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Chapter 11

AVOIDANT RESTRICTIVE FOOD INTAKE DISORDER AND ATYPICAL ANOREXIA NERVOSA: DAY TREATMENT FOR CHILDREN AND ADOLESCENTS

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ABSTRACT

This chapter, on specialized Day Treatment for Eating Disorders, will examine an intensive therapeutic alternative to inpatient hospital care for children and adolescents with atypical anorexia nervosa and avoidant restrictive food intake disorder (ARFID). Day treatment programs (DTPs) are unique, comprehensive psychiatric care that employ a multi-disciplinary team to care for the patients and utilize various forms of group psychotherapy throughout the day, providing structured, supervised meals, as well as close psychiatric and medical monitoring. This chapter will review strategies to treat both ARFID and atypical anorexia nervosa in DTP settings. Two case vignettes will highlight the challenges of caring for these complex and life threatening disorders in children and adolescents. Family-based informed treatment and family meals will be described as an integral part of the structure of the treatment. Clinical experience and wisdom will determine the limits of DTP for children and adolescents with more serious medical and psychiatric disorders who require a higher level of care. Future clinical research is needed to appreciate the most effective treatment approaches and strategies for the successful outcome for youth with ARFID and atypical anorexia nervosa.

ARFID

ARFID Introduction

Avoidant restrictive food intake disorder (ARFID), is a new diagnosis in DSM-5 that captures various presentations of eating and feeding disorders, ranging from those who fear

eating for various reasons such as choking or vomiting phobias to those who have sensory and textural issues with food (APA, 2013). This disorder results in significant impairment, often requiring hospitalizations and naso-gastric (NGT) feeds.

ARFID is not exactly a new diagnosis in that it is actually a revision of and an extension to the previous Feeding Disorder of Infancy and Early Childhood Diagnosis (FDIEC), which last appeared in DSM-IV (APA, 2000). ARFID blurs the distinction between feeding and eating disorders. There is no longer a distinction between the two in DSM-5 (i.e., in DSM-IV feeding disorders included Pica, Rumination d/o, and FDIEC, whereas eating disorders included Anorexia Nervosa (AN), Bulimia Nervosa (BN), and Eating Disorder not otherwise specified (EDNOS). ARFID is a combination of some feeding and some eating disorders (Uher & Rutter, 2012), in that it includes some previously diagnosed with eating disorders such as EDNOS in DSM-IV (i.e., those with FAED, Food Avoidance Emotional Disorder), as well as those who previously received the feeding disorder diagnosis of FDIEC (Bryant-Waugh, 2013).

The Evolution of ARFID

The ED criteria in DSM-IV did not adequately capture these diagnoses in children and adolescents, who often possess different levels of chronicity and capacity for thinking compared to adults and often possess feeding issues rooted in developmental issues. As a result, up to 90% of children and adolescents in community samples received a diagnosis of EDNOS (Zimmerman et al., 2008), a heterogeneous group which described little about the actual ED diagnosis. Children in this category were often forgotten about, improperly monitored, left without insurance coverage for treatment or accepted into programs with limited spots reserved only for those with AN/BN. Often these children and adolescents in the EDNOS category were simply observed until they became sicker with full-blown symptoms of an ED. Given the heterogeneity of the EDNOS groups, it was also difficult to target research and treatment for this group. ARFID was created to help better define some of those in the EDNOS category and provide them a more accurate diagnosis and targeted treatment (Fisher et al., 2014).

Furthermore, there were numerous concerns with the previous FDIEC diagnosis. Often it was confused with the medical term, failure to thrive (FTT), which previously was recorded on Axis III in the DSM-IV, separating out organic from non-organic causes of feeding problems. If it were an organic cause it would receive the FTT diagnosis and if no organic cause could be found it would be labeled as FDIEC, a psychiatric diagnosis. ARFID was created to include those who might have both a psychological and medical problem contributing to the feeding or eating issues (Fisher et al., 2013). ARFID was also created to help those who develop the feeding or eating problem after six years old as well as those who have significant impairment without weight loss, both of which were inclusion criteria for FDIEC (APA, 2000; APA, 2013).

ARFID Criteria

Given that ARFID is a new diagnosis, it can be useful to discuss the relevant criteria.

ARFID is a maladaptive eating or feeing disorder as a result of restriction due to (1) a lack of interest in eating; (2) a sensory-based avoidance (i.e., color, texture, smell); (3) avoidance due to feared consequences of eating often based on an aversive experience (e.g., coughing, choking, vomiting, allergic reaction to food, etc.); or (4) a combination of these reasons (APA, 2013). The restricting has to result in at least one of the following: (1) weight loss or failure to meet weight gains; (2) nutritional deficiency; (3) reliance on enteral feeds or supplements; or (4) causes significant impairment (APA, 2013). Unlike with AN, ARFID covers eating and feeding problems not associated with significant body image concerns or weight/shape control behavior, and cannot occur exclusively during anorexia or bulimia. These patients can realistically appraise their own body and often report they do not like being small and want to grow and gain weight. Instead of separating out organic vs. nonorganic problems, ARFID can co-occur with a medical condition, though the severity must be in excess of what one would expect from the medical problems alone (APA, 2013). ARFID can be distinguished from picky eaters, which is found in up to 21% of children, because with those who are picky eaters, growth is not affected and there is no significant impairment overall (Jacobi et al., 2008). More than half of patients who are picky eaters improve with no treatment at all within a few years (Jacobi et al., 2008). ARFID is more persistent and typically associated with more severe impairment.

The criteria for ARFID were created as a result of criticism of the previous DSM-IV diagnosis for feeding disorder of infancy and early childhood (FDIEC). With FDIEC, the criteria emphasized a failure to gain weight or weight loss, excluding those with other forms of significant impairment (Williams et al., 2009). Furthermore, FDIEC required a one-month time frame, which is thought to be redundant and excessive in a very young child; thus ARFID has no time frame cutoff. Previous studies demonstrated difficulty in distinguishing between organic vs. non-organic problems, showing a substantial number of infants thought to have a non-organic or psychological cause later ended up having an organic cause for not eating, such as oral motor dysfunction (Reilly et al., 1999). Thus, ARFID criteria permit a medical or organic diagnosis provided the feeding and eating difficulties are in excess of what one would except with the medical issues alone (APA, 2013; Kreipe & Palomaki, 2012). FDIEC was often confused with AN; thus ARFID clarifies the difference and that one cannot have a body image distortion with ARFID (APA, 2013; Kreipe & Palomaki, 2012). Perhaps one of the greatest criticism of FDIEC was the age cutoff of six years old, which was eliminated for AFRID because it is now known that feeding/eating disorders can occur at any age (Kreipe & Palomaki, 2012). Often the traumatic type of ARFID (i.e., post choking/vomiting) can occur at any age, while those with the sensory type can start out in childhood and persist long into adulthood (Kreipe & Palomaki, 2012).

Demographics and Literature on ARFID

Given that ARFID is a new diagnostic term and that eating disorder DTPs have primarily been utilized to treat patients with AN and BN, there is a paucity of literature examining treatment of ARFID both generally and in DTP settings. One study estimated the prevalence of ARFID amongst patients with EDs at 13.8%, with it being more likely to occur in males (around 29%, compared to 15% for AN) (Fisher et al., 2014). A second study confirmed this percentage, with around 14% meeting criteria for ARFID (Ornstein et al., 2013). Another

study showed a smaller prevalence of 5% (Norris et al., 2014), but studies suggesting a lower prevalence may be due to underreporting as these patients are frequently evaluated by PCPs who miss the diagnosis, which is a new term. Literature also provides that patients with ARFID tend to be younger (Fisher et al., 2014), around 12 years old as compared to 14-16 years old for AN. As explained in the criteria for ARFID, studies show these patients, unlike those with AN, do not have body image distortion or engage in intentional methods of weight loss

In terms of comorbidities, one study showed anxiety disorders were both highly prevalent in AN and ARFID (58% vs. 50%), with generalized anxiety disorder being the most common and AN and ARFID having similar rates of depression (Norris et al., 2014). Another study showed those with ARFID are more likely to have an anxiety disorder and less likely to have a mood disorder compared to AN (Fisher et al., 2014). Common comorbidities with ARFID in clinical practice mirror those seen with feeding disorders, which are commonly comorbid with ADHD, autism spectrum d/o, intellectual disability, as well as with OCD and anxiety disorders (Timimi, Douglas and Tsifsopolou, 1997). One study highlights that those patients with ARFID are actually more likely to have a comorbid medical condition compared to AN (Fisher et al., 2014). This study also found that the most common type of patients with ARFID are those who have been picky eaters since childhood (28.7%) whereas those with vomiting/choking phobia were less common at 13.2% (Fisher et al., 2014). Case reports also show patients with food selectivity and autism can develop rare nutritional deficiencies including scurvy (Ma et al., 2016). Specifically, a case report for an adolescent with ARFID has associated it with various nutritional deficiencies including vitamin A, E, K, D, and B12 and folate (Chandran et al., 2015), whereas those with AN typically are not deficient in vitamins and minerals.

While evidence supporting the efficacy of treatment of ARFID in a DTP setting is minimal, in clinical practice positive outcomes have been observed. The few pieces of literature that do exist regarding ARFID and DTPs mostly examine prevalence and are descriptive in nature. One recent study, a retrospective chart review of 7-17 year olds in a DTP setting showed 22.5% met criteria for ARFID (39/173) and supported previous literature that ARFID patients are younger and a greater proportion of them are males compared to AN. The study showed similar degrees of weight loss and malnutrition for those with ARFID compared to AN, highlighted the severity of this disorder, and supported utilization of programs of equivalent level of intensity used to treat other EDs. This study also showed the ARFID group was more likely to be reliant on supplements and have higher co-morbidities of anxiety, pervasive developmental, and learning disorders and were less likely to have co-morbid depressive disorders (Nicely et al., 2014).

Biological Treatment of ARFID in a Day Treatment Program

Similar to the other EDs, a team approach is best for treating individuals with ARFID. Because of growth failure and high comorbidities with medical problems (Norris et al., 2014), patients with ARFID require close medical monitoring. This may include laboratory testing, taking vital signs, graphing growth curves and in some instances further medical testing, based on the clinical condition of the Individual. DTPs, especially those that are affiliated with a hospital or have adolescent medicine or pediatric involvement, are well equipped to

monitor these patients closely in order to identify early signs of medical instability and to prevent further decompensation. While food is the best "medication" to treat ARFID, a role for psychiatric medication does exist. Generally, psychotropic medications may be indicated to treat the co-morbid conditions including anxiety and depression. Given the difficulties of finding a child psychiatrist, especially one able to accept and equipped to treat a patient with ARFID, DTPs are often the best place for these patients to obtain psychiatric treatment. ED DTPs have psychiatrists on staff, who can assess the need for medication treatment for patients with ARFID. However, often the role of a child and adolescent psychiatrist in an ED DTP is to minimize the use of psychiatric medication or taper these patients off of medications when psychiatric polypharmacy is being utilized, given the limited effectiveness of medications in treating EDs.

Compared to patients with ARFID, patients with AN are much more likely to be prescribed SSRIs (61% vs. 21%) and benzodiazepines (17% vs. 0%) (Norris et al., 2014). These prescription patterns may be a function of the fact that ARFID is a new diagnosis and there is little evidence available on the use of medications to treat it. In general, SSRIs are thought to be ineffective for AN patients due to their malnourished state, and this is thought to be true for patients with ARFID as well. That being said, ARFID can be highly co-morbid with anxiety and depression, and if patients come in at a normal weight, trials of SSRIs may be warranted. Sometimes refeeding alone can be enough to help improve these patients' depression and anxiety. Given daily observation, DTPs are often the best place to monitor these patients intensely to assess whether there is the need for an SSRI. A few case reports have described the use of fluoxetine in patients with ARFID that have been successful (Kriepe & Palomaki, 2012). The role of benzodiazepines in ARFID needs to be further examined. While in certain cases low doses can be helpful (i.e., .25-0.5mg lorazepam prn before a food exposure), often patients with ARFID are younger and, given their malnourished state, tolerability of lorazepam or clonazepam can be poor (i.e., disinhibition, sedation, dizziness, etc.).

Patients with ARFID often have a co-morbid diagnosis of ADHD. It is extremely difficult, however, to treat ADHD with a stimulant because of the weight loss and appetite suppression that would ensue. Frequently, alpha agonists are contraindicated as well in light of the hypotension and bradycardia associated with the medication. If weight gain proceeds continuously and impairment from ADHD is significant, DTPs can be a safe setting to slowly add back medication treatment for ADHD, with close monitoring of growth. MVI, vitamins, supplements (i.e., pediasures/ensures) might also play more of a role in ARFID given these patients have been found to have various rare nutritional deficiencies (Chandran et al., 2015). DTPs can also be good settings for adding food back into the diet of patients who have been solely reliant on supplements.

Psychological Treatment of ARFID in a Day Treatment Program

Behavioral interventions are essential in treating ARFID (Bryant-Waugh et al., 2013). Some strategies include pairing the fear foods with liked foods and/or a positive social experience. The use of a token economy, such as using star charts where the patient can earn rewards is helpful. A broad CBT approach with parental involvement has also been shown to be effective, especially for those with ARFID with co-morbid depression and anxiety

(Bryant-Waugh, 2013). Behavioral experiments involving food exposures can be worked on in individual sessions. During exposure therapy fear hierarchies should be created and exposure should be gradual from the least to the most feared foods. In patients with acute onset of ARFID, the behavior and fears can be rapidly extinguished, especially if the patients do their homework and parents make sure they practice the exercises at home. Biofeedback can be a helpful approach in individual sessions as well, especially for those patients with a choking phobia, to help them to gain control over their muscles (Kreipe & Palomaki, 2012). Part of CBT should include psycho-education that ARFID is a biologically based illness and that the brain is wired to only want certain foods and to be fearful of others. Often those with sensory issues can be described as supertasters, or for a child with a choking phobia, it should be explained they have an involuntary/unwanted reflex that can help clear and protect the airway but also makes it hard to eat, helping them to learn to relax. Groups in DTP can teach CBT skills including self-monitoring, cognitive restructuring, and anxiety management techniques. During multi-family and parent support groups, parents should be educated that their child might not ever be adventurous around food in order to set realistic expectations, but that treatment can help vary the child's diet, improve nutrition, and help with weight gain.

Family-Based Treatment (FBT) strategies can also be useful in treating ARFID. Empowering the parents to refeed their child is an important part of treatment not just for AN but also for ARFID. Additionally the therapist should empower the patient to be personally responsible for his or her own health and recovery. FBT strategies that are frequently helpful in treating ARFID include psycho-education and working with parents to help decrease blame, and externalize the illness, which is included in CBT as well. In the past, parents were erroneously considered to be the cause of their child's feeding problems. At this time, it is very important to dispel this myth and explain that the family's relationship problems might actually be a result of the child's eating problems. The therapist can coach parents to remember how they were successful in getting their children to transition from formula to solid foods and gradually widening their diet when they were much younger. It is useful to have parents recall strategies used to get their toddler to eat certain foods, such as pairing a small amount of the preferred food and gradually increase the un-preferred food with it (e.g., one pea in a bowl of mac and cheese) (Chatoor & Ganiban, 2003). Modeling eating new food is also very important at family meals (Chatoor & Ganiban, 2003). Thinking back to toddlerhood, it is challenging for toddlers to resist food that parents and older siblings enjoy. With younger children, parents can pretend to not give them the food to make them want it even more (e.g., this is mommy or daddy's' food. You can't have it....fine, I will give you just a little piece). Parents should stay neutral and calm whether the child eats the food or not. When parents react to the child refusing the food, often the fear food can be rapidly generalized and the child will not be willing to try anything else from the parents' plate (Chatoor & Ganiban, 2003). One challenge in the FBT approach for patients with ARFID is that often these children have had developmental disabilities and the parents never had that success in getting them to eat early on, which adds an extra challenge in treatment.

Individual therapy should not be the sole form of treatment for ARFID. However, DTPs allow for individual sessions in addition to group and family sessions, and these can be used to focus on psycho-education and identifying the child's worries and their priorities and goals in treatment. Frequent concerns include being teased in school as a result of their eating, worrying about fainting, not being able to play sports, and being small/not growing, etc. Sessions can help patients identify the consequences of their eating behaviors and assess their

willingness to try new foods and new ways of eating.

Nutrition counseling is also helpful and is incorporated into DTPs. Those with ARFID often respond well to education about different foods (e.g., for those who like sports, emphasize that these foods will help them grow stronger to run faster, etc.). Those with sensory issues often respond well to a food exploration approach that utilizes the five senses (e.g., describing what the food looks like, touching it, smelling it, starting out by taking a lick and then a bite, and describing what it sounds like when being chewed, etc.) (Mustonen & Tuorila, 2010). While there is little evidence that touching or smelling the food reduces the fear—only repeated exposures by actually taking bites and swallowing the food does—at times using the other senses helps get the patient to take a bite of the food.

Social Treatment of ARFID in a Day Treatment Program

DTP programs excel at addressing the social factors contributing to and perpetuating EDs, particularly for patients with ARFID. Addressing these social factors, such as struggles with parental and sibling relationships, is accomplished by using an FBT informed approach within the DTP setting, including by having family meals and sessions, multi-family meals and meetings, and parent support groups. Siblings are also included in the DTP setting and are encouraged to act as cheerleaders, but not to act as parents, as described in FBT. Furthermore, when siblings are involved in the DTP treatment, underlying issues of jealousy and competition for parental attention can be addressed, thereby improving the siblings' relationship. Meeting other siblings in the multifamily forum can also prove helpful.

Additional social factors contributing to and perpetuating the ED include struggles with peer relations and being teased or bullied in school. Observing their social struggles and helping to improve their social skills and ability to foster friendships in the DTP setting is of utmost importance. Often those with ARFID and co-morbid autism spectrum disorder particularly benefit from the social skills training incorporated into the group setting in the DTP. Social exposures are often incorporated into the treatment for those with ARFID and co-morbid social anxiety (i.e., they go on trips to the cafeteria and order food for themselves with guidance from staff). DTPs are ideal settings to gradually help transition these patients back to school to make sure they can continue to eat and gain weight there.

Academic struggles can also be a stressor contributing to ARIFD, as many of these patients have co-morbid ADHD and learning disorders. Observing these patients in the school setting within the DTP can help identify their needs better. Typically DTP Teams are knowledgeable in advocating for IEP/504 plans to be initiated or modified, and DTP Teams can be in close contact with the patient's school (provided the parents give written consent).

Likewise, having low self-esteem is a significant contributing and perpetuating factor for ARFID. DTPs are optimal settings for helping patients build their lives outside of the ED. Patients can discover new hobbies in the DTP setting either via various art therapy and recreational groups or as a result of the encouragement given to parents to enroll their children in school and community activities; in turn this enables patients to develop confidence and enjoy pleasurable activities again.

It is often useful to involve case management upon discharge from DTP. Patients typically have numerous follow-up appointments when they leave the program (e.g., psychiatry, psychology, nutrition, medical, etc.) and case managers can help arrange these

appointments and ensure follow-up. Intensive case managers (ICMs), are particularly useful for patients with a history of treatment non-compliance, and ICMs can often do home visits and help patients get to outpatient appointments when parents are struggling with doing so. Involving ICMs early on during a patient's DTP stay can be useful as well in cases where parents are struggling to get them to attend the program daily.

Benefits of Day Treatment Programs for ARFID

While little is known about the treatment for ARFID because it is a new diagnosis, it is imperative, as with any psychiatric disorder, to think about treatment from a biological, psychological, and social standpoint. Given the comprehensive treatment available in DTPs, they can provide treatment in one setting targeting all three areas. Though ARFID can often be chronic in nature, these patients can sometimes rapidly decompensate to complete food refusal, resulting in medical instability and requiring a medical hospitalization or a psychiatric eating disorder hospitalization if medically stable yet unable to eat. While we have little evidence to date of the effectiveness of DTPs in treatment of ARFID, in clinical practice they seem to both prevent hospitalizations and help patients to transition to outpatient treatment when being discharged from a hospital (Golden et al., 2015). Based on clinical experience, DTPs can be helpful in treating ARFID regardless of the nature of the food refusal. For example, in chronic cases of those with sensory/textural issues, depending on how longstanding and severe the problem is, an intense daily program targeting the ARFID from all perspectives can often aid the patient in adding new foods to their diet and improving variety and weight gain. Often lengthy DTP stays are required to make improvement in patients who have been struggling with ARFID since birth. While one might argue good weekly exposure therapy is effective in acute onset ARFID due to choking/vomiting phobia, often times these patients can rapidly improve within one to two weeks of exposure therapy (Kreipe & Palomaki, 2012) in a DTP setting. In our experience DTPs allow for very intense, repetitive exposures, in which success can be mastered fairly quickly, especially when parents are actively involved in the DTP setting and they practice these food exposures at home in the evenings and on weekends. In reviewing the previously discussed treatment strategies, one can see how DTPs can be particularly useful in treating ARFID.

Challenges Caring for Patients with ARFID in a Day Treatment Setting

While there are many benefits to treating patients with ARFID in a DTP, there are also many challenges, particularly when the DTP contains patients with a mix of EDs. Some challenges are a function of demographics (i.e., patients with ARFID are more likely to be male and younger than patients with AN or BN) (Fisher et al., 2014). For example, if the number of males in the milieu is small, these patients may feel awkward and out of place due to both their gender and their diagnosis, potentially impacting their self-esteem. Furthermore, most groups in a DTP setting are geared towards adolescents. As a result, younger patients with ARFID may struggle to understand the content of the groups and may require more frequent breaks and/or that play-based treatment be incorporated. Additionally, parents often worry about their younger child being exposed to the negative influences of adolescents in the

program and/or ED behavior that their child with ARFID does not exhibit. Many groups focus on body image issues (e.g., CBT groups help patients reframe negative thoughts about their bodies), coping skills, and behaviorally-based strategies to avoid engaging in restricting, binging, and purging, all of these issues are less relevant to patients with ARFID. In addition, DTPs are often limited in size and staffing, making it difficult to have two groups running at the same time (i.e., one for ARFID and one for AN/BN) or have a one-on-one session with the patient with ARFID instead.

The psychiatric co-morbidities associated with ARFID often make it difficult to treat in a general ED DTP. For example, patients with ARFID often have ADHD that cannot be treated due to their low weight or vital sign abnormalities. As a result, these patients struggle with sitting through an entire group and/or listening to, and benefiting from, the information taught. Similarly, those with ARFID are often on the autism spectrum or have an intellectual disability that renders them unable to benefit significantly from the group therapy. While the DTP's social benefits are arguably one of their most important aspects, patients with ARFID who struggle socially due to autism spectrum disorder or social anxiety often do not fit in well with their peers, which can further lower their self-esteem. Sometimes these complications even pose a milieu problem because patients with AN/BN feel irritated or easily annoyed by those with ARFID and autism spectrum disorder and/or ADHD, and they will consequently withdraw from the milieu or the program.

Meals for patients with ARFID in a mixed ED setting can also pose challenges. The rules are typically much different for these patients than for those with AN and BN. Most of the time patients with ARFID are allowed to bring their own food from home, starting out with the easiest foods to eat on their fear hierarchy and gradually including more difficult fear foods in small amounts; often their diets are very limited in variety at first. By contrast, those with AN/BN cannot bring in food from home initially and typically they have to work their way up the level system to earn privileges to bring in meals from home or go home early for dinner; and variety is emphasized in the meal plan for those with AN/BN early on. Additionally, while patients with AN/BN are expected to complete 100% of their meal within the allotted time (i.e., 30 minutes for main meals, 15 minutes for snack), patients with ARFID are often allowed to be in control when eating fear foods and sometimes will be permitted to eat just a single bite of a feared food. In fact, those with ARFID may sometimes be allowed to spit out the feared food if they are unable to tolerate it, as a first step towards helping them feel comfortable with putting new foods in their mouth. Yet this kind of spitting behavior would not be accepted for patients with AN/BN. Also, meal time limits are often more lax for those with ARFID and extra time is allowed to complete the meal, especially when eating challenging foods. And unlike their peers with AN/BN, those with ARFID are often allowed to drink small amounts of water given there is less concern of water loading to falsify their weight.

In terms of other rule differences, often those with ARFID do not need to have supervised bathrooms trips as there is no concern of them vomiting, exercising in the bathroom, or water loading. This often leads to their peers with AN/BN being jealous of them and resenting the different set of rules they need to follow, which in turn creates hostility by those with AN/BN towards patients with ARFID and against staff as well.

Intensive treatment for those with choking/vomiting phobic type ARFID can lead to a quick recovery when caught early. Thus, sometimes these patients have a shorter length of stay and move up in the level system faster in the DTP setting. This poses another challenge

as it can lead to animosity from other DTP patients, typically those with AN who can be in a program for many months and who struggle with seeing peers leave before they do.

Modification of a Day Treatment Milieu for Patients with ARFID

While it requires a slightly different approach, it is quite feasible to care for patients with ARFID in a mixed milieu DTP setting, which includes patients with AN/BN. Although no evidence-based guidelines currently exist concerning how patients with ARFID should be treated generally (or in a DTP setting), we have found the following strategies helpful in our program. First, success in a DTP setting for these patients often requires more one-on-one work and individualized sessions. In addition to individual sessions by psychiatrists and psychologists, social workers, nutritionists, art therapists, etc. can also have individual sessions with the patient. This can often prove more beneficial to patients with ARFID compared to the group sessions. Additionally, involving parents more frequently than the typical one family session per week has been beneficial to these patients, who are often younger. Likewise, given their age and psychiatric co-morbidities, it is often more reasonable to expect patients to participate only in half of a group. It is often feasible at times to work with insurance companies to truncate days and make them shorter so as to be more age appropriate. Further, it is helpful to focus groups on CBT and coping skills rather than strictly having groups on body image when patients with ARFID are present so that they may benefit from group therapy as well (Bryant-Waugh, 2013). These patients can simply be pulled out of groups focusing on body image or other groups that might be above their age/skill level (e.g., certain CBT or DBT groups) for one-on-one sessions instead.

Those patients with ARFID often respond well to the use of behavioral charts, motivating them to participate more in groups and mealtimes. Staff can work these behavioral charts into groups every 15 minutes to help patients focus (e.g., by giving patients points/stickers/etc.). Staff can also find a confidential area in an office to keep the patients' charts so that they can leave the group room accompanied by staff to take a break and put the stickers on their chart and be reminded of what prize they are working towards, while also receiving some brief oneon-one attention. Notably, prizes have to be individualized for the patient. Given the comorbidity of autism spectrum disorder, at times patients have very fixed areas of interest, so rewards should be targeted to these areas (e.g., rewards might include printing out facts about their favorite amusement park, permission to sing/listen to their favorite song, playing with Lego or puzzles, etc.). Though short-term or more immediate rewards are typically best, certain patients are motivated to work towards a larger goal (e.g., a trip to the gift shop to pick out an item of minimal value or sometimes parents are willing to facilitate a large reward such as a video game). Often, we have found the children want to work towards obtaining a pet at home, which is generally discouraged because it often only creates more conflict as parents then have someone else to care for and clean up after in the home. That being said, our program does offer pet therapy, and extra time with the animals can often be worked into the program as a reward.

More generally, for patients with ARFID to be successful in a mixed ED DTP setting, it requires creating a culture of tolerance amongst all patients. All patients should be educated in groups about various ED diagnoses and treatments and zero tolerance of bullying should be allowed. Often these patients do well in-group settings that focus on their similarities with

peers rather than their differences (i.e., everyone struggles with the fear of eating but for different reasons, everyone has struggled at one point socially or been teased in school, etc.). In order to minimize upsetting patients with AN/BN and to make patients with ARFID feel most comfortable, food exposures, especially the top fear foods, should be saved for one-on-one sessions, so that if patients need to spit out food it is not done around others. It is best to be open, honest, and upfront about the difference in mealtime and bathroom rules and explain why they are different. While patients with AN/BN still might not agree or be content with these rule differences, they do tend to appreciate having being treated with respect by having the rules explained to them.

While treating patients of different ages and diagnoses can prove challenging, we have often found that it can benefit both patients as older peers tend to look out for younger or more socially challenged ones and sometimes will take them under their wing and try to guide and motivate them, which in turn can increase the self-esteem of both individual. In fact, older patients often want to serve as role models and are therefore on their best behavior around younger peers. To put parents of younger children with ARFID at ease, we always explain to them the positive experiences we have had mixing patients of various ages and diagnoses and reassure them that their children are not left alone unsupervised and that a lot of one-on-one and family work will be done with their child in addition to the group work.

ARFID Vignette

Patient is a nine year old, Caucasian male, in fourth grade regular education, with a past psychiatric history significant for ADHD, hoarding, social difficulties, and sensory/textural issues with food resulting in poor food intake. He was reportedly a picky eater since he was two years old, and he was always underweight. He did not like how most foods tasted and felt nervous around food, with certain limited exceptions, such as candy and Kraft American cheese slices that were wrapped in plastic. Meat and vegetables were particular fear foods. He would take home his school lunches and hide them under his bed, as he did not feel comfortable throwing them out due to his hoarding issues. He denied any fear of gaining weight and felt sad about being smaller than his peers. He denied any history of binging/vomiting/diet pill/laxative/diuretic use/etc. or eating non-food items/rumination of food. His maximum weight was 72 pounds (height 4'5") though his target weight was in the 80's. After struggling with eating on a family vacation, which his parents described as sensory overload for him, his weight dropped to 67 pounds and he was admitted to our DTP. He had some social anxiety and struggled picking up on social cues from others. He would hoard trivial items and would become very upset when his parents tried to throw away broken items in the home. He displayed classic ADHD symptoms, including hyperactivity and inattentiveness.

He previously had outpatient therapy including a feeding program at six years old, though he had no previous inpatient psychiatric or medical hospitalizations upon presentation. He had previous trials of methylphenidate, atomoxetine, and melatonin to combat the sleep problems when on stimulants. All stimulants caused worsening appetite, weight loss, and worsening irritability and mood swings. Though chronically underweight, he had no known health problems. There was an extensive family psychiatric history significant for bipolar disorder, OCD, anxiety, depression, substance use, and a distant relative committed suicide.

He had an older sister, 11 years old, who was also underweight due to fears of germs and vomiting. His developmental history was within normal limits excepted for social struggles, including poor eye contact and areas of interest not common for children his age. He previously had a 504 plan for his ADHD.

He was initially referred to DTP by adolescent medicine. Parents would not agree to admission after an initial intake but agreed a few weeks later after he remained at 67 pounds. They removed him, though, two weeks later to go on a vacation after minimal progress. By that point, he had not yet gained any weight, but he had broadened somewhat the variety in his diet. Parents brought him back to DTP a week later. A mixture of a CBT/exposure based therapy, combined with an FBT informed approach was used. He was a challenge to manage in groups due to his ADHD and hoarding. To help him function better in group, a low dose of short-acting stimulant was introduced (methylphenidate 5mg was started and increased to 10mg). Upon tolerating the methylphenidate, he was switched to methylphenidate ER (18mg daily) and he functioned better in groups and schools. His weight increased from 67 pounds to 70 pounds in three weeks, and he ate better at home. As a result, his parents requested discharge.

However, a few months later, he was admitted as an inpatient to the hospital for food refusal that resulted in his weight loss from 72 pounds to 67 pounds. Thereafter, he was motivated to eat by using a behavioral chart with stickers to earn trips to the gift store, video game time, music time, etc. His methylphenidate ER had previously been increased as an outpatient to 27mg PO daily but was discontinued upon admission to help him to eat better. He was discharged at 70 pounds, ten days later with follow up at DTP again.

During his DTP admission, he continued gaining weight, varied his diet, and learned to eat new foods including bagels with butter and peanut butter sandwiches. While his primary diet consisted of the foods he loved, such as McDonald's fries and milk shakes, parents worked on pairing his favorite food with fear foods (e.g., he had to have a cheeseburger with his fries, eating meat for the first time, he had to eat a string bean to obtain a brownie, and parents substituted chocolate pediasures for chocolate). An FBT approach helped empower parents to set limits and feed him the food he needed to be healthy. They were able to add more protein, fruits, and vegetables into his diet. As his treatment progressed, he began to take ownership of his recovery and was able to pick healthier foods and combine foods together. This FBT approach helped parents to be more positive, which led to more success and seemed to help sister as well, who was referred to adolescent medicine for evaluation. Mother was also successful in using a behavioral reward chart at home to motivate him. Individual family meals as well as multi-family meals were utilized. He remained off of his methylphenidate ER. Hyperactivity seemed to improve somewhat with refeeding, but inattentiveness persisted and parents disagreed over the use of a stimulant re-trail or an SSRI to help with his anxiety and hoarding. At 78 pounds, he was stepped down and allowed to return to school twice a week to help him to re-integrate gradually. He was discharged a week later after he reached his target weight of 80 pounds. An ICM through SPOA was obtained to help ensure compliance with appointments, and the team helped his mother write a letter to the CSE to obtain a 504 for patient. It should be noted, however, that he did briefly return to DTP for a few days approximately one year later after his food intake briefly declined after sensory overload during another family vacation, though his weight was still maintained in the 80s.

ATYPICAL ANOREXIA NERVOSA

Atypical Anorexia Nervosa (DSM Criteria and Evolution of the Diagnosis)

Literature on the new term "atypical anorexia nervosa" (atypical AN) is limited. In previous literature, the term was used to describe odd presentations of AN, such as AN occurring in those on the spectrum or in those with a medical illness, which would now be diagnosed as ARFID (APA, 2013; Kreipe & Palomaki, 2012). Often the term atypical AN was used to describe those with AN who did not report any body image distortion or fear of weight gain (Dalle-Grave et al., 2008), which are no longer required for a diagnosis of AN in DSM-5 (APA, 2013). When patients did not meet at least one of the diagnostic criteria for AN in DSM-IV (e.g., amenorrhea or weight below the 85% IBW cut-off), sub-threshold AN would be diagnosed under EDNOS (APA, 2000; Thomas, Vartanian, Brownell, 2009). Those with this diagnosis often were not monitored as closely as those with AN, and at times insurance would not cover these patients to receive treatment in a DTP.

Obesity is a massive problem in our country, as well as worldwide. Unfortunately, it does not only affect adults. Almost 16.9% of kids 2 to 19 years old are obese, with 8.1% of infants and toddlers having a high weight as well (Ogden et al., 2014). Surprisingly, evidence-based treatment for obesity is limited. The new term, atypical AN, found in DSM-5 under the "other specified feeding or eating disorders" (OSFED) category, refers to patients who typically start out as obese or overweight and lose a large amount of weight by engaging in ED behaviors though their current weight is still not significantly abnormal (APA, 2013; Forman et al., 2014). Atypical AN patients present as overweight or normal weight given their height, age, and sex, but their history is essentially identical to that of someone with AN in that they restrict their eating to minimal kcals daily, may exercise for hours per day, are highly preoccupied with their body image and weight loss, and may engage in binging and purging behaviors as well. Patients with atypical AN exhibit classic AN behaviors, including losing a large percentage of their body weight, yet are still normal or above normal weight because their weight started out as overweight or obese. In DSM-IV, these patients ended up in the EDNOS category and would have been called sub-threshold AN, a term that included other categories of patients such as those who met all criteria for AN but still had their periods or those did not report any fear of gaining weight (APA, 2000). Like with EDNOS, for OFSED, significant distress or impairment in social, occupational, or other areas of functioning must also be present and full criteria for any of the other ED diagnoses cannot exist. Also like EDNOS, OSFED includes examples of situations that can meet the diagnosis. OSFED includes atypical AN as well as sub-threshold bulimia, sub-threshold BED, purging d/o, and night eating syndrome (APA, 2013). Therefore, while atypical AN was described in DSM-IV under the EDNOS category, it now possesses its own name and separate subcategory in OFSED, which is useful in calling more attention to this important presentation. Atypical AN is thought to be more prevalent than AN (Stice et al., 2013), but its diagnosis is more likely to be missed because these patients present at a normal weight or overweight.

The weight criteria were problematic for the diagnosis of AN, especially for children and adolescents who often do not present with the same chronicity as adults (Thomas, Roberto, Brownell, 2009). While the DSM-IV weight criteria were never meant to be interpreted literally, in practice, most clinicians and certainly insurance companies adhered to these

guidelines. The suggested 85% IBW cut off criteria for the diagnosis of AN did not apply well to children or adolescents, who could still suffer serious health consequences with lower amounts of weight loss (Thomas, Roberto, Brownell, 2009). Further, this weight suggestion failed to take into account age, sex, and developmental norms. Studies show that amongst the previous EDNOS group that the most common reason for a patient to be diagnosed with sub threshold AN was that the weight cut-off was not met (Watson & Andersen, 2003). One study showed that the prevalence of AN would increase significantly if the old cut off criteria were changed from 85 to 90% IBW (Thaw et al., 2001). By eliminating the weight cut off (and amenorrhea) criteria for AN in DSM-V, more patients should receive a diagnosis of full blown AN than before. Nonetheless, atypical AN is much more common (Stice et al., 2013) given the large prevalence of those who are overweight and that one must still be significantly underweight in order to receive a diagnosis of AN in DSM-5.

Despite the weight difference between AN and atypical AN, few other differences exist. It has been shown that those with sub-threshold AN can be just as impaired as those with AN (Swanson et al., 2011), and the same is thought to be true for those with atypical AN. The distorted body image criteria might be different for those with atypical AN since these patients often see themselves as being overweight and typically others in society view them this way as well. Unfortunately, these patients often receive the message that they need to lose more weight, which further strengthens the illness. While neither those with AN nor those with atypical AN typically want help, one difference noted in clinical practice is that those with atypical AN feel less entitled to help since they think they are not as good or as sick as those with AN and thus feel unworthy of treatment.

While there is a common misperception that EDNOS or OSFED is less serious than AN, more similarities than differences exist. Like with AN, those with atypical AN have an intense fear of gaining weight or persistent behaviors interfering with weight gain (APA, 2013). Both typically lack recognition of the seriousness of the weight loss. It is critical to acknowledge that both can have severe medical complications from the ED. Often those with atypical AN present as sicker upon admission because the illness went unnoticed for so long, as AN is often diagnosed sooner. On one hand, the long-term complications of being overweight can be devastating. On the other hand, the unhealthy manner in which the weight was lost, or the ED behaviors that were used to lose the weight, not to mention the severity of the thoughts about their weight and body, make atypical AN a serious disorder.

Distinguishing between AN and atypical AN can be challenging at times due to the elimination of the IBW cut-off for AN. There are age, sex, cultural, and personal norms which can contribute to the judgment call if someone is of significantly low weight and receives a diagnosis of AN or atypical AN. A healthy weight can differ by individual, so that two individuals can be at the same height yet one can be healthy and the other unhealthy at the same weight. Furthermore, certain institutions or insurance companies still use their own cutoffs for AN and atypical AN. It should be noted that the CDC uses BMI percentiles for children and adolescents and that those in the 5th to 95th percentile are considered normal (CDC, 2015), though those with atypical AN can have a higher BMI percentile yet still have lab and vital sign abnormalities and subjective signs (e.g., low energy/hair thinning) indicative of malnutrition. One study showed discrepancies were possible within a 15-pound weight range for females and a 25-pound weight range for males for diagnosing AN vs. EDNOS, depending on what site the patient was at (Thomas, Roberto, Brownell, 2009). Many argue that, with the exception of the weight, atypical AN or subthreshold AN, and AN

are barely distinguishable, are the same disease, and should be treated as such (Le Grange et al., 2013). The rationale for lowering the threshold for AN was that the sub-threshold cases did not differ in terms of psychological co-morbidities or psychopathology, medical complications or prognosis (Le Grange et al., 2013). The utility of separating out atypical AN from AN has yet to be seen. In clinical practice those with atypical AN with fragile self-esteems often struggle with receiving a diagnosis with the word "atypical" in it. Thus, further research on this diagnostic term is needed.

Biological Treatment Atypical AN in a Day Treatment Program

Despite the fact that patients with atypical AN are overweight, weight gain is every bit as important a treatment goal for them as it is for those with AN. Day treatment programs are optimal places for rapid weight gain, as studies have shown that patients typically gain approximately 2 pounds per week in a DTP setting (deGraft-Johnson et al., 2013). That said, it may be more difficult for patients with atypical AN to tolerate weight gain in a DTP where they are surrounded by peers of a much lower weight. Often other physicians and insurance companies struggle with understanding the need for weight gain in this population, sending mixed messages to these patients. At times it is difficult to obtain insurance coverage for DTPs because reviewers perceive the patient's weight to be normal. However, it is anything but normal for a child or adolescent to have lost half of his or her body weight in a few months, as many of these patients do.

Those with atypical AN are in a relative state of emaciation. Determining a patient's target weight can be particularly difficult as the standard IBW estimates (for a female, 100 pounds + 5 pounds for each inch of height over 5 feet) (Peterson et al., 2016) do not apply. Looking at previous growth curves, however, can be useful in determining target weights. For example, if the adolescent was always at the 95th percentile but she dropped to the 70th percentile, notwithstanding the fact that she may appear to be at a normal weight, she often has to gain weight back to the 95th percentile in order for her vital signs to stabilize and for her periods to return. Often the target weight cannot be known ahead of time, and the patient simply has to be re-fed and gain weight to determine the precise number at which medical stability can be achieved and ED thoughts have resolved. In fact, further weight gain is often needed not just to regain medically stability but to clear up the patient's thought process and to help improve depressive/anxiety symptoms.

One strategy in refeeding patients with atypical AN is to start with a 2000 kcal diet and focus on normalizing eating behavior. Some patients will gain weight on a 2000 kcal diet due to the slowing of their metabolism by the ED. If they gain rapidly on 2000 kcals, lowering kcals below this number is inappropriate because the body is simply trying to return to its set point. More importantly, lowering the kcals number can trigger binging/purging. From a psychological standpoint, the more the kcals are lowered the more patients receive the message that they are eating and gaining too much, which can then cause patients to start restricting again. It should be noted that, in order to gain the weight back, patients with atypical AN often require a large number of kcals (3000+) for weight gain, as do patients with AN. However, like those with AN, those with atypical AN who have lost a large amount of weight often need to be started on a low number of kcals at first in order to minimize the risk of refeeding syndrome. Disruption of exercise and physical activity should be an initial

treatment goal (Lock & Via, 2015) until a stable weight is achieved (Yager, 2005). After steady weight gain is cleared and patients are medically stable, light, supervised activity can be considered to help with depressive/anxiety symptoms and to slow down weight gain if it becomes too rapid. This should be monitored carefully, however, as it may trigger ED behaviors. Indeed, it is important for physicians to closely manage the weight of patients with atypical AN into the future, as sometimes patients may need to lose weight at some point (though this is not recommended for many years out of concern that these patients are unable to lose weight in a healthy manner and the ED may be triggered again).

In terms of the use of psychiatric medication for treatment of atypical AN, very limited research exists. In terms of treatment for AN, studies have shown that, in the acute, malnourished state, SSRIs do not appear to be helpful for weight-gain purposes or for treating depressive/anxiety symptoms (Attia et al., 1998). But for adults with bulimia nervosa, fluoxetine is FDA-approved and strong evidence exists that it helps decrease binging and purging and helps improve depressive symptoms as well (Levine, 1992). Some evidence also exists that fluoxetine is helpful for adolescents with BN (Lock & Via, 2015). This leads one to wonder if SSRIs may be more effective in atypical AN given that these patients are at a higher weight, like those patients with BN. Given that these patients are in a relative malnourished state, however, SSRIs may not be effective. As no evidence-based treatment exists for treating atypical AN, use of medications should generally be limited. In clinical practice, though, those with atypical AN, some of whom may have also engaged in binging/purging and/or are significantly depressed or anxious, SSRIs may be of help. SSRIs should only be initiated if the patient has minimal or no GI symptoms (due to the risks of SSRIs worsening GI symptoms) and if informed consent is given for the limited use of these medications. Unfortunately, the percent body weight or ideal body weight at which SSRIs will be effective is unknown. As always, the risks and benefits of using SSRIs should be carefully weighed. For example, if the patient has active suicidal ideation, the risk of not treating the issue seems likely to outweigh the risk of side effects or potential ineffectiveness.

There is some evidence, mostly in the form of case reports and open label studies, for the use of atypical antipsychotics (mainly olanzapine) in treatment of AN for adolescents (Boachie et al., 2003, Dennis et al., 2006, Powers et al., 2002). To date, meta-analyses do not show the effectiveness of their use (Dold et al., 2015). Further, their use should be cautioned against in atypical AN due to the potential for large weight gain and the risk of metabolic side effects, which can trigger the ED again. Given that patients with EDs are already at risk from a cardiac standpoint, appropriate screening (i.e., checking QTc on EKGs, lipid panels, fating glucose, HbA1C) and monitoring in this population should be performed if atypical antipsychotics are initiated.

Psychological Treatment of Atypical AN in a Day Treatment Program

While typically refeeding is the first step that is necessary for the therapy to work, many parents struggle with understanding this and instead want the therapy to change their child's thinking first in order to get them to accept food and weight gain. While limited evidence exists for therapy for AN other than a family based treatment (FBT) approach, refeeding patients is often done alongside other therapy approaches. In a DTP setting, various groups exist throughout the day that attempt to target the ED from all angles, including FBT for

educating parents, cognitive behavioral therapy (CBT), dialectical behavioral therapy (DBT), interpersonal therapy (IPT), cognitive remediation therapy (CRT), acceptance commitment therapy (ACT), etc. to help the children and adolescents to cope better.

FBT has the strongest evidentiary support for helping those with AN gain weight at follow up compared to individual therapy (Couturier et al., 2013). It typically works well for those less than 18 years old who have been sick for less than 3 years (Russell & Treasure, 1989). In contrast, we do not necessarily know which, if any, treatment works best when treating atypical AN. Given that patients with atypical AN do not appear emaciated and potentially may suffer less effects on their brain from starvation, one may wonder if therapy will help these patients to eat better. Future studies may show more of a role for therapy in atypical AN, as it does for BN. However, we also know these patients are in a relative state of relative emaciation compared to their original weight, and, given the acute and severe nature of their weight loss, their cognitive capacity can be the same or worse than someone with AN, consequently limiting the effectiveness of therapy. Thus, studies are needed to examine their cognitive capacity and the effectiveness of different therapies for atypical AN.

Though limited evidence exists for the effectiveness of treatments for atypical AN, our DTP relies on an FBT-informed approach for treating all eating disorders. It typically can be the most appropriate starting point because parents should always be given the benefit of the doubt that they possess the skills to refeed their child with some guidance. Given that those with atypical AN need to gain weight, it seems natural that FBT would be a useful starting point to help these patients. The FBT manual for BN utilizes more of a collaborative approach with patients' family given that BN is typically more ego dystonic and patients are often more motivated for treatment (Lock & LeGrange, 2007). Thus, future adaptations of FBT for atypical AN should be examined. In clinical practice, an FBT for atypical AN modeled after the AN approach, rather than BN approach, is more appropriate because strict parental control is needed (Lock & LeGrange, 2013). Often those with atypical AN are even more resistant to and fearful of gaining weight, as they have memories of being severely teased due to their current and previous maximum weight.

Additionally, although not formally studied, various forms of group therapy exist in an ED DTP setting that have proven helpful when treating these patients. Some patients with atypical AN have dabbled in binging/purging and have a lot of cluster B traits and self-injurious behavior. These patients benefit highly from DBT, which helps them with distress tolerance. CBT-E (enhanced cognitive behavioral therapy for EDs) is the gold standard for BN, and interpersonal therapy (IPT) is the only therapy that rivals it (NICE, 2004). Evidence exists that both help with binge eating disorder (BED) as well. Given that those with atypical AN often appear to have a normal weight and often can engage in some binging/purging, these other therapies may be useful as well.

Few studies guide the treatment of individuals with OSFED, Other Specified Feeding or Eating Disorder, a term that includes atypical AN. We do, however, possess some evidence regarding which therapies are effective for the ED NOS group in DSM-IV (Fairburn et al., 2009; Murphy et al., 2010), which OSFED resembles. CBT-E is thought to help with EDNOS and OFSED (Fairburn et al., 2009), though CBT-E is known to be less effective for the acute phase of AN when the brain is starved, which raises questions as to how effective CBT-E is for atypical AN. CBT-E is aimed to target the cognitive disturbance in eating disorders (i.e., the over-evaluation of eating, shape, and weight), and modifying sustaining factors such as perfectionism, core low self-esteem, mood intolerance, and interpersonal difficulties. CBT-E

showed effectiveness in two studies (one on adults and one on kids) in patients with AN who were underweight over a prolonged follow-up period (Fairburn et al., 2013, Dalle Grave et al., 2013). Therefore, one can hypothesize that CBT-E may be effective for atypical AN given that common mechanisms are involved.

Social Treatment of Atypical AN in a Day Treatment Program

Social treatment for atypical AN is primarily the same as for all EDs, in that building the patients lives up outside of their ED is of utmost importance. Adolescents with atypical AN greatly benefit from self-esteem building activities, including finding areas of success whether it be through new hobbies, excelling in an area in school, getting a job, feeling more independent, making new friends, etc. DTPs are optimal environments to help jump-start many of the above goals. As with all EDs, given the complexity of the illness and its high acuity, multidisciplinary treatment is a must. This requires multiple follow-up appointments with various specialties including adolescent medicine, pediatricians, psychiatry, psychology, nutrition, dentists, etc. Those with atypical AN frequently have even more follow up appointments as many have seen specialist such as endocrinologists for premorbid thyroid, growth hormone problems, weight problems etc. Involvement of intensive case managers can be crucial to coordinating all of these appointments and ensuring insurance coverage and compliance. DTP staff members are well trained in advocating for case management services to help these patients and their families. Unfortunately, in situations where parents do not take atypical AN or other ED diagnoses seriously and they are non-compliant with DTP and/or medical appointments, often the Administration for Children's Services (ACS) or Child Protective Service (CPS) need to be involved out of concern for neglect.

Benefits of Caring for Patients with Atypical AN in a Day Treatment Setting

While one might argue for a separate program for patients with atypical AN to protect them from being rejected by peers with AN or from being triggered by those who are thinner than they are, a mixed program is more prevalent in practice and offers many benefits to those with atypical AN. Indeed, having a mixed DTP setting can help those with atypical AN learn to eat in various situations, such as with others who eat more or less than they do and with those who weigh less. If those with atypical AN can learn to have a positive experience interacting with peers who weigh less, it can foster tolerance on both ends. Additionally, it can boost patient confidence and help them learn to build friendships with others who weight less than they do, which will be useful for when they return to their original school. Further, those with atypical AN can benefit more from being in a mixed DTP with patients with AN than they can from being in a separate program with only obese or overweight patients where the focus might be on binge eating disorder (BED) or Bulimia Nervosa (BN). Programs focusing on BED or BN typically have more of a CBT approach and have different rules, whereas those with atypical AN need help with the restricting first and foremost and do need to gain weight. Those patients with atypical or sub-threshold AN have much more in common with patients with AN than those with other EDs (Le Grange et al., 2013), and require a similar treatment.

Challenges of Caring for Patients with Atypical AN in a Day Treatment Setting

Many challenges exist in caring for patients with atypical AN in a DTP setting. When mixing patients with atypical AN with patients with AN, patients with atypical AN are often triggered and ashamed and have to face their fears of not feeling good enough and being a "failure" at having an eating disorder when they see peers who are thinner. Often peers tease them. Sometimes even other patients' parents will make comments that these patients do not seem to belong and question why they are admitted to the program when they do not look thin like their child. Those with atypical AN compare themselves to those with AN and especially compare their food. While they struggle with eating more kcals than their peers, they can struggle with eating less as well. Often those with atypical AN can actually gain weight on a lower amount of kcals (though at other times some may need as many kcals as someone with AN would). As treatment progresses it may be reasonable to switch them from whole milk to skim milk or ensures to pediasures, which all reinforces the message in their mind that they are "fat" or "not good enough" and need to lose more weight. Additionally, treatment of patients with atypical AN often poses a challenge for those in a DTP setting with AN because those with AN often view those with atypical AN and resist eating and challenge staff as a result because they think they will end up overweight and looking like their peers in the program with atypical AN.

Modifications for Caring for Patients with Atypical AN in a Day Treatment Setting

When treating those with atypical AN, it should be emphasized at the outset to all patients in the milieu that eating disorders come in all shapes and sizes (Thomas et al., 2013). This message should likewise be emphasized in multi-family meetings and parent support groups to help the parents to foster an understanding of atypical AN. An atmosphere of tolerance should be emphasized; and any sort of bullying or teasing of those with atypical AN should be addressed immediately in both individual and group sessions. At times, those who engage in bullying/teasing need to face repercussions, such as by dropping a patient's level. Conversely, it is of utmost importance to praise and promote as group president those patients who support all their peers.

Although appropriate for all EDs, when treating those with atypical AN and AN in the same milieu, it is particularly useful to discourage patients from comparing themselves with their peers, and instead encourage their radical acceptance of themselves and the situation. As a corollary, it is important to acknowledge the difference in patient sizes and diagnoses. Those with atypical AN struggle with accepting the fact that they need to be at a higher weight than their peers of the same height. Therefore they require help in accepting what they cannot (or should not) change as well as in acknowledging that their weight is not just a meaningless number but rather the number that will enable them to stay healthy and lead productive lives outside of the hospital or DTP. It is important to educate those with atypical AN that their genes are out of their control and that everyone is born with illnesses or things that they do not like about themselves. While their weight may be changing, it need not run or

ruin their lives. Indeed, it is critical to empower these patients to focus on things that they can control and change in their lives to make themselves happy. Activities that help build self-esteem and a life outside the ED should be a priority. Staff should help the patients to explore new hobbies, many of which can be attempted in DTP including doing puzzles, knitting, drawing, music, etc. Further, in-program successes such as answering questions correctly in groups, being voted president by peers, leading a multi-family meeting, etc. can help build patients' self-esteem and confidence in preparation for when they eventually leave the program and return to their previous school environment.

Groups in the milieu and individual sessions should focus on addressing issues underlying the illness and exploring any adaptive functions of the ED. For example, if a patient is refusing to go to school, it should be addressed in DTP. Options include helping the patient to get an IEP, transfer to an alternative school, or preferably working on a gradually transition back to school. The milieu should also focus on having those with atypical AN learn to befriend others, not only in the program but more importantly with peers outside of the program. During individual sessions, having the patient choose an afterschool activity or community club to join, or trying a new hobby to meet peers with a similar interest, can be useful in fostering the patient's self-esteem and remedying the isolation that often maintains EDs.

It should be emphasized that most of these patients should be on a weight gain plan like their peers with AN, and require a similar number of kcals. Rather than just looking at the actual number on the scale, one must remember these patients lost a large amount of weight and need to gain it back for health reasons. In many cases, being on a lower number of kcals in DTP can lead to more weight gain. If these patients go home hungry, they often eat in secret at home and increasing their calories in a controlled setting can help prevent against binging, which will also help prevent against purging.

For some patients with atypical AN, light activity can be added back to the treatment plan sooner than for someone with AN. Before doing so, the patient should be medically stable and cleared by the medical team for light exercise, such as a 20-minute walk three times per week. This exercise can often help improve the patient's mood and anxiety. However, for those with atypical AN with a history significant for over exercising, or if the patient still has a large amount of weight to gain, adding back any exercise activity should be done with caution.

Atypical AN Vignette

Patient is a 13-year old Hispanic domiciled female, who lives with her biological parents, with a self-reported past psychiatric history significant for anxiety and depression, reportedly due to being teased and bullied in school because of her weight. She reported a history of restricting and weight loss and body image concerns since second grade, but reported worsening of these concerns during the 8 months prior to her DTP admission. She had no previous outpatient psychiatric treatment or psychiatric hospitalizations. She had a medical history significant for amenorrhea for 6 months and a history of obesity and hypothyroidism. She had half of her thyroid gland removed around the time the restricting started. It was removed due to concern of a goiter, which was deemed to be benign, and was possibly due to subacute thyroiditis, given that she reported a flu-like illness and a painful thyroid gland prior

to the goiter being identified. She also had a history significant for a knee injury 1 year prior to her DTP admission, reportedly due to a "faulty meniscus" since birth. A more sedentary lifestyle after her knee surgery and weight gain due to this and her thyroid issues contributed to her worsening body image concerns and restricting. There was also a family history significant for obesity, which included her parents and sister.

Patient reported feeling sad and disliking her body for as long as she could remember, which she attributed to being teased and having few friends due to her weight. Her maximum weight was around 150 pounds at a height of 4'11" eight months prior to her admission; and her lowest weight was around 105 pounds, which was her presenting weight upon her admission to DTP. She reported eating only a few hundred kcals daily and exercising two hours daily. She also attempted vomiting a few times, but reported being unsuccessful in doing so. Her mother and sister became concerned that they could no longer get her to eat more than a few bites of food and that she was completely preoccupied with her weight, so her mother and sister took her to see an adolescent medicine doctor, who then referred her to the DTP here.

A family based treatment approach was successfully used in DTP. She was able to gain to approximately 120 pounds in 2 months and her menses resumed. While her menses was one positive sign that she was at a healthy weight, it was emphasized that she should continue to gain additional weight slowly upon her discharge from DTP. While her goal weight was difficult to determine given her previous history of being overweight, as it is for many patients with atypical AN, it was estimated that her ideal weight should be in the 130's in order to help clear up some residual ED thoughts and to help prevent relapse. A CBT approach was utilized in individual sessions with her to help her challenge her ED thoughts and improve her self-esteem and body image.

At first patient struggled significantly with eating in DTP because she compared herself to her peers and felt unworthy of treatment and food because she felt she was heavier than everyone else in DTP. Though not directly teased by peers, a new peer did ask the patient why she was there because she did not look like the peer or the other patients. Her mother reported that other parents made similar comments to her during multi-family meetings. An emphasis was made in groups and multifamily sessions to educate patient, peers, and parents that EDs come in all shapes and sizes and education regarding different EDs was provided, with a focus on atypical AN. Gradually, as the patient's weight and nutritional status improved, her depression and anxiety also improved and she was able to befriend peers in the program, which further improved her depression, anxiety, and self-esteem.

Patient still struggled with some depressive symptoms including passive suicidal ideation and social anxiety, most notably upon transitioning her back to her school on a step-down basis. Given the persistence of these symptoms in spite of her improvement in nutritional status and ED symptoms, fluoxetine was started at 10 mg PO daily and titrated up to 30 mg daily with good effect. Her mood and affect brightened and the suicidal ideation resolved. She was able to successfully transition back to school approximately three weeks after starting the fluoxetine and reaching her target weight.

Her parents adapted well to an FBT approach, though they initially struggled with feeding her on weekends due to their fear of overfeeding her and making her obese again. Psycho-education using an FBT approach and having them speak with the program's nutritionist on a few occasions helped them to feel more comfortable with re-feeding her and confident that they were feeding her adequate kcals that were nutritionally balanced

(including fruits and vegetables as well as sweets). After a few weekends she was successfully able to gain weight on weekends as well. Patient left DTP with her weight, mood, and anxiety much improved and was able to find meaning through her suffering from this illness by volunteering to participate in a video for a grand rounds presentation on atypical AN. She focused on helping educate others about the illness and decreasing stigma against obesity and those with eating disorders. She did a project on eating disorders for her Girl Scout troop to help educate others. Her family was very grateful for her treatment. Her parents and sister had brighter affects and their anxiety related to pt's ED seemed much improved by the end of her treatment.

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