Enhancing Outcomes for Families Enrolled in Parent Training Group in A Community Mental Health Setting Kimberly Bosley PMHNP-BC OHSU School of Nursing

Introduction

Child Mental Health Disorders refer to mental health disorders that are diagnosed and/or begin during childhood. These disorders are an important public health issue. Child Mental Health Disorders include diagnoses of Attention-Deficit Hyperactivity Disorder (ADHD), anxiety disorders, depressive and other mood disorders, autism spectrum disorders, and behavior disorders including Oppositional Defiant Disorder (ODD) or Conduct Disorder (CD). Early diagnosis is important, as untreated mental health disorders can impact functioning in multiple life domains and can impact development. Child Mental Health Disorders can be treated and managed, and there are many evidence-based approaches that can be highly effective (Children's Mental Health New Report, 2013).

Population and Epidemiology

According to a recent report from the Centers for Disease Control, it is estimated 13 -20 percent of children in the United States experience a mental disorder. The Mental Health Surveillance Among Children report describes monitoring efforts and attempts to describe the number of children in the United States ages 3-17 who have specific mental disorders. They reviewed multiple data sources from 2005-2011. Their findings indicated ADHD is the most prevalent diagnosis among children age 3-17, with the second most common diagnosis being ODD or CD. The third most common diagnoses were anxiety and depression. Excluding Autism Spectrum Disorder, the number of diagnosed mental disorders increased with age. Males were more likely than females to be diagnosed with ADHD, behavior disorders, Autism Spectrum Disorder, and anxiety disorders including Tourette Syndrome. Among adolescents, males age 12-17 were more likely than females to complete suicide, though females were more likely than males to have a depressive disorder (Children's Mental Health New Report, 2013).

In the full report it is mentioned ADHD, ODD and CD are diagnoses frequently found to occur together. In reviewing demographic patterns for ADHD diagnosis, it was found ADHD was more common among males than females, diagnosis frequency increased with age, and was highest among

those with the lowest poverty to income ratio. With regard to ODD and CD, diagnosis was twice as high for males compared to females, and prevalence also increased with age. It was found there was increased prevalence with decreasing household educational attainment and household income. (Perou et al., 2013). Additionally, approximately one third of youth who meet criteria for a CD diagnosis also meet criteria for an additional depressive or anxiety related diagnosis (Shapiro, Friedberg & Bardenstein, 2006.

The particular site where this project is focused is a child, adolescent and family community mental health agency. It is located in an urban setting and provides comprehensive mental health, substance use, and prevention services for children from birth to age 18. The agency's prevention and education services include the Incredible Years Parenting Program. The agency's outpatient programs provide mental health services to over 4,000 children per year. The outpatient programs include general outpatient, outpatient services for youth who are victims of sexual abuse, intensive outpatient services for children birth to six years of age, and other specialized programs for youth who struggle with sexually acting out. The community and school based programs offer general outpatient services and case management within the school and in the home with crisis support and prevention outreach (Programs, 2010).

Purpose

The purpose of this inquiry was to improve outcomes for the families who are referred for the Incredible Years (IY) Parent Program, by improving the identification and referral process based on current literature. One third of children whose parents attend the Incredible Years program continue to have ongoing conduct disturbance despite the Incredible Years intervention and the child is subsequently characterized as a non-responder (Webster-Stratton, Rinaldi & Reid, 2011; (Drugli, Larsson, Fossum & Mørch, 2010b). As a part of the overall purpose, it was necessary to identify specific pre-treatment and post-treatment characteristics of children and families that correlate to "nonresponse to intervention" based on the existing literature. Then, based on this information, identify the

number of children and families who are referred to the Incredible Years program who have one or more of the pre-treatment or post-treatment characteristics. From this point there will be a review of the Incredible Years program using a clinical micro-systems approach. The focus will be on identifying areas of growth related to the current procedure for family referral. Recommendations will then be submitted to the agency's Outpatient Division Director. The recommendations will include: a proposed intervention to address Incredible Years program referral, a plan for implementation of the intervention, and discussion of future need for alternative adjunct treatments for those children and families who are characterized as non-responders to the Incredible Years curriculum.

Brief Description of Incredible Years.

According to Webster-Stratton (2011) the Incredible Years programs are designed to target children ages 2 to 8 who are either presenting with conduct disturbance, or are at risk for conduct disturbance. Conduct disturbance is described as aggression, defiance, oppositional behavior, and high impulsivity. The programs have been evaluated as prevention programs that promote social adjustment, and are indicated as an intervention program for children with early conduct disturbance. The BASIC Parent Training program emphasizes development of parent skills. These skills include playing with their children, promoting cognitive, social, and language skills, use of effective praise and incentives, limit-setting, and strategies to manage misbehavior. The BASIC Parent Training is a minimum of 14 weekly 2 hour sessions. Webster-Stratton does note an additional 2-4 sessions may be necessary depending on the size of the group, difficulty of child behavior, as well as how well the participants are grasping content (Webster-Stratton, 2004).

There is substantial evidence for the effectiveness of the Incredible Years curriculum. The program developer found in six randomized control trials there was significantly more positive parent interaction and also a reduction in critical parenting and harsh discipline. Children have shown a reduction in conduct disturbance, with a reduction in oppositional behavior when compared to controls. The changes have been shown to remain up to three years after the intervention, with two thirds of

children no longer exceeding the normal range with regard to oppositional or conduct related disturbance (Webster-Stratton, 2011).

Literature Review

A review of the literature was performed to explore current literature available with reference to the Incredible Years model. An electronic literature search was performed. The initial search occurred in June of 2014 using Literature that was collected from EBSCOHost database with Academic Search Elite, CINAHL Plus with Full Text, MEDLINE as the selected databases. The Boolean/Phrase used was "Incredible Years" and was combined with Boolean/Phrase "responder OR non-responder". This search yielded two relevant articles that were both reviewed. Subsequent searches were conducted using Boolean/Phrase "Incredible Years" with Boolean/Phrases "risk factor" which yielded fourteen articles. Of the fourteen articles, nine were excluded from review due to: using a combined or comparison study with no reporting of predictive factors, utilization of Incredible Years Teacher program or child program only, or small studies that were highly specific to population. Of the fourteen articles fivewere reviewed.

After reviewing literature from these searches, a final search was done in August of 2014 using the same search process as described above. The Boolean/Phrase used was "Incredible Years" AND "internalizing" which yielded five articles. One article was a duplicate from a previous search; two articles were focused on data collection measures rather than intervention outcomes. Two articles were reviewed.

Relevant literature

Pre-treatment predictive factors. Drugli, Fossum, Larsson, and Morch (2010a) sought to identify the predictors of ongoing diagnosis of ODD or Conduct Disorder in children ages 4-8, using a randomized control trial where treatment consisted of either the Incredible Years Parent Training program or the Incredible Years Parent Training program combined with the Incredible Years Child Treatment. Researchers found the pre-treatment predictive factors associated with persistent problems

at the 1 year follow up, were high levels of internalizing problems (emotion dysregulation) and behavioral problems as reported by mothers. When children displayed significant internalizing and externalizing problems pre-treatment, this was associated with higher risk for ongoing significant conduct problems 1 year after treatment. One family characteristic found to predict persistent conduct disturbance at the 1 year follow up, was family contact from Child Protective Services. One limitation was the study was selective for children meeting criteria for diagnoses of oppositional or conduct disorders and may not generalize to children with more minor to moderate behavior severity.

Drugli and colleagues also conducted a five to six year outcome study using the same families as the 1 year follow up study. Again, the children in the study all had a diagnosis of ODD or Conduct Disorder prior to intervention. Investigators found at the five to six year follow up there were multiple pre-treatment factors that correlated with an ongoing diagnosis of ODD or Conduct Disorder at the 5 or 6 year mark. The researchers found of the 54% of participants who responded to the survey at the 5 or 6 year mark, two-thirds no longer qualified for a diagnosis of ODD or Conduct Disorder. This was the same result as the 1 year follow up. The most significant pre-treatment predictive factors for the continuation of ODD or Conduct Disorder diagnosis was being a female child and living in a single parent, mother only home. Another pre-treatment factor that was predictive of ongoing Conduct Disorder or ODD diagnosis was combined internalizing and externalizing problems (Drugli, Larsson, Fossum & Mørch, 2010b).

Post-treatment predictive factors. In the five to six year outcome study described above, the most significant post-treatment predictive factor for the continuation of ODD or Conduct Disorder diagnosis was high levels of child externalizing problems after intervention. At the 5-6 year mark, it was also noted additional risk factors in the post-treatment group were children with high levels of internalizing problems and children of mothers who report high levels of stress and depressive symptoms. This is likely due to parents who are experiencing depressive symptoms having difficulty implementing and maintaining parenting practices (Drugli et al., 2010b).

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Another study of 4- to 8-year old children found maternal depression was a significant predictor of non-response. Both baseline depression scores for mother and post-treatment depression scores for mother were higher at the 2 year post-treatment mark for those youth who were non-responders. An additional post-treatment indicator was mothers making more than 10 critical statements about the child at the post-treatment assessment, the child showed an 80% likelihood of continuing to have clinically significant problems at the 2 year follow up (Reid, Webster-Stratton, Hammond, Beidel, Brown, Lochman, & Haaga, 2003). A later study contradicted this finding. Though this study did find maternal depression was correlated with poor outcome, they also found the intervention itself actually seemed to improve parental depression. The results of this study indicated children whose parent was more depressed at treatment start tended to appear to respond better to the intervention with regard to conduct problem outcome measures than children in the control group. This finding was partially attributed to the assumption that depressed parents tend to rate their children's behaviors more negatively, and thus with the parent's mood improvement, they were able to rate their child more accurately (Gardner, Hutchings, Bywater, & Whitaker, 2010). Gardner and colleagues (2010) also found the intervention produced better outcomes for boys than girls in regards to conduct problems. boys in the control group fared poorly whereas girls in the control group improved--regardless of not receiving the intervention.

Webster-Stratton, Rinaldi, and Reid (2011) conducted a follow up with youth who had early onset conduct problems whose parents received the Incredible Years Parent Training treatment program when they were 3–8 years old. The families were contacted and reassessed 8–12 years later. Results of the study indicated there were several important factors that were correlated with negative intervention response. Researchers found that mother reports of conduct problems and low rates of maternal praise at the immediate post-treatment period significantly predicted reports of delinquent acts as teenagers. Post-treatment reports of coercive behavior and conduct disturbance predicted adolescent involvement in the criminal justice system.

Internalizing symptoms. As discussed, Drugli and colleagues (2010a, 2010b) found internalizing and externalizing symptoms were pre-treatment predictors of who would respond to the Incredible Years training intervention. A study from Webster-Stratton and Herman (2008) indicated though there was improvement in internalizing symptoms in response to the Incredible Years parent training intervention, the improvement was not statistically significant. This study had several limitations in that the population consisted of 80% European American families and therefore may not generalize well and is possibly not culturally specific. In addition, the children were recruited for the study due to existing ODD or Conduct Disorder diagnoses, not depressive symptoms. Not all children who entered the study presented with baseline internalizing symptoms. All children in the study did, however, present with conduct disturbance, meaning improvements to internalizing symptoms may not generalize to children who have only depressive symptoms.

One study evaluated data from another sample of 4-8 year old children with ODD who were randomly assigned to parent training alone; parent and teacher training; child training; child and teacher training; parent, child and teacher training; or a waiting-list control group. They were then assessed for internalizing symptom improvement. This study found children who received intervention (single or two combined) had lower internalizing symptoms compared to the control group. Though, again, these results were not statistically significant. Children who received all three interventions (parent, child and teacher training) did demonstrate statistically lower internalizing scores than the control group. When comparing the follow-up scores from the group where only parents were trained, and the group where the parent and the teacher were trained, the parent and teacher intervention had significantly lower scores than the parents who were trained alone. A major limitation to this sample was 90% of the children were boys (Herman, Borden, Reinke & Webster-Stratton, 2011).

Attention problems. Hartman, Stage & Webster-Stratton (2003) took a sub-set of data from a previous larger study that had compared Incredible Years Parent Training, Incredible Years Child Treatment (no parental involvement), and the Child Treatment in combination with Parent Training.

Researchers found elevated ratings of attention problems were correlated with child externalizing behaviors pre-treatment. The study found children with conduct problems who also exhibited inattention, impulsivity and hyperactivity showed improvements in conduct in response to parent training. It was not clear from this study how the results compared to the typical response to the Incredible Years Parent Training intervention and whether the number of responders was similar. This study had several limitations to generalizability as 88% of the children were Caucasian and 100% of the children were male. Three quarters of the mothers were partnered and 98% of mother's were Caucasian. Additionally, diagnosis of ADHD was not recorded as the initial study was not designed to evaluate ADHD and researchers relied on symptoms related to inattention, impulsivity, and hyperactivity based on parent and teacher report.

Familial Risk. There was one study that looked at familial risk in relation to treatment response to the Incredible Years Parent Training. The researchers re-analyzed data from children 3-8 years old with a family history of externalizing behavior in first and second degree relatives. The results indicated maternal depression scores and maternal familial history of externalizing disorders were significantly higher in single biological mother families. Maternal report of child externalizing behaviors at baseline was found to be higher in single biological mother families than in two biological parent families. With regard to predictors of treatment response in families with two biological parents, if there was a first or second degree relative with externalizing behaviors, this was associated with increased parental report of externalizing symptoms in the child, both before and after treatment. This is significant as it has been shown higher symptom severity report after treatment is a post-treatment predictive factor of later conduct disturbance (Presnall, Webster-Stratton & Constantino, 2014).

Current Treatment Guidelines

The American Academy of Child and Adolescent Psychiatry (AACAP) has practice parameters for the assessment and treatment of children and adolescents with ODD. They recommend building therapeutic rapport with the child and family and subtly evaluating current parent strategies with the

parents. With regard to treatment for the child, AACAP discussed two evidence based treatments for youth with ODD. The first is a family approach focusing on problem-solving and family interventions using a parent management program. The second is an individual approach that focuses on specific problems encountered and is oriented toward skill development in the area of problem solving. The recommendations when selecting a parent management program include the need for it to be empirically tested, a focus on reduction of positive reinforcement for undesirable behavior, increase reinforcement for prosocial and desirable behavior, and consequences or punishments for undesirable behavior. The goal is to improve behavior and make parental response predictable, contingent and immediate (Steiner & Remsing, 2007)

The AACAP practice parameter related to ADHD focuses on proper and thorough assessment and the use of stimulant medications, either alone or in combination with other therapy, and the importance of high quality psychoeducation. With a comorbid anxiety and disruptive behavior disorder, they found there were better outcomes with behavioral therapy in combination with pharmacotherapy (Pliszka, 2007).

The AACAP practice parameter for assessment and treatment of Conduct Disorder is outdated, as it was written in 1997. At that time, the recommendation for preschool-aged children was to provide early intervention that provided structure for children and education and support for parents. Clinically, the focus is on "goodness of fit" between the child and parent, and increasing parental efficacy through skill development, especially around how to handle normal child tantruming. With school aged children who met criteria for CD diagnosis, the treatment recommendation was an approach that targeted problem-solving skills, rather client centered therapy (Steiner & Dunne, 1997). There was extensive support for Family Systems Therapy that emphasized skills training, parent child management techniques, and whole family communication and problem solving training (Shapiro, Friedberg and Bardenstein, 2006).

Summary of Literature

Based on the information from the literature review there are several pre-treatment and posttreatment factors that predict adverse treatment outcomes. The pre-treatment factors found in multiple studies include Conduct Disorder diagnosis only, high levels of internalizing and externalizing symptoms, and female children. There were individual studies that highlighted pre-treatment factors of single mother family, family CPS involvement, and having first or second degree family members who had externalizing symptoms. The significant post-treatment predictive factors that relate to the child, were a child who continued to demonstrate high levels of post-intervention internalizing and externalizing symptoms. There were specific post-treatment factors that related to the child's parents including maternal depression, high maternal stress, more than 10 maternal critical statements, low maternal praise, and immediate maternal report of conduct problems.

Gaps

There are some significant gaps in the literature. A majority of studies were primarily focused on assessing the efficacy of the Incredible Years with a small number of studies who utilized the previous study data in an attempt to identify the predictive factors for poor treatment outcomes. Due to this, the study subjects were primarily children with a diagnosis of ODD or Conduct Disorder. This makes the data specific to that population and difficult to generalize to children with other diagnoses. Additionally, a majority of the children were male, though this is likely in part to ODD and Conduct Disorder occurring more frequently in males than females. Lastly, race and ethnicity was often not mentioned explicitly, or there was a higher participation rate of Caucasian families which makes the information difficult to generalize.

Practice Improvement

Intentional focus on a clinical micro-system is a critical part of improving clinical practice and promoting better outcomes. Nelson, Batalden and Godfrey (2007) describe planning patient-centered services by focusing on clinical micro-systems through an evaluation method termed the 5 P's Approach. The goal of utilizing the 5 P's Approach is to evaluate the purpose, patient population,

professionals, processes, and patterns of the micro-system in order to identify activities, information, and knowledge needed to design and improve patient centered services. This allows identification of interventions to improve patient care, as well as the work environment for the professionals within the micro-system. This project utilized the clinical micro-systems approach to assist in assessing and designing patient centered services that best meet the needs of the children and families served by the Incredible Years Parent group. As part of the overall 5 P's assessment, current practices for identifying and referring children to the Incredible Years group were reviewed as well as current practice parameters. Recommendations were then made to the agency with regard to the Plan, Do, Study, Act (PDSA) model for improvement.

The "plan" phase of the PDSA model involves describing the objective change to be tested and to clarify individual roles, timing for implementation, education needed prior to implementing the change, what data should be collected during implementation, who is responsible for data collection, and duration of implementation before data is reviewed. The "do" phase of the PDSA model involves implementing the intervention as a "pilot". Unexpected responses are documented, feedback is received, and leadership provides presence for support and to receive input from those involved in implementation. The "study" phase of the PDSA model is a period of time after the initial pilot where data are analyzed and reviewed, team members are given an opportunity to debrief, and unexpected items are addressed prior to the next implementation. The "act" phase of the PDSA model involves discussion of whether there need to be modifications to initial intervention and whether the intervention should be abandoned based on data collected and what the next steps are for the intervention prior to entering another "plan" phase of the PDSA cycle (Nelson, Batalden & Godfrey, 2007)

Project Description

Setting

The agency that is the focus of this paper is a non-profit community mental health organization. It delivers specialized mental health services through a variety of programs including prevention and

education, outpatient, community and school-based programs, day treatment programs, foster care, and residential programs. The mission of the organization is to "partner with families and communities to provide effective and responsive services for children and youth coping with adversity and trauma" and to achieve significant long-term positive outcomes for all children and families served by the agency. The agency values providing fair and equitable treatment that is comprehensive and integrated. They partner with the community to strengthen the families served by the agency. The agency seeks to accomplish this mission through their multiple program offerings and seeks to build on current programs and develop innovative models to meet the current and evolving needs of the community (Mission, Values, Objectives, 2010).

Barriers, facilitators, challenges. The agency prioritizes and values program evaluation. They have created a Program Evaluation Department that helps in evaluating the many processes within the multiple micro-systems that compose the larger macro-system. This prioritization of the program evaluation role allows the agency to evaluate the effectiveness of interventions. This helps guide modifications to programs necessary to maintaining high quality programing for both clients and funders. As a result, the agency has experience in not only identifying areas for growth but also implementing change as a result.

In any micro-system, it is important to recognize all team members must be aware of the improvement process and goals, prior to implementing change. Also before change is implemented, it is necessary for the micro-system to identify and clarify the specific goals that need accomplished, identify measures for improvement, and identify the specific changes that need to be made to meet the specific goal. With the specific goal in mind, utilizing the Plan, Do, Study, Act (PDSA) model for improvement would allow for evaluation of change and provide a clear process for testing of the change, learning from the testing, and making improvements to the initial change, when necessary. The PDSA model can be completed quickly and clarifies the details of change implementation. It also clarifies that the changes being implemented are in the "pilot" stage, which can reduce some of the resistance and anxiety

that generally emerges with change discussions. It also enables staff to gain knowledge and improve on the original idea, which contributes to feelings of participation and success (Nelson, Batalden & Godfrey, 2007). This will be a new approach to organizational change within this system, though there is clear support from clinical leadership in utilizing this model.

Existing supports. The Program Evaluation Department is an existing support. The agency has already identified the importance of program evaluation as a way of improving clinical practice and outcomes. Because of this, the agency, as a whole, is familiar with the process of utilizing data to clarify whether current practices are achieving the desired outcomes. They are also comfortable receiving information and recommendations about practice improvement when outcomes are not being achieved. The leadership at the agency is supportive of analyzing the Incredible Years family group micro-system to gain insight into the process that may impact future outcomes for families served through the agency.

Participants

The data related to the children and families who are served by the Incredible Years program was retrieved and provided by the Research and Development department staff. The data for this analysis are based on a sample of 50 general outpatient families who attended at least one Incredible Years curriculum class who were admitted into the general outpatient service between October 2011 and October 2013. There were initially 56 children identified, however, 6 were removed as they were duplicates. All data were retrieved from the electronic medical record system TIER. This time period was selected to capture a representative sample based on seasonal fluctuation of admissions, with information showing admissions have remained stable year to year. Demographic data including identification of race, gender, and primary diagnosis data was provided by the Research and Development department. Additional data relating to full diagnostic picture, presenting problems outside of diagnostic reporting, marital status of primary caregiver, history of family CPS/DHS

involvement, familial substance use history and/or incarceration were obtained through review of Initial Mental Health Assessments for each of the clients.

Project Intervention

An initial inquiry was made to the Division Directory and Senior Psychologist to determine if the proposed project had merit to be reviewed by the Research Proposal Review Committee. The proposal was approved by the Division director, Senior Psychologist, and the Director of Program Evaluation Services. The agency has been utilizing the Incredible Years curriculum since approximately 2003 as part of their prevention and treatment model in the general outpatient settings.

Purpose

The mission of the organization is to, "partner with families and communities to provide effective and responsive services for children and youth coping with adversity and trauma" and to achieve significant long term positive outcomes for all children and families served by the agency (Mission, Values, Objectives, 2010).

Patients

Post-treatment factors were not able to be considered, as there was no data collected that would capture the post-treatment non-responder factors. The demographic information was collected on the child only. According to the data, the youth ranged from 2 years old to 12 years old with an average age of 6.5 years. Approximately half of the participants identified as Caucasian, 28% of the participants did not identify a race, 1% identified with two or more races, less than one percent identified as either Hispanic, African American, or Other. 62% of the youth were male and 38% were female. There were individual studies that highlighted pre-treatment factors of single mother family, family CPS involvement, and having first or second degree family members who had externalizing symptoms. Therefore, these factors were analyzed as well. 40% of youth were living in a single mother home, 34% were living in a two parent home, 16% were living in kinship or foster care placements, and 10% were living in a single father home. 34% of families had previous reported CPS or DHS Child Welfare

involvement. 42% of youth were reported to have had a first degree relative with history of substance use and/or incarceration (externalizing symptoms).

Narrowing down the top presenting problems for the patient was difficult for several reasons. First, the data showed only their diagnosis at intake, where clinicians most commonly provided an Adjustment Disorder diagnosis with recommendation for further clarification and assessment. There was no clear intake data as to when the child and family actually enrolled in the Incredible Years program, which might have contained some diagnostic clarification. Second, depending on the clinician, the intake assessment may or may not have included other presenting problems outside of those qualifying for diagnosis. Assessments varied widely. Some had a heavy reliance on narrative descriptions and others were more detailed with regard to the discrete data and check boxes. The two most prevalent diagnoses were Adjustment Disorder (diagnosed in 40% of youth) and ADHD (diagnosed in 28% of youth). 12% of youth were diagnosed with Disruptive Behavior Disorder NOS and 12% had a primary anxiety disorder diagnosis of either Separation Anxiety Disorder, Post Traumatic Stress Disorder, or Anxiety Disorder NOS. The remaining 8% were diagnosed with ODD, Pervasive Developmental Delay, or only had diagnoses of physical abuse of child or neglect of child.

Initial Mental Health Assessments were reviewed to gather additional data around other problems related to externalizing/internalizing symptoms, not just symptom criteria related to diagnoses. Internalizing symptoms generally relate to anxiety symptoms or mood symptoms, specifically those related to sadness, withdrawing, apathy, or avoidance. Externalizing symptoms are generally related to symptom presentation found with ADHD, conduct disorder, or ODD diagnosis but also encompass any consistent outward expression of aggression or agitation. Of the 50 youth whose parents were referred to the Incredible Years Parenting program, 62% presented with a mixed internalizing and externalizing profile, 28% presented with only externalizing symptoms, and 10% presented with only internalizing symptoms. With regard to the referral data and the known non-responder criteria, 28% of the referrals made to the IY Parent group were females with both internalizing and externalizing symptoms. These two factors were found in multiple studies to be pre-treatment predictors for non-response. Only 18% of referrals made were males with externalizing only symptoms. However, when considering males with both externalizing and internalizing symptoms, the statistic increases to 38%. There were no Conduct Disorder only diagnosis referrals, likely due to the age of the clients.

Professionals

There are five separate general outpatient sites within this agency, though only two sites facilitate the Incredible Years Parent groups. According to information from the Incredible Years website (n.d.) approximately 34 staff at the agency are trained and approved to facilitate the IY program. Their educational backgrounds range from Bachelor's level Social Service staff to Master's level Social Workers or Professional Counselors. The agency is offering the Basic Parent Group, Advanced Parent Group, School Age Parent Group, and The Dinosaur School in their early childhood outpatient and general outpatient clinics. The model is being offered both as treatment and prevention, with 23 providers designated as treatment providers and 11 providers designated as prevention providers. The primary focus of this review was the treatment providers rather than the prevention providers. At each outpatient site there are additional supports that would have their own micro-system designation, including psychiatric services, family support specialists, skills training, intensive home based services, and other resources that are available for referral by the general outpatient therapist. There is also a second parent group, Parent Child Interaction Therapy, where families can be referred for parenting support.

Processes

Central Intake is the first point of contact for families and completes the initial screening. They ask the family which outpatient site is the closest or most convenient for them and schedule them with a therapist at that site for an intake appointment. Every general outpatient therapist submits their monthly

availability for intake slots by the 15th of the month for the following month. The goal is to have the family assigned and seen within 14 days of their initial contact with Central Intake. Because of this, at intake, families are assigned to the next available therapist. This may or may not be the therapist they continue seeing for treatment. There is not necessarily a specific policy as to whether the clinician who sees the family at intake is the clinician who continues with them. There is, on the other hand, a benchmark in place that families should be provided with three service encounters within the first 45 days of their initial contact with Central Intake and these services cannot be case management services.

Referrals to adjunct services, such as IY, might occur at intake, but can also occur at any time during the therapy process. The primary therapist can make a referral to IY after discussing the program with the family and the family agreeing to attend. Once the determination has been made to refer a family, the clinician will educate the family regarding the length of the group as well as expectations for attendance and submit a referral form. This form includes demographic information for the child as well as a section for the "reason for referral". There are "additional group screening questions" that include questions around barriers to location of group, transportation, obstacles related to scheduling, and general obstacles. Last, there are questions around the number of adult caregivers in attendance, number of children who will attend the childcare, and food allergies and special needs. A list is compiled by the IY clinicians and they reach out to parents, screen for appropriateness and provide additional information. There are two outpatient sites offering the IY groups and they differ slightly in their approaches.

Patterns

There is a formalized referral process where the clinician assesses for barriers to access, but there is no formal screening to determine if it is an appropriate referral for The Incredible Years groups. In the sample of 50 youth, 20 were referred to the IY program at intake and 4 were referred to a "parenting group" or "psychoeducation group", though there was no indication of whether that was Incredible Years or Parent Child Interactive Therapy. There was no specific recommendation made for

parenting group support for 26 of the 50 youth. The first site offers group from 5:30PM to 7:00PM and dinner and childcare are offered. There are two trained IY leaders, and one intern. The group size ranges from 4-24 parents and this number varies due to attrition rather than original referral numbers. The groups run weekly for 14 weeks. The clinicians then reach out to families with weekly phone calls to"check in". The second site also has IY clinicians compile a list of names and will reach out to families to pre-screen, inquire about barriers to attending and help to address barriers as needed. Childcare is provided, and group runs for 2 hours at this site (compared to 1.5 hours at the other site) to allow time for the provided dinner. This was consistent at both sites. Twenty families are generally referred, but due to the attrition rate of about 50%, by the 4 week mark there are usually 8-12 families remaining in the core group. Groups run from 12 to 14 weeks with weekly phone call check-in's by one of the group leaders. During the course of the IY group, families see their regular outpatient provider less frequently.

There are no data collected or measures related to group drop-out rates and/or common barriers to group attendance. There is no pre-group or post-group questionnaire for clients. There is no follow up with clients unless clients drop out early, and in that case a phone call is made in an effort to identify and resolve barriers to engagement. Historically, data had been collected in the form of surveys. Those were discontinued due to clinicians feeling it took a good deal of time, and there was no analyzing of the data being collected due to not having resources allocated to reviewing this program.

Outcomes

Areas of Improvement

After reviewing the 5P's for this micro-system, a few areas emerged as possible areas of improvement. The first is around the process of identifying appropriate referrals for the IY group. Other areas include the need for additional data collection and the need to assess fidelity to the IY model. There is significant room for improvement with regard to the process surrounding the decision to make a referral to the Incredible Years Parent group. Data collection around common barriers, pre-

treatment and post-treatment measures, and general follow up would also be helpful. Lastly, it is recommended fidelity to the model be addressed, especially in regard to group length--though this would be a separate PDSA, and outside of the content of this project.

Plan, Do, Study, Act Recommendations

The aim is to enhance the outcomes for families enrolled in the Parent Training group through the general outpatient services. This process begins with the referral to Incredible Years Parent group and ends with post-treatment follow-up. By working on this process, it would be expected the 1) clinicians will have an understanding of reasonable goals for families taking The Incredible Years Parent program, that are based in evidence 2) clinicians will be aware of criteria that may result in nonresponder outcomes for families 3) agency will identify additional supports that may be necessary to prevent non-responder outcomes 4) agency will offer an additional parent program that can appropriately addresses the needs of those families who are inappropriate for The Incredible Years curriculum. It is important to work on these goals to 1) ensure families are receiving appropriate referrals to services—reviewing the evidence-based findings to determine the service is likely to be appropriate for the child/family 2) ensure there are programs or adjunct supports available for families where Incredible Years may not be appropriate; and 3) emphasize evidence-based pre-treatment and post-treatment data collection to ensure processes are effective.

Specific Aims

Specific Aim 1) Within 3 months, referral form will be developed with emphasis not only on barriers but also pre-treatment factors that would likely result in non-response to IY.

Specific Aim 2) Within 3 months, clinicians will begin to administer a pre-treatment and post-treatment questionnaire, either Achenbach Child Behavior Checklist or Eyeberg Child Behavior Inventory.

Plan

The ultimate goal of this project is to enhance outcomes for families enrolled in the IY Parent Training group. By improving the referral process, and specifically looking for pre-treatment characteristics that are likely to lead to non-response, there will be a reduction in inappropriate referrals. Hopefully this will decrease the group drop-out rate, which is significant. Having clinicians trained and educated around the pre-treatment characteristics that lead to non-response, will allow for more appropriate support for families. Clinicians can continue to support these families in the outpatient setting or refer them to adjunct services that may have better outcomes. The referral form will need to include diagnoses (emphasis on ODD or ADHD) and/or clinical behavior problems as demonstrated by standardized measures, such as the Achenbach Child Behavior Checklist or Eyeberg Child Behavior Inventory. This will encourage referrals to be made for children who primarily exhibit externalizing symptoms (Beauchaine, Webster-Stratton, & Reid, 2005). Pre-treatment and post-treatment measures should be collected, allowing regular feedback from the clients to ensure families are finding the group relevant and useful. It is expected assessing for appropriateness for IY Parent Group will increase the number of parents who actually complete the program, and also enhance outcomes for those parents.

Data

Data to be collected would include: 1) diagnosis information as well as pre-treatment and posttreatment Achenbach Child Behavior Checklist and/or Eyeberg Child Behavior Inventory scores 2) number of families both referred to and completing IY groups 3) number of referrals that fall within recommended parameters. All three of the data points could be collected by one of the IY clinicians or may be delegated to an intern. These would also best be displayed in a pre-implementation and postimplementation bar graph. Displaying the data in the staff lounge areas, lunch rooms, and break rooms would be ideal as these are frequently used areas. Emailing results could also be of benefit, though should not be the sole dissemination mechanism--as this may seem to minimize their importance. Presenting the information in staff meetings, discussing the information, and then posting the information would be the best way to assure the information is received by staff. Having the

individual discipline leaders then discuss it with their teams in their team meetings would reinforce solidarity and would demonstrate they are invested in the change. Over time, data should be collected at a minimum of every three months or after each IY cycle. This way the data could be displayed in a run chart which would indicate whether or not the improvement is sustaining, where there are issues, how much variation there is, and to determine whether this intervention is meeting the unit goals.

Driving and Restraining Forces

Driving forces for change often arise from reimbursement issues. With a push towards case rates for reimbursement it is fiscally imperative length of treatment not be prolonged. Group interventions are generally less costly than individual interventions, and therefore appropriate referral to IY groups will result in better outcomes for families and less treatment cost. Additionally, individual interventions can be reserved for those families who fall outside the treatment parameters. Other driving forces are the individual leaders within the disciplines who are eager to have their information utilized and their voices heard. This is specifically true for the clinical staff who are passionate about the IY Parent Group material.

Restraining forces will likely be attitudes around new processes and whether or not they feel supported. The intent is the clinic supervisors will act as a support for the IY clinicians and will help reinforce and model the change. Another restraining force is the sites have undergone several major changes in the recent past including a change in case rate reimbursement, a new electronic health record and moving to centralized scheduling for therapy intakes. It is always a risk to introduce change when the system is already under strain.

Practical Considerations

One of the main considerations in regard to the intervention is the individuality of each site. Each site likely has their own unique lens from which they view the families and clients. Because of this, there is no way for one site to develop a template for another. This is why in the "pre-intervention" phase, there will be a meeting between both IY site clinicians to help facilitate the development of the referral form. This is an opportunity to collaborate and create documents that work for both sites.

Summary

The proposed outcome of this project was to provide the agency with information regarding the Incredible Years program. Additionally, the goal was to provide recommendations based on existing literature for areas of growth and improvement that relate to current referral practices. The client data from 2011-2013 indicates a large number of families are being referred to the IY Parent groups that are considered non-responders based on literature. It is recommended the agency move forward in designing a new referral form based on this information, and to continue with implementing the PDSA model for practice improvement. It is recommended there be follow-up with families who initiated with IY—likely at 3 months, 6 months and 1 year post-intervention, to assess for treatment response. There should also be pre-treatment and post-treatment Achenbach Child Behavior Checklist or Eyeberg Child Behavior Inventory scales completed to ensure referrals are appropriate and children are benefiting from intervention. It is also recommended the agency track post-treatment data that would evaluate non-responder criteria as a way to inform post-group treatment.

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