2020-12-07

Prevention of Eating Disorders in Children: A Guide for Nurse Practitioners

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A scholarly paper submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Science

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ABSTRACT

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Eating disorders are prevalent in Western society and are highly influenced by body dissatisfaction and disordered eating patterns. Disordered eating refers to unhealthy behaviors used to control and influence weight with the potential to become eating disorders. Eating disorders can lead to or further accelerate both physical and emotional damage. As such, it is important to determine possible contributing factors to decrease negative outcomes. Because parents are typically the primary caretakers of children, it is necessary for nurse practitioners (NPs) to know how to best educate parents in the prevention of eating disorders in their children. This clinical paper provides the most current research in how parents can promote positive body image and healthy attitudes regarding food in their children.

Keywords: body image, body dissatisfaction, disordered eating, eating disorders, parents, children

ACKNOWLEDGEMENTS

I would like to offer a special thanks to Dr. Jane H. Lassetter for her guidance, support, and expertise in helping this paper come to light. Her time and sacrifice spent in research, suggestions, and editing is most appreciated, especially during a worldwide pandemic and new appointment as Dean of the College of Nursing.

Additionally, I would like to thank Ryan Oaks for his constant encouragement and support in writing this paper and helping me work towards my goals.

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The western world is obsessed with the prototypical body image. The media's ubiquitous depiction of the perfect body creates false standards of beauty, especially in children and adolescents at a time when they are most vulnerable. Many of them struggle with body dissatisfaction as the media's constant bombardment of the thin ideal reverberates in their minds. Body dissatisfaction is not a phenomenon that exclusively effects teens and young adults—children as young as five years old have been shown to be dissatisfied with their body, and more than 50% of girls between 6 to 8 years of age think that the ideal body is thinner than their current body shape (Common Sense Media, 2015). As a consequence, increased body dissatisfaction may contribute to forms of disordered eating and eating disorders (Micali et al., 2015). These dangerous eating patterns continue to permeate western society, most prominently among adolescent and young adult females (Academy for Eating Disorders, 2019).

Body dissatisfaction is defined as a negative perception regarding one's body (Heider et al., 2018) and becomes harmful when it leads to unhealthy weight-controlling behaviors, also referred to as disordered eating. Disordered eating is manifested in a wide array of behaviors, such as extreme dieting and fasting, skipping meals, purging, binging, and use of laxatives (Loth et al., 2015). More extreme patterns of restricted, disordered eating become eating disorders and include the clinical diagnoses of anorexia nervosa (AN), bulimia nervosa (BN), and binge-eating disorder (BED) (Langdon-Daly & Serpell, 2017). The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) defines AN as a weight for height of 15% or more below the expected normal weight with features including restricted food intake, fear of being "fat," and/or body dissatisfaction. BN features bouts of binge eating followed by self-induced purging or laxative use. BED is characterized by a large intake of food in a short amount of time

with a feeling of loss of control (American Psychiatric Association, 2017). It is important to note that within each type of eating disorder, the severity of the condition varies widely (Lipson & Sonneville, 2020).

Background

While 4 to 20% of young women engage in disordered eating patterns, such as unhealthy amounts of dieting and purging (Academy for Eating Disorders, 2019), approximately 5% of young women battle an eating disorder (According to the Academy for Eating Disorders, 2019). More specifically, 0.3 to 1% of young women struggle with AN, 1 to 3% with BN, and 3% with BED. Physical complications of eating disorders include electrolyte and cardiovascular instability, endocrine disorders, osteoporosis, gastrointestinal abnormalities, hematologic complications, organ failure, cachexia, and death (Fichter & Quadflief, 2016; Robinson & Fornari, 2017). Mental health concerns are also prevalent and include anxiety, depression, and suicide (Fichter & Quadflieg, 2016; Lipson & Sonneville, 2020). In fact, compared with students who had no eating disorder symptoms, those who had a higher frequency of symptoms were 11 times more likely to attempt suicide (Lipson & Sonneville, 2020).

Due to the potentially catastrophic consequences of eating disorders, it is important to identify prevention strategies. Parents are the primary influencers on their children's behaviors, especially while the children are young (Haines et al., 2016). Parental knowledge and attitudes regarding health impact the development of children's eating patterns and physical activity choices (Vittrup & McClure, 2018). Children learn from their parents' verbal and non-verbal cues how to prioritize these food and physical activity choices. For example, parents can impact their children's current and future body satisfaction and relationship with food by the way they

talk about their own and others' weight and body image as well as their comments about their child's shape and size (Lydecker et al., 2018).

Children largely develop eating patterns at home (Martin-Biggers et al., 2017); therefore, an understanding of the home and family environment may offer valuable insights into potential contributing factors. Much of the literature regarding parents and their children's eating disorders focuses on the negative outcomes of different types of parenting strategies on body image (Langdon-Daly & Serpell, 2017; Levine & Smolak, 2015). Thus, identifying positive parenting techniques that provide protection from eating disorders would be beneficial. Therefore, the purpose of this clinical paper is to provide nurse practitioners (NPs) with an understanding of the protective factors that parents can have on their children in the prevention of body dissatisfaction, disordered eating, and eating disorders. Additionally, we will explore how types of parenting styles may relate to forms of disordered eating and the differences that exist between boys and girls. NPs can use this information to help guide parents and children in the promotion of healthy living, positive body image, and self-esteem.

Protective Parental Factors

Eating disorders are multi-faceted and complex, so no singular action exists to eliminate them. However, research has shown that certain forms of positive parenting, also known as "protective factors" (Langdon-Daly & Serpell, 2017; Levine & Smolak, 2015), may help decrease the risk of eating disorders and promote positive body image in children. Rather than merely attempting to eliminate risk through a list of "do nots," protective factors work in the opposite way—to strengthen one's ability to combat negative influences from family, peers, and the media (Levine & Smolak, 2015). Parents are vital in creating this mental shift and combating outside effects on their children. The following sections discuss how family environment,

parental warmth and bonding, and family meals can help to promote positive relationships with food and an affirmative body image in children.

Family Environment

While the role of genetics in growth and development is indisputable (Barlow, 2019), the impact of the home and family environment also plays an indispensable role. The environment that surrounds a person will strongly influence behavior (Martin-Biggers et al., 2017). Thus, it can be assumed that because most children spend the majority of their early years at home, the home environment may contribute to eventual outcomes in eating and body image behaviors. Haines et al. (2016) found that high family functioning (defined as positive interactions, communication, and connectivity among family members) was associated with lower levels of disordered eating, such as purging, fasting, binge eating, and the use of laxatives. In addition, families that reported higher levels of cohesion and lower levels of chaos consumed more fruits and vegetables and less salty and fatty snacks than families with high levels of chaos (Martin-Biggers et al., 2017).

In line with this research, Fulkerson et al. (2019) discovered that parents who better managed the stress and environment at home provided healthier eating options for their families. This research indicates that the home atmosphere, as well as family connectivity, may set the stage for current and future eating habits, behaviors, and body satisfaction levels. Parents may be able to prevent or reduce body dissatisfaction and disordered eating patterns in their children when they create healthy eating environments by making healthy food choices more readily available in their homes (Martin-Biggers et al., 2017).

Children who had conversations with their parents regarding healthy eating habits had lower levels of disordered eating than those who had conversations regarding weight (Berge et

al., 2013). Even children whose parents attempted to make positive or encouraging comments regarding weight, rather than emphasizing healthy eating habits, had poorer outcomes in regard to disordered eating (Kluck, 2010). Similarly, in more recent literature, Biolcati et al. (2020) found that adult women had higher body dissatisfaction when appearance-focused conversations in the home were discussed as a "family value." These studies stress the importance of sensitive communication among parents and children regarding weight and eating habits. It appears that children, especially daughters, are susceptible to any type of comment that highlights what they are eating and its relation to their body image (Refer to Table 1 for more in-depth analysis between boys and girls). Thus, parents are most effective when they focus their food related conversations with children on aspects of healthy eating, instead of encouragement to diet with remarks about their child's weight and size (Kluck, 2010).

Parental Warmth and Bonding

Parental warmth is defined by Paine et al. (2020) as a sensitive, nurturing, and responsive relationship between parent and child. Parent-child relationships that are abundant in warmth and connection have been associated with lower levels of disordered eating (Hazzard et al., 2020). Chen and Zhou (2019) researched maternal warmth and single child homes in China and found that higher levels of maternal education and marital satisfaction were both correlated with higher rates of maternal warmth. This study may be limited by the inclusion of families with one child as this may allow mothers to give more time and attention into raising that child. However, on the other hand, it may suggest that both maternal education and marital satisfaction decrease stress in the home, allowing for more emotional energy to be devoted to their child's needs.

A study by Jones et al. (2019) looked at the combined effect of both parents in the home and found that when both parents exhibited similar levels of warmth, especially when those

levels were high, their girls' drive for thinness was reduced. Another study revealed that girls who reported more positive relationships with their mothers had lower rates of body dissatisfaction. This association was only found with the daughters' perceptions of the relationship to their mother and had no correlation with the mothers' perspectives (Smith et al., 2016). This finding underscores the importance of differentiating the child's perception from that of the parent. Regardless of how the parent views the relationship, the child must be the one to perceive value, support, and care from the parent; otherwise, there is no difference in eating patterns and body image outcomes (Smith et al., 2016).

These findings suggest that when parents make a consistent effort to create bonding experiences with their child, their children experience less body dissatisfaction and disordered eating. Finding moments and ways to validate their children and provide basic love and support will help fill the child's emotional needs (Jones et al., 2019; Smith et al., 2016). Furthermore, parents that keep marital conflict to a minimum in front of their child may decrease the risk of their child's body dissatisfaction and disordered eating later in life (Chen & Zhou, 2019).

Family Meals

The frequency of family meals is associated with a lower prevalence of disordered eating patterns in children. Other psychosocial benefits also appear to be related to family meal frequency, including reduced rates of substance abuse, violence, depression, and suicidal ideation (Harrison et al., 2015). Solis et al. (2019) reported that dinner was the most common meal that families ate together. Additionally, they discovered a correlation between a country's culture and frequency of family meals. For example, in Spain, people place higher emphasis on family mealtime—more than 75% of adolescents had family dinner five or more times a week—in contrast to Peru, where family meals were only reported roughly half of the time. The rates of

eating disorders and disordered eating were found to be lower in Spain versus Peru (Solis et al., 2019). Also worth noting, families with lower socioeconomic status tend to have lower rates of family mealtime (Harrison et al., 2015) perhaps partially explaining some of the variations between Spain and Peru (Solis et al., 2019).

Skeer et al. (2018) conducted a qualitative study of children and parents that further explored the effects of family meals rather than just frequency. They found that mealtime was important for both parent and child, but the reasons for this varied. Younger children appreciated that they could count on being fed, older children enjoyed the time spent together as a family, and parents liked the connection it created with their children and saw it as a continuation of tradition. The conversations during mealtimes allowed families to debrief about the events of their day, discuss challenging situations, and created an opportunity for parents to teach and reinforce values in addition to providing healthy food for their children.

Family mealtime is perhaps the most easily modified of the protective factors. Therefore, knowledge regarding the advantages of family meals can be more easily implemented in the family setting. As such, the NP can give more specific recommendations to families and their children on the positive effects of family mealtime. It is important to remember that family meals may be difficult for some families to incorporate due to differences in family composition. Frequent mealtime may be challenging for single parent homes, homes where both parents work, or homes where there is a socioeconomic disadvantage.

Parental Attachment Styles

John Bowlby's attachment theory surmises that human beings have an innate desire to feel safety and security with one another, especially those with whom they are closest (Lenzi et al., 2015). Because parents tend to be the primary caregivers for their children, children naturally

develop attachment towards the parental figures in their lives. Insecure attachments may develop in children when a disparity exists between what the parent is able to provide and the child's physical and/or emotional needs (Bowlby, 1969). When this difference exists, these children may exhibit greater levels of body dissatisfaction later in life (Grenon et al., 2016; Szalai et al., 2017), potentially contributing to both disordered eating and eating disorders. A better understanding of how attachment occurs between parent and child, especially during early childhood, may help parents implement strategies to promote positive self-esteem in their children (de Vries et al., 2019; Grenon et al., 2016).

Maternal Attachment

The role of mothers in the home changed drastically in the last century; however, mothers still tend to be the primary caregivers for their children. Research has shown that positive mother-child relationships have been associated with decreased rates of body dissatisfaction, disordered eating, and eating disorders (Grenon et al., 2016). Positive mother-child relationships have been shown to combat the negative effects of social media (de Vries et al., 2019). Research suggests that mothers who build healthy, emotional connections with their children help their children feel secure, loved, and valued as they are. This, in turn, may serve as a protective factor in the prevention of body dissatisfaction and consequently, potential eating disorders. In addition, daughters who felt higher levels of connectedness to their mothers had lower levels of binging and compensatory eating behaviors (Hazzard et al., 2020). In contrast, Grenon et al. (2016) found that women with eating disorders who recalled that their mothers were less caring had poorer body images. However, no association was found among males' connectedness to their mothers and disordered eating, indicating that there are likely different factors that

influence male eating behaviors (Hazzard et al., 2020); this is an area that would benefit from further study.

Mothers who made self-critical comments about their own weight, size, and shape tended to have daughters who also had lower levels of body satisfaction. This finding reinforces the importance of mothers not only encouraging positive self-talk and body image, but also avoiding critical comments regarding their own body, especially in front of their children (Handford et al., 2018). Mothers who model healthy relationships with food and body image send the message to their daughters that their innate value is not based on levels of thinness (Handford et al., 2018). However, Hillard et al. (2016) discovered that mothers, who openly discussed their own weight concerns with their daughters, fostered higher levels of bonding and attachment between mother and child. Thus, a fine line may exist between open discussion of concern and critical comments of self. Mothers should be aware of how the subtle nuances of tone of voice and body language, both regarding themselves and their children, may subtly influence a child's perspective on body image and self-esteem.

Paternal Attachment

While the majority of research tends to focus on the role of the mother, particularly mother-daughter relationships, available research suggests that fathers can also play a protective role (Grenon et al., 2016). Young girls with high paternal anxiety and female adolescents with high paternal avoidance experienced greater levels of body dissatisfaction (Szalai et al., 2017). This finding suggests that healthy and secure attachments to fathers helps meet females' emotional needs. When validation is provided in the home, it may decrease a child's need to seek validation from potentially harmful influences outside the home, such as the media and current societal trends (Grenon et al., 2016). Additionally, in a study researching adult women with

eating disorders, an indirect correlation was found between fathers who were perceived as less caring and increased body dissatisfaction and higher levels of attachment anxiety in the adult women. This, in turn, led to higher levels of media internalization, which may have contributed in their subsequent eating disorder (Grenon et al., 2016). Furthermore, higher levels of connectedness with their fathers were correlated with lower levels of disordered eating in children (Hazzard et al., 2019).

In contrast, de Vries et al. (2019) found no association between positive father-adolescent relationships and body dissatisfaction of the adolescents. One possibility for the inconsistency in findings between studies could be explained by recognizing that while positive father-adolescent relationships may not have much influence on body dissatisfaction, the effects of negative father-adolescent relationships may be detrimental, potentially contributing to body image disturbances and disordered eating patterns (de Vries et al., 2019). Another possibility could be that fathers who are warm and caring are more influential in the prevention of eating disorders than body dissatisfaction.

Table 1. Differences in Body Perception and Eating Disorders Between Boys and Girls

Topic	Boys	Girls	Reference
Positive mother-adolescent relationship	• Lower levels of body dissatisfaction	• Lower levels of body dissatisfaction	de Vries et al. (2015)
Positive father-adolescent relationship	• No association	• No association	de Vries et al. (2015)
High quality mother-child relationships	• Lower levels of disordered eating	• Lower levels of disordered eating • Lower levels of being overweight/obese	Haines et al. (2016)
High quality father-child relationships	• Lower levels of being overweight/obese • Lower levels of disordered eating	• Lower levels of being overweight/obese • Lower levels of disordered eating	Haines et al. (2016)
High family functioning	• Lower levels of disordered eating	• Lower levels of being overweight/obese • Lower levels of disordered eating	Haines et al. (2016)
High mother-child connectedness	• No association	• Lower levels of binge eating, fasting/skipping meals, and compensatory behaviors	Hazzard et al. (2020)
High father-child connectedness	• No association	• Lower levels of binge eating, fasting/skipping meals, and compensatory behaviors	Hazzard et al. (2020)
Increase in family meal frequency	• Lower levels of unhealthy weight control behaviors	• Lower levels of extreme weight control behaviors • Lower levels of unhealthy weight control behaviors • Lower levels of dieting	Loth et al. (2015)
Negative maternal comments and dietary restraint	• Increased levels of disordered eating • Increased levels of emotional eating • Increased dietary restraint and external eating	• Increased levels of disordered eating • Increased levels of emotional eating	Rodgers et al. (2020)
Maternal body dissatisfaction	• Lower levels of body self esteem	• Lower levels of body self esteem	Rodgers et al. (2020)

The Role of the Nurse Practitioner

In order to properly perform patient assessments in the clinic, NPs need to be aware of the risk factors and prevalence of disordered eating and eating disorders, especially among children and adolescents. Particularly in situations where the NP recognizes risk factors or red flags regarding body image and eating habits, the NP must be able to ask candid questions. Among patients that appear to be low risk, it is important for NPs to consistently educate, reinforce, and promote healthy living and positive self-esteem for both the children and parents. Doing so has the potential to increase awareness and introduce preventative techniques as well as reinforce values that may be taught in the home. Furthermore, the NP can advocate for positive parent-child relationships that support parents in helping decrease levels of chaos in the home. This can be done by providing stress management education and encouraging consistent mealtime routines and engaging the children in mealtime preparations (Fulkerson et al., 2019).

It is crucial that the NP recognize the wide variances that exist in family units and that no one solution will fit all families. This is especially important to remember as eating disorders are also complex with no one solution. The NP must be both sensitive and flexible in adjusting education, care, and treatment to what a family is currently capable of handling. For example, NPs may encourage families to focus on the quality of family mealtime rather than the quantity of meals. This is best done by incorporating shared decision making with these families. Additionally, an interprofessional approach may be beneficial in such instances, which may include other specialties, such as dieticians, psychologists, and social workers.

Several tools exist to help screen for eating disorders. The following table summarizes some of the most common questionnaires to help NPs determine which fits best with their clinic and population.

Table 2. Screening Tools for Eating Disorders

Screening Tool	Condition Assessed	Population Tested	Number of Questions	Reliability and Validity	Reference
EAT-26	AN, BN	Adolescents, adults	26 questions; 6-point Likert scale	Cronbach's alpha = 0.75	Dunn et al., 2019; Psych Tools, 2017
ch-EAT	AN, BN	Children ages 8-14	26 questions	Cronbach's alpha = 0.79	Lommi et al., 2020
SCOFF	AN, BN	Children, adolescents, and adults	5 yes/no questions	Cronbach's alpha = 0.47 SN 26-97.7% SP 72.7-97%	Siervo et al., 2005 Wade, 2016
TFEQr18	Cognitive restraint, uncontrolled eating, emotional eating	Adults	18 questions	Cronbach's alpha = 0.75 SN 72% SP 70.1%	Siervo et al., 2005
CTFEQr17 (specific to children)	Cognitive restraint, uncontrolled eating, emotional eating	Children, adolescents	17 questions	Cronbach's alpha = 0.85	Bryant et al,. 2018
EDDS	AN, BN, BED	Adolescents, adults	22 questions	Cronbach's alpha = 0.91	Psych Tools, 2018
BES	BED	Adults	16 questions	Cronbach's alpha = 0.88 SN 81.8% SP 97.8%	Duarte et al., 2015

Conclusion

While it may be impossible to completely eliminate body dissatisfaction, disordered eating, and eating disorders, NPs can help parents incorporate several evidence-based methods to proactively protect their children. Parents and NPs can work together to create a healthy and safe environment for children to learn, grow, and develop healthy eating patterns and attitudes

towards their bodies and food. Parents who consciously create bonding experiences and connection with their children, while utilizing high levels of warmth, may help their child feel their innate worth. Furthermore, family meals have also been shown to combat negative attitudes regarding their bodies and food. NPs who readily recognize risk factors for body dissatisfaction and disordered eating in their patients can provide appropriate teaching to families, thereby helping to counteract outside influences and create opportunities for open discussion in the home between parent and child.

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