Promoting self-esteem in overweight and obese girls

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The purpose of this literature review is to delineate the link between overweight/obesity (OW/O) and low self-esteem in pre-adolescent and adolescent girls. Topics covered include the adverse physical and emotional health-related repercussions of OW/O in girls, factors that increase the risk for low self-esteem and factors that protect against the loss of self-esteem, the particular effects of maternal and societal factors, and selected approaches for enhancing self-esteem in OW/O girls.

KEY WORDS: **childhood, adolescence, overweight, obesity, self-esteem**

Childhood obesity has reached epidemic rates in the United States, affecting all socioeconomic classes. At the same time, girls in this country are being bombarded with media images of the ideal female body, which is likely more slender and more muscular than their own. Preadolescence and adolescence are tumultuous periods of development for any girl, but they present a particular challenge for girls who are overweight or obese (OW/O) and who are at risk for experiencing a loss of self-esteem because their own shape and size do not match those of the media-portrayed ideal. Providers of healthcare to girls in these age groups are in a position to identify those girls at high risk and guide them and their parents to available interventions and resources to help enhance their self-worth and possibly control their weight or lose weight in the process.

The American Academy of Pediatrics defines obesity as an excess percentage of body weight due to fat that puts persons at risk for many health problems.[1] Among children aged 2-19 years, 31.7% are at or above the 85th percentile of body mass index (BMI)-for-age growth charts in weight, defining them as *overweight* or *obese*.[2] Nearly 17% of children in this age range are defined as *obese*—that is, they have

BMIs greater than the 95th percentile. Among children and adolescents in the United States, OW/O prevalence is most concentrated in African American (AA) females, Hispanic males, and Native Americans.[1-8]

Statement of the problem

A direct link between OW/O and the development of health problems later in life, including cardiovascular, endocrine, pulmonary, renal, and orthopedic disorders, has been well established.[1-8] In addition, OW/O can have adverse effects on children's current physical and emotional health. In preadolescent and adolescent girls, for example, OW/O is strongly correlated with low self-esteem, which can lead to depression, anxiety, disordered eating, substance abuse, social isolation, and even suicidal ideation.[4,9-11] Jasik and Lustig[4] identified the ages of 9-12 years in girls as being key for development of excess adiposity. During this age period, many girls tend to be less active than when they were younger, and they tend to eat less healthy foods, causing them to gain weight. Higher levels of adiposity translate to higher systemic levels of estrogen and to an earlier onset of thelarche.

A vicious cycle is set in motion: Early breast development leads some girls to become self-conscious and isolate themselves, perhaps avoiding physical activities and eating extra food to soothe themselves, thereby aggravating the situation. To add to the complexity, this age period can be a challenging one in which to stage interventions because of these girls' rapidly changing cognitive and emotional development.

Factors that lower self-esteem or preserve it in girls

According to McClure et al,[12] self-esteem represents one's capacity to feel worthy of happiness. Self-esteem is an important determinant of adolescent mental health and development. One in three girls has a distorted interpretation of her appearance—either that she feels she is overweight when she is normal or that she feels she is normal when she is overweight.[10] McClure et al[12] found that obesity

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was the most strongly correlated, modifiable risk factor for low self-esteem in pubescent girls.

Documented risk factors for low self-esteem include adolescence itself, female gender, low socioeconomic status, non-traditional family structure, having healthcare/special needs, exposure to school bullying, parental aggravation and family stress, elevated BMI, sedentary behavior, and higher rates of television viewing.[13] During pre-puberty, a girl's self-esteem is not significantly tied to BMI; however, by age 13-14 years, the shift to a significant negative correlation exists.[13]

Low self-esteem does not appear to be a significant contributor to the development of obesity but, rather, a primary result of it.[14] Factors that help preserve a girl's self-esteem include physical activity, perception of good health, family communication and closeness, authoritative parenting, perceived teacher support, being part of a religious community, and feeling safe at school.[12]

Effects of maternal and societal factors

The initial and most powerful influence on a girl's self-esteem is her mother.[10] As a girl enters late childhood/early adolescence, though, an increased desire to fuse with her peer group often takes precedence—with increased attention paid to the media. Pop culture bombards girls with "ideal" female images on television, in movies, in magazines, and on the Internet—girls of today have a much higher exposure to advertising than did previous generations. Girls are also exposed to mixed messages by the media; they are encouraged to love themselves the way they are, but they are also told that being OW/O is undesirable. Susceptibility of an adolescent to all these peer and pop culture pressures largely depends on both her mother's values and actions and on the relationship she has with mother. For example, if a girl has a strong bond with a mother who has a good image of herself, she is less likely to be vulnerable to outside influences.[15]

Other factors that increase the risk for psychosocial complications of OW/O are race and ethnicity.[15] In general, AA girls do not experience as extreme a downward spiral in self-esteem as do their Caucasian peers.[14] Identifying oneself with an eth-

nic group has been thought to be protective against low self-esteem.[14] This theory is demonstrated in the study by McClure et al,[12] which showed that even though female Hispanic and AA populations in the U.S. had higher rates of OW/O than their white counterparts, they had higher self-esteem and a more positive body image. AA girls also reported less desire for thinness. This difference may have been due to a cultural acceptance by AAs, even an admiration, of "curvy" women. These findings warrant further investigation to determine whether the values of a particular ethnic group can overcome the negative self-esteem typically related to being OW/O.

Raising self-esteem in overweight/obese girls

Several studies have shown that programs with a primary focus on exercise as a means to increase self-esteem are detrimental to participants' body image and have not produced a sustained, significant reduction in BMI.[9,14,16] O'Dea[9] theorized that the most effective model would focus primarily on building self-esteem itself, with secondary promotion of a healthy attitude toward diet and exercise. As the time period of greatest potential for weight gain coincides with psychological immaturity, the best course of action in girls may be an early intervention to promote self-esteem and positive body image—starting just before the onset of thelarche, at age 8 or 9.[8] As these girls enter middle adolescence after menarche, at age 12-14, the focus on nutrition and physical activity can gradually increase.[11] At this point, the girls' weight gains will have stabilized and they will have become more emotionally mature.[9]

According to Piaget's developmental stages, young adolescents cannot grasp the concept that OW/O may lead to obesity-related health problems during adulthood.[17] These individuals will not understand this concept until their late teenage years, when most of the psychological stigma of obesity has already occurred. This notion reinforces O'Dea's theory that the most important concern to address in young adolescents is the adverse psychosocial effects of OW/O.[9,17] In other words, a therapeutic approach should focus on raising self-esteem, not on weight loss or exercise or the potential adverse health consequences of OW/O in the distant future.

Selected approaches

Available programs to address low self-esteem in OW/O girls vary in intensity, strategy, and primary focus. Nurse practitioners must ascertain each patient's values and goals before recommending a specific approach for her. Options range from patient-centered, motivational interviewing to participation in community-wide programs.

Motivational interviewing—Use of this approach is based on the idea that OW/O is maintained by faulty cognitions and beliefs.[18] The motivational interviewer must identify, evaluate, and restructure the patient's maladaptive cognitions and beliefs. In this approach, the NP identifies factors contributing to the patient's poor self-image and works with both the patient and parents (as indicated) to create an environment to foster a positive body image. Success of this type of intervention depends heavily on a desire to change. Motivational interviewing has been shown to work with adults, but little research has been conducted with younger patients. This intervention may be benefi-

cial for older adolescents, who tend to be more independent and self-motivated. In dealing with pre-adolescent to early adolescent patients, NPs might want to include the parents in the process. Motivational interviewing is a code-able intervention for primary care practitioners, does not require referral and outside expenses to the family, and is minimally invasive.

School-based programs—Many school programs address self-esteem and body image at around the fifth-grade level.[19,20] In a survey by Wilson,[19] adolescents indicated that an ideal obesity prevention program at school would include their peers, take place during school hours, involve "fun" physical activities, and not require family members to participate directly—although they stated that they valued family support outside the program. The Nutrition and Enjoyable Activity for Teen Girls (NEAT Girls) study targeted girls in disadvantaged secondary schools who had been identified as being less active.[20] No parental involvement was included in the program. The researchers found that the program helped improve participants' body image, although no significant reduction in BMI was noted between the intervention and control groups. The researchers theorized that parental involvement in the program might have had a significant impact on BMI while preserving the observed improvement in body image.

Female-specific extracurricular programs—Programs such as Girl Scouts of America, Girls on the Run, New Moves, the Memphis Girls Health Enrichment Multi-site Studies (GEMS), GoGirlGo, and Loozit have had a significant positive impact on adolescent participants' self-esteem.[6-8,10,16,21] Compared with school-based programs, these programs are more tailored to participants' needs and have a lower leader-to-participant ratio. The main emphasis of many of these programs is to address the issue of low self-esteem and poor body image, with a secondary emphasis in some groups on increased physical activity. Many studies have shown that noncompetitive physical activity improves feelings of self-worth; girls who participate in any kind of physical activity report feeling good about themselves, regardless of their weight.[6,16,20] The curricula vary in content and length, for example, from week-long summer camp (GoGirlGo) to longer, regular involvement through age 17, such as is available in Girl Scouts of America.[7,10]

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According to Walker's theory of intentionality, a program will have the best outcome if it is tailored to the essential needs and the inherent nature of a particular child.[22] Even though the GoGirlGo program lasted only a week, participants stated that they felt empowered and had fun in the process.[7] The authors of this report ascribed the program's success to tailoring discussion topics to participants' needs and to the mentor having a pre-existing relationship with the participants—establishing a level of trust prior to the camp.[7]

The GEMS programs were specific to AA girls aged 8-10 years, took place at local YMCAs, and were led by AA women, who were the adults most likely to foster a mother–daughter-type relationship with the girls.[16] Participants met weekly for 14 weeks and then monthly for the remainder of the 2 years. The intervention group's goals were to follow a balanced diet, to decrease sedentary behaviors, and to increase physical activity. Psychological interventions included positive reinforcement, social support, and goal setting. The girls' parents/guardians were encouraged to participate by increasing the availability of healthy foods at home. In the control group, the goal was to improve self-esteem and social efficacy; the family unit was not involved. Despite a rather intensive and well-planned study, the researchers found no significant prevention of weight gain among intervention participants versus the controls.

Family-driven and community-wide programs—NEAT girls, Girl Scouts, and the GEMS are family-oriented programs that rely on a child's parents, who are often the ones preparing meals, to lead by example with positive attitudes regarding body image and increased physical activity.[10,16,20] Perhaps the largest program is Let's Move, a comprehensive national health initiative spearheaded by First Lady

Michelle Obama.[5] Let's Move addresses preventive measures for childhood obesity, starting with the mother's prenatal care and progressing through encouragement of breastfeeding and child-rearing practices (e.g., following a healthful diet, limiting exposure to digital media). This program does not specifically address interventions for the social stigma of obesity; rather, it aims to decrease the psychosocial side effects by eliminating the cause.

The U.S. Department of Health and Human Services Office on Women's Health has constructed websites such as Womenshealth.gov[A] that address body image in children.[23] This resource offers simple recommendations for parents/guardians to promote both a healthy body image and a healthy relationship with food. Recommendations from this resource include maintaining open lines of communication, discussing media images, praising the child's accomplishments, and avoiding negative comments regarding dieting and body shape.

In an effort to combat poor self-image in New York City, the organization New York City Girls placed posters of girls in areas of high visibility (e.g., subways, buses) proclaiming "I'm a Girl; I'm beautiful the way I am."[24] The program aimed to counter the media bombardment of stick-thin fashion models. The posters featured normal-appearing girls of all ethnic backgrounds. The second phase of the program included outreach, with several in-school and after-school programs as well as free fitness classes for further promotion of a healthful lifestyle.

Role of the nurse practitioner

Most NPs do not have adequate time during a typical well-patient visit to both identify low self-esteem in an OW/O girl and counsel her appropriately. NPs may need to schedule additional appointments with the patient and parents to focus discussions on self-esteem and body image or to make a referral to a mental health specialist when deemed necessary. NPs also need to consider the family's social background, financial constraints, and goals. Above all, the most successful intervention is one in which the patient feels invested. By encouraging girls' participation in early interventions, NPs are not only curbing the risk for future health problems, but also helping shape the ideas and attitudes of the future generation by creating strong role models and mothers.

Conclusion

The inverse relationship between BMI and self-esteem escalates as girls enter puberty. Although this phenomenon does not affect all ethnic groups equally, plummeting self-esteem is a widespread occurrence in this age group and, without intervention, may lead to problems such as substance abuse, depression, anxiety, social isolation, and suicidal ideation. Although low self-esteem in the presence of OW/O is common, a higher BMI is more socially acceptable in some cultural subgroups. Participation in motivational interviewing or in school or community programs can lead to improvements in self-esteem and body image. Preadolescent and adolescent girls may also develop a healthy attitude toward nutrition and physical activity. Reduction of BMI should not necessarily be emphasized in this age group unless a patient's BMI poses immediate risks to her health; she may experience more psychological damage through intense intervention during this fragile period of social uncertainty. Because NPs are often trusted primary points of contact within the healthcare field, they are in an ideal position to provide guidance to both the child and parent(s).

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