suggesting additional contributing factors were not addressed. Perhaps offering parents description of the two programs at the first visit would improve treatment compliance. Tracking referrals based on provider could assist in determining any trends in treatment engagement based on referring provider. Based on provider trends, scripts or talking points for how the programs are presented to families could be provided. Additional review on how patients scheduled the initial visit (either by being given information and then asked to call if interested or if they are being scheduled at checkout) would also be helpful to assess parent motivation to start the intervention. Additionally, using a validated behavior measure and/or parent stress measure pre- and post-intervention would provide measurable outcomes of completing treatment.

1. Emotional and Behavioural Problems in Young Children With Autism Spectrum Disorder. Chandler S, Howlin P, Simonoff E, et al. Developmental Medicine and Child Neurology. 2016;58(2):202-8. doi:10.1111/dmcn.12830.
2. Psychiatric Disorders in Children With Autism Spectrum Disorders: Prevalence, Comorbidity, and Associated Factors in a Population-Derived Sample. Simonoff E, Pickles A, Charman T, et al. Journal of the American Academy of Child and Adolescent Psychiatry. 2008;47(8):921-9. doi:10.1097/CHI.0b013e318179964f.
3. Aggressive Behavior Problems in Children With Autism Spectrum Disorders: Prevalence and Correlates in a Large Clinical Sample. Hill AP, Zuckerman KE, Hagen AD, et al. Research in Autism Spectrum Disorders. 2014;8(9):1121-1133. doi:10.1016/j.rasd.2014.05.006.
4. The Impact of Parenting Stress: A Meta-Analysis of Studies Comparing the Experience of Parenting Stress in Parents of Children With and Without Autism Spectrum Disorder. Hayes SA, Watson SL. Journal of Autism and Developmental Disorders. 2013;43(3):629-42. doi:10.1007/s10803-012-1604-y.
5. Effectiveness of a Time-Limited Parent Training Program via Telehealth for Children With Autism Spectrum Disorder and Externalizing Behavior. Greathouse AD, Zemantic PK, Strong-Bak W, Lieneman C, Hayes LB. Journal of Developmental and Behavioral Pediatrics : JDBP. 2025;:00004703-990000000-00303. doi:10.1097/DBP.0000000000001416.
6.Effectiveness of the Stepping Stones Triple P Group Parenting Program in Reducing Comorbid Behavioral Problems in Children With Autism. Kasperzack D, Schrott B, Mingebach T, et al. Autism : The International Journal of Research and Practice. 2020;24(2):423-436. doi:10.1177/1362361319866063.