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A Structural/Strategic Lens in the Treatment of Children With Obesity

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Abstract

Childhood obesity is an issue affecting an increasing number of families in the United States and the international community. In the past, obesity has been treated primarily by medical models that may or may not have included family therapy. It has been found that the use of family therapy in treating childhood obesity is helpful to produce long-term results. The authors suggest that the use of structural/strategic family therapy may also be useful in treating children and families dealing with obesity, as well as other medical issues that are a result of it.

Keywords

children, obesity, family therapy, structural/strategic

In recent years, the rate of obesity has increased in the United States, with 30% of adults, or about 60 million people, considered obese (Center for Disease Control, 2009a). Health costs associated with obesity were estimated at $52 billion in 1995 and increased to $75 billion in 2003 (Center for Disease Control, 2009a). Obesity does not just affect the adult population. In a recent survey, 12% of youth in the United States were reported to be obese (Center for Disease Control, 2009b).

The increase in obesity is believed to have many causes. Previous research suggests that among children, there has been a worldwide increase in consumption of less healthy foods and a decrease in physical activity (Caroli & Burniat, 2002; Gable & Lutz, 2000; Nowicka, 2009). Research has also indicated that both biological and environmental factors play a role in the development of obesity (Nowicka, 2009; Stuart, 1967; Stunkard, Harris, Pedersen, & McClearn, 1990). Despite obesity being a multidetermined, complex illness, for the purposes of this article we will focus solely on the environmental factors that play a role in both sustaining obesity and overeating. Specifically, we address patterns of using food to lessen a family's anxiety, or children triangulating food into family relationships to help regulate conflict. This may be done in one of three ways: First, anxiety in the family structure may be created by a lack of parental hierarchy and inappropriate family boundaries. Second, obesity may work as a protective function to mask marital conflict. Third, a child may use food and/or positive or negative attention they receive from being obese as a way to decrease anxiety in their family system, regardless of what issue caused the anxiety.

Child symptomology manifesting because of family issues has been discussed at length (Haley, 1987; Minuchin, Rosman, & Baker, 1978; Stanton & Todd, 1982). These researchers suggested anorexia nervosa and drug addiction were a child's way to mask martial conflict and reduce anxiety in the parental–couple dyad. Given the findings in the aforementioned research, applying structural and strategic family therapies may be useful treatment modalities in cases where childhood obesity is considered a problem and is suspected to be caused by a need to reduce anxiety in the family. We discuss specific therapeutic interventions that can help the family reorganize and deal more effectively with their anxieties and conflict.

General Information About Obesity

The standard international definition of obesity was developed by measuring the body mass index (BMI) of an individual (Nowicka, Hoglund, Pietrobelli, Lissau, & Flodmark, 2008). A person with a BMI of at least 30 is considered obese; recently, a score of 40 or above on the BMI has been classified as morbidly obese (Shepherd, 2009). The most recent survey by the World Health Organization (WHO, 2006) found that 1.6 billion people over the age of 15 reported being overweight (a BMI ranging from 25 to 29), and at least 400 million of those

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adults are obese. Furthermore, it has been projected that by 2015 these numbers will nearly double to 2.3 billion overweight adults and more than 700 million obese adults (WHO, 2006). Unfortunately, this statistic may be reached prematurely, as 20 million children under the age of 5 are now considered overweight (WHO, 2006). Globally, these statistics have presented many concerns for health professionals.

Obesity has many medical ramifications, especially for those under 18. The health risk factors in later life for children who are obese include heart disease, high cholesterol, hyperinsulinemia, hypertension, early atherosclerosis, impaired glucose tolerance, dyslipidemia, sleep apnea, gastrointestinal disturbances, orthopedic and pregnancy complications, Type 2 diabetes, and ultimately, a shorter life expectancy (Cole, Bellizzi, Flegal, & Dietz, 2000; Ludwig, 2007; Nowicka et al., 2009; Olshansky et al., 2005; Wijnen, Wendel-Vos, Wammes, & Bemelamans, 2009). Children who are obese are more susceptible to these illnesses due to obesity usually carrying on into adulthood unless treated successfully (Dietz, 1983; Nowicka, 2009). Although the physical ramifications of obesity are severe, nonphysical concerns may also occur.

Obesity affects a child's mental health as well. Self-esteem has been shown to be lower in children and adolescents who are morbidly obese, especially in females (Coyl, 2009; Nowicka et al., 2009) and those who are socially isolated (Strauss & Pollack, 2003). Additionally, psychological and behavioral difficulties have been observed among children with obesity (Nowicka, 2009). These difficulties can include anxiety and depression (Coyl, 2009; Van Vlierberghe, Braet, & Goossens, 2009), as well as defiance and aggression if obesity persists into adolescence (Schwimmer, Burwinkle, & Varni, 2003). The potential negative effects of obesity on the physical and emotional health lead to the importance of treatment.

Many different treatments have been available historically to help eliminate obesity including diet, exercise, medication, and surgery (Nowicka et al., 2008). Within the medical field, it is common to treat obesity on an individual level (Nowicka, 2009). Currently in clinical settings, group therapy is a preferred method of treatment for childhood obesity (Nowicka et al., 2008); however, there is little empirical evidence as to how effective group treatment is. In recent studies, a more collaborative approach to treat obesity has been attempted with mixed results (Nowicka, 2009). In one of these collaborative approaches, participants attended a sports camp for 1 week, with 6 months of support after the camp. The follow-up study did not find significant results in the change of body compositions, lifestyles, or a reduction of BMI scores (Nowicka, Lanke, Pietrobelli, Apitzsch, & Flodmark, 2009). Other studies conducted by similar research teams have used more family-centered approaches and have been found to be more effective (Flodmark, Ohlsson, Ryden, & Sveger, 1993; Nowicka et al., 2008). This indicates approaches including the family can be successful and may be an important step in treating obesity.

One such approach is the Childhood Obesity Unit, located in Sweden. A research team tested two family programs, the Family Weight School Treatment Model and Low Intensity Family Therapy in the treatment of obesity (Nowicka et al., 2008). The Family Weight School Treatment Model was run by a multidisciplinary treatment team consisting of a pediatrician, dietitian/trainer, pediatric nurse, and family therapist. The focus of the treatment was to create an optimal emotional climate, parental cooperation, increased communication skills, mutual support, consistency, and to establish appropriate limits within the family. Through teamwork, the BMI scores of participants decreased among adolescents whose BMI scores were lower than their peers from the outset, meaning participants with lower BMI scores continued to decrease their score with treatment. The researchers noted the families in the study were able to manage the obesity independently posttreatment (Nowicka et al., 2008). Another strategy of the Childhood Obesity Unit was the Low Intensity Family Therapy trial, which averaged 3.8 family sessions of Solution Focused Brief Therapy with the participants. A multidisciplinary team was used with a focus on lowering participant BMI scores and improving the child's self-esteem. Results found that overall BMI scores decreased and self-esteem improved. Flodmark et al. (1993) compared family therapy and conventional obesity treatment and found fat mass was significantly lower and engagement in physical fitness was significantly higher for groups who received family therapy. The success of the family therapy approaches lead into the thought that particular types of family therapy may be beneficial in the treatment of obesity, specifically a combination of structural (Minuchin, 1974) and strategic (Haley, 1987) interventions.

Previous Research

Anorexia Nervosa

Anorexia nervosa and obesity are vastly different, but have a similar underlying component in that they both are eating disorders influenced by a social component. The family's role in the maintenance of obesity is a relatively new topic, while a wealth of research surrounds the family's role in treatment of a child diagnosed with anorexia nervosa (Dare, Eisler, Russell, Treasure, & Dodge, 2001; Eisler et al., 2000; Fishman, 2006; Minuchin et al., 1978; Raymond, Friedlander, Heatherington, Ellis, & Sargent, 1993). Much of the work focuses on the structure of the family and views anorexia as a symptom of a flawed family organization. In these flawed organizations, the identified patient is in control of their parents (Minuchin et al., 1978), and often, the parents feel they are in a position of helplessness and/or incompetence in their ability to help their child. Related to interaction patterns, Raymond et al. (1993) found that, compared to nonanorectic families, anorectic families demonstrate more disturbed communication patterns, specifically a rigid verbal interaction pattern. Another prominent feature of families with a child with anorexia was conflict avoidance in the parental subsystem. The authors speculated diffuse boundaries lead to the identified patient mediating their parents' conflicts; this is attributed to diffuse boundaries within the family (Raymond et al., 1993). Minuchin et al. (1978) advocated changing the structure so the parental subsystem is

strengthened and the parents develop a united front in parenting. Establishing appropriate boundaries in which the child is no longer involved in the parental conflicts is imperative.

More recent research has also focused on the interactional patterns within the family, and how it contributes to treating the eating disorder. Eisler et al. (2000) focused treatment of eating disorders on separating individual issues such as self-esteem and family relationship issues from the eating disorder behaviors, and altering the interactional patterns around the disorder, by placing emphasis on the parents to take control of nutrition for their children. The study found significant changes in the expressed emotion within the family, with a reduction in critical comments between parents and child, and increased warmth between parents (Eisler et al., 2000). Dare et al. (2001) tested different modes of therapy for anorexia nervosa, once again emphasizing the role of parents in taking more control over the nutrition of their adolescents when applicable. This study found success in producing weight gain in both focal psychotherapy and family therapy compared to the control treatment of a year's worth of outpatient eating disorder management with a psychiatrist trainee (Dare et al., 2001).

Obesity can be seen similarly to anorexia in the way that it can be a symptom of a problematic family structure. In strategic terms, anorexia and obesity are different digitally, but analogically they are the same. Meaning that the details and symptoms of the child are different, but the underlying reason for the symptomology may be very similar. The child is acting in different ways by either overeating or not eating enough; however, the same issues of triangulation, anxiety, and a dysfunctional hierarchy may be present in the family. Given the previous research of structural and strategic therapy this approach may be effective with families where obesity is a concern, as it has been with families coping with anorexia.

Drug Addiction

Research on drug use has shown findings similar to those of Minuchin, Rosman, and Baker (1978); Stanton and Todd (1982) conducted treatment with young adults struggling with drug addiction. The main premise of their work was that drug use was a metaphor for other family issues, such as marital conflict. They found when the drug addiction started to subside, problems in the parents' marriage became apparent. This led to the hypothesis that marital conflict was always present but was masked by the drug use; thus, the addict's behavior was serving a protective function, similar to past research with anorexia. In a similar manner, we see overeating potentially serving as a protective function, much as anorexia did in Stanton and Todd's (1982) research.

It is important to note that whatever the parents' metaphor for the problem, the therapist must work within the framework the family provides and treat the family for the problem they want to work on in therapy (Haley, 1987). Working outside of this metaphor may send a message to family members saying that the therapist is not listening or understanding them. Thus, if the clients present with a child who is "acting out," it is important to work within that sequence and only address other family and marital issues as the family decrees. Again, it must be stated that digitally obesity and drug use are very different, the behavior of the child of the family is very different and may have many different influences, however, one way that these two issues are similar is at the analogic level, meaning the underlying problems of the family structure.

Children With Emotional and Behavioral Problems

Szapocznik et al. (1989) conducted a study with young males of Hispanic descent with behavioral and emotional problems. The researchers placed the boys in one of three groups: structural family therapy, with the emphasis on changing maladaptive family interaction patterns; psychodynamic child therapy, with the focus solely on the identified client; or in a recreational control situation. At the conclusion of the study, the researchers found structural family therapy and psychodynamic child therapy to be equally effective in reducing the behavioral and emotional problems of the boys as well as improving their functioning. However, structural family therapy protected the families' integrity better than psychodynamic child therapy. In fact 1 year after the study was completed, Szapocznik et al. (1989) found deterioration of family functioning was the long-term outcome of psychodynamic child therapy. They attributed this finding to the fact that psychodynamic child therapy only treats the individual child and does not address the reason why the child feels they have to act in order to help the family in some way. Structural family therapy prevented this by treating the family as a whole unit and working with the analogic problem. Focusing on the problem with individualized therapy addressed the digital issues but does not look at some of the underlying family issues that may be occurring, in other words the analogic issues. Based on the findings and assumptions of this study, we postulate treating childhood obesity without addressing the family may lead to similar family deterioration because of the similar issues at the analogic level.

Structural/Strategic Therapy and Obesity Treatment

The basic understanding of structural therapy states that family dysfunction perpetuates individual problems, not necessarily that the family causes the symptom. In other words, problems that exist will be maintained and possibly prolonged by the structure of the family system. A child's quality of life and psychological development is significantly influenced by his or her family (Nowicka et al., 2008). Due to the importance of family in the child's life, any problems the family has may be more easily manifested in an individual child. Essentially, the psychological well-being of one family member affects the rest of the people in the family (Nowicka, 2009). This awareness supports the significance of working with the members of a system together to develop healthier ways of functioning.

Recent research has highlighted the important influences of family contributions to childhood obesity (Elder, Arredondo,

Campbell, et al., 2009; Epstein, Valoski, Wing, & McCurley, 1994; Power, Bindler, Goetz, & Daratha, 2010). When asked about children in their classes who displayed symptoms of obesity, teachers were most likely to cite home influences they noticed, such as parents being permissive and not monitoring their child's behavior (Power et al., 2010). Elder et al. (2009) found that parents of obese and overweight children set fewer limits on the child's activities as well as gave less support and encouragement for physical activity. These same parents were also less realistic about the severity of their child's weight.

Previous studies that have included the family in treatment of childhood obesity proved to be more successful than treating the child alone (Epstein et al., 1994). Epstein et al. (1994) determined the mode of treatment for childhood obesity effects results, and success was seen when parents and children took part in treatment together, as well as aerobic exercise and lifestyle education. Ten years later, 30% of these children were no longer obese, and an additional 34% also sustained weight loss, indicating long-term results (Epstein et al., 1994). Considering the success of the Epstein et al.'s (1994) study, including the family in treatment seems critical to combating childhood obesity. One of the hypotheses about the success of this study was that the involvement of the parents led them to being able to exert external control on children living at home, and therefore their living situations were restructured to support healthy changes in eating and exercise. This approach relied less on the child's level of self-control and more on a healthy environment that encouraged success (Wilson, 1994).

Although this treatment focused on families working together in physical activities, family work can also focus on psychological issues that take the implications of the family system into consideration. When working from this perspective, obesity may be seen as the maintenance of a somatic manifestation of anxiety in three different ways. First, anxiety may be perpetuated by a family structure that does not have a stable parental hierarchy and has inappropriate boundaries. Second, obesity may be a symptom that works as a protective function to mask marital conflict. Third, a child may use food as a way to decrease anxiety in the system, regardless of what family issue caused the anxiety. In each instance, the environment the family creates can be seen as that which maintains the symptom of obesity in the child.

The effect of larger systems and parental patterns on children's behavior has been well documented (Haley, 1987; Minuchin, 1974; Minuchin et al., 1978; Nowicka et al., 2008; Stanton & Todd, 1982). For example, young children have been found to be good regulators of their own food intake, but often unlearn this ability from their upbringing (Hill & Peters, 1998). Children adopt eating habits from their environment. Minuchin (1974) found that family changes are often in response to the changes in society. "Family is subject to inner pressure coming from developmental changes in its own members and subsystems and to outer pressure coming from demands to accommodate to the significant social institutions that have an impact on family members" (Minuchin, 1974, p. 60). Within the larger system of society, there has been a staggering trend of consuming large proportions of high-calorie foods. In this case, the family's eating habits may be evolving with those of the larger society. Potentially, these habits were learned by parents and then instilled into their children. Nowicka et al. (2008) found that children who were overweight had both mothers and fathers who were overweight. The authors speculated that due to similar challenges in childhood, parents can relate to their child's experiences and possibly their anxieties. Additionally, other studies have shown it is likely an obese child will have at least one obese parent (Epstein et al., 1994; Harkaway, 1986). These trends demonstrate how patterns of eating may be learned from the family. Understanding the impact of the family system on a child and seeing the patterns that may exist around food demonstrate the need to understand the structure and boundaries that exist within the system. A dysfunctional structure and inappropriate boundaries can serve as a function to maintain the symptom the child exhibits, in this case, obesity and overeating. For example, a dysfunctional structure can appear due to a lack of parental control surrounding food intake and physical activity.

Treatment Methods

Based on the findings of Fishman (2006), Flodmark et al. (1993), Minuchin et al. (1978), Nowicka et al. (2008), Stanton and Todd (1982), and Szapocznik et al. (1989), a family therapy approach for obesity appears to be a viable treatment option. In each of these cases, the child's behavior or symptom was maintained by the family system. Much of the previous research has used aspects of structural and strategic therapies for the treatment of childhood obesity by emphasizing the need for parental cooperation and appropriate boundaries as well as changing interactional sequences through communication. Parents should be regarded as a treatment resource because of their influence on a child's development and quality of life (Nowicka et al., 2008). By viewing obesity in a structural and strategic framework, we aim to restructure the parental hierarchy, establish appropriate boundaries, and lower anxiety by detriangulating food from the family and detriangulating the child from the parental conflict. Furthermore, interactional sequences that work to maintain the issue are addressed.

Joining. The backbone of structural and strategic therapies involves creating a safe environment by joining with the family. Haley (1987) stressed that addressing every member of the family to assure that each is heard and is acknowledged as important in the therapeutic process. It is important for therapists to remember when using structural and strategic therapies to work within the metaphor the family presents. This is particularly important at the beginning of therapy in order to build trust and genuine interactions with the family. In the treatment of a family including children, the joining process may be better facilitated if play therapy techniques are utilized. Because play is the universal language of children (Gil, 1994), using their language may be more effective in creating a safe and trusting environment. Activities in which the whole family is

involved and able to have fun with each other can be facilitated to encourage relaxation and openness.

One such activity could involve having the child draw an outline of his or her body and then use various art materials to decorate the inside of his or her body with images, words, or other symbols that represent him or her (Hecker, Lettenberger, Nedela, & Soloski, 2010). With the child's permission, the therapist then could share the image with the rest of the family as a way for them to better understand how the child feels about himself or herself, both related and unrelated to his or her obesity. For a more thorough description of play therapy techniques, the authors recommend *The Therapist's Notebook for Children and Adolescents* (Sori & Hecker, 2003). Haley (1987) also noted the mood of the family will differ depending on their situation and is important to observe this and match their mood in order to join adequately (Minuchin, 1974). Having genuine interactions with each member of the family is important for the therapist. Change will not occur if the therapist is not securely joined with the family (Minuchin, 1974). After a therapist has joined with the clients, the therapist should work to restructure the parental hierarchy and establish appropriate boundaries.

Parental hierarchy and boundaries. Structural family therapy is based on the concept that a dysfunctional family can be identified by an inflexible and rigid structure that does not allow the family to problem solve adequately. Incidentally, the problem can manifest itself in one person or between combinations of family members. Similarly, within strategic family therapy, symptoms are produced in response to the current hierarchy, and they are believed to protect a member of the client's family (Haley, 1987).

One of the therapist's first steps in restructuring the parental hierarchy is to empower the parents. Parental empowerment can develop through increasing the parents' sense of competence in their role as leaders of the family. This empowerment leads to the parents being able to set better boundaries (Haley, 1987). Creating a stronger boundary between the parental subsystem and sibling subsystem will help modify the structure, which in turn will enable the family to better deal with the obesity (Raymond et al., 1993). Raymond et al. (1993) also discussed the therapist's role in establishing structure in session by redirecting conversations when the family behaves in a way that indicates a dysfunctional structure. In this way, the therapist's behavior becomes part of the family context (Minuchin, 1974; Raymond et al., 1993). Throughout this process, the therapist is seen as a leader who supports, educates, and guides the family, but is still responsible for accommodating them (Minuchin, 1974).

When working with a family with an obese child, one of the therapist's main goals is to help the family achieve a flexible system. Such a system helps the parents work toward the child having a negative energy balance, meaning the child will expend more calories than he or she consumes (Dufour, 1997). As parents are more empowered and able to set appropriate boundaries, the therapist can work with them to decide on healthy rules and consequences surrounding eating, extracurricular activities, television viewing, and other electronic entertainment. Parents have control over these activities, and with that, the potential influence over their own child's weight (Gable & Lutz, 2000). Parents ultimately know their children the best and have the capacity to understand what will be the most helpful for their family. Thus, empowering them to make the decisions about rules and consequences is the goal (Minuchin, 1974).

Detriangulation. As previously stated, strategic therapy operates on the assumption that negative interactional sequences maintain the problem within a system, and the therapist becomes part of the sequence when the family enters into therapy (Haley, 1987). When working with families, it is imperative to stay within their metaphor, or view of the problem. Haley saw problems with children as a reflection of marital problems. Therefore, in working with child obesity, a therapist is very likely working on the marital conflict at the same time (Haley, 1987). Due to the therapist working within the family's metaphor, the parents may be unaware of the possible changes within the marital relationship. One of the main goals of the therapist is to help the family engage in and resolve conflict; this process can happen once more flexibility in communication is achieved and the rigidity surrounding transactions is reduced (Raymond et al., 1993). When these sequences are inappropriately rigid, the family is feeling anxiety within their system. Often the way in which the parents deal with anxiety is to bring a child into their interactional sequence. This lessens the anxiety the parents feel and creates a triangle (Haley, 1987). The child, in turn, also will be feeling the anxiety and may try to reduce it by overeating (Harkaway, 1986). This forms an additional triangle between the parents, the child, and the food. The therapist works to redirect the conversation to enable the parents to engage in effective communication without triangulating the child (Haley, 1987).

The two aforementioned triangles are closely related. As the therapist works to diffuse one, the other is also indirectly addressed. The triangle directly addressed in therapy is the one that involves the parents, the child, and food due to the necessity of staying within the parents' metaphor; this is the digital manifestation of the problem. As the therapist works with the parents to address the issues with food, they are instructed to work together to manage the obesity. The parents working together allow the second triangle between each parent and the child to be indirectly addressed; this is the analogic metaphor. Through this sequence, the underlying problem of the parents' marital relationship may be improved.

Interactional sequences. As the family structure changes, the interactional sequences will also change (Haley, 1987). The therapist's hope is that the child will be taken out of the interactional sequence involving the parental conflict. Through the use of reframing and directives, the therapist can help the parents feel less anxious about the child's overeating. This gives the parents a task on which they work together to solve

the reported problem, therefore making them a united front. The therapist elects directives by working with the parents to decide which should be appropriately applied to the family. Strategic directives that can be given to the family include exercising, buying more nutritious food, and discouraging sedentary activities by assigning homework tasks for the parents to enact.

The aim of these techniques is for the parents to establish appropriate and flexible boundaries with and between the children. With the establishment of these boundaries the parental hierarchy will be empowered and able to regulate their child's eating behaviors. With these changes the interactional sequences also will be modified. While the parents may not openly discuss their issues, both their metaphoric and analogic problems will be addressed. Throughout this process the therapist hopes the parents will be working together to set rules surrounding food and lifestyle. The overall goal of this approach is to lessen anxiety within the family and reduce obesity. Although future conflicts will certainly arise, the family may be better equipped to resolve those conflicts.

Conclusion

Due to obesity being caused by a multitude of factors, treating obesity with family therapy is a relatively new concept in both the medical and mental health fields. Recent work has had successful results, which encourages the exploration of the influence of the family system on obesity (Nowicka et al., 2008; Nowicka, Pietrobelli, & Flodmark, 2007). Based on the positive effect treatments have had, these family models have shown that viewing obesity as a family issue can be helpful in treatment. Further, viewing obesity with a structural/strategic lens can be beneficial as it enables the therapist to view obesity in a unique way. Obesity, in this treatment context, is seen as resulting from a dysfunctional family structure, underlying marital problems the child is drawn into, or the child using food to cope with family anxiety. Treating obesity as such addresses the health concerns of being overweight as well as the patterns and structure that help maintain it. Specific goals in therapy need to be assigned to each member as treatment will be inadequate if the clinician is unable to engage all members in a dialogue regarding behavioral change and lifestyle patterns (Nowicka, 2009). Including all family members increases the ability of the therapist to alter the system's patterns. Regardless of individual genetic susceptibility, healthy family functioning increases the chances of one having an acceptable weight both socially and medically (Nowicka et al., 2009).

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