Parent & Family Influences on Adopting Healthy Weight-Related Behaviors: Views and Perceptions of Obese African-American Female Adolescents

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Our purpose was to evaluate the views of obese African-American (AA) female adolescents concerning parent and family factors relating to obesity and a healthy lifestyle. Obese AA female adolescents enrolled in a residential healthy lifestyle program completed inventories measuring family functioning and perceptions of parenting styles, and participated in focus groups to identify themes regarding parent and family involvement in healthy lifestyle change. The majority of participants' mothers were scored as "inductive/authoritative" and fathers were "indulgent". Mothers reportedly were seen as more likely to encourage dieting to control weight than fathers. Common themes of the focus groups included a desire for family involvement, identification of family behaviors that were supportive as well as those which were perceived as unhelpful. Though generalizability of these results is limited by a homogenous small sample size, our results suggest that obese adolescents seeking weight loss treatment desire significant family involvement in their efforts.

Keywords: Adolescents ■ Focus groups ■ Obesity ■ Family Functioning ■ Parenting Styles

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INTRODUCTION

Being obese in adolescence increases the risk of being obese or severely obese as a young adult.[1,2] Obese adolescents are likely to become severely obese adults and have increased risk of developing chronic diseases including hypertension, heart disease, type 2 diabetes mellitus, gallbladder disease, osteoarthritis and ultimately early mortality.[3,4] In 2009–2010 the prevalence of obesity (BMI ≥ 95th percentile) among US adolescents 12–19 years old was 18.4%: 13% were severely obese (BMI ≥ 97th percentile).[5] While rates of obesity among adolescent girls do not appear to be increasing, almost one quarter (24.8%) of non-Hispanic Black female adolescents are obese, with 17.6% ≥ the 97th percentile (vs. 17.1% and 11.2% respectively for all adolescent females and 14.7% and 9.7%, respectively for non-Hispanic White females).[5] The researchers determined that among Black adolescent girls with a BMI between the 95th and 97th percentile, over 50% were severely obese as young adults and that 71% with a BMI ≥ 97th percentile during adolescence remained severely obese during young adulthood.[2] Hence the current high prevalence of obesity in adolescent Black girls is expected to result in significant future health burdens.

Parents and adult guardians may play important salutary roles in treating and preventing childhood obesity, in part because intervening in the family system may provide greater and more sustainable change in the child because of the ability of the family to shape child behaviors on a daily basis.[5,7–9] Indeed Janicke et al. demonstrated that overweight children (ages 8–14) enrolled in a behavioral intervention targeting parents-only experienced greater decreases in BMI z-score than those participating in a family-based intervention following the initial 4-month treatment program.[10] However, after 10 months, the children in the parent only treatment group were beginning to regain weight while the family-based group continued to show significant weight loss suggesting that involving the child, as well as the parents, in family treatment does play a critical role in the treatment of obesity.

Both favorable and unfavorable family factors may affect health promotion and obesity management in the home environment with gender modifying the response.[1,11] For example, the more girls feel that their parents care about them the more likely they were to have a normal BMI; however, parents may make food more available to girls than boys.[1,12] Parents whose feeding style pressures their children to eat tend to have children with lower BMIs, while parental restriction of foods has also been associated with increased non-hunger eating and weight in children.[13,14]

Parenting style is one factor that may affect health promotion and is a function of two dimensions of parental behavior: the extent to which parents are responsive to their children's needs (responsiveness), and how controlling they are of their children's behaviors (demandingness).[15] By crossing the dimensions of responsiveness and demandingness, four prototypes of parenting are created: authoritative (both responsive and demanding), authoritarian (less responsive but highly demanding), indulgent or permissive (high level of responsiveness but less demanding), and neglectful or uninvolved (relatively low levels of both responsiveness and demandingness).[15]

Research has shown that maternal authoritative parenting style predicted lower BMI in adolescent sons and daughters, and paternal permissive parenting style predicted more fruit and vegetable intake in daughters, but significant associations were not found between parenting style and adolescent physical activity.[12] In contrast, fathers with either permissive or disengaged parenting styles were more likely to have preschool children with a higher BMI; where no associations were found with mothers.[16] Hence parenting style may influence childhood weight status. However significant gaps exist in the assessment of parenting practices and demonstrating their role in treating childhood obesity.[17] We are not aware of any studies to date that determine what obese adolescents think the optimal family involvement would be in their efforts to reduce their BMI. The aim of the current study is to start to fill this knowledge gap for obese AA females.

METHODS

Participants. The study included obese AA adolescents attending a three-week residential healthy lifestyle camp. The overall goals and outcomes of the residential camp have been described in more detail elsewhere.[18–20] The study included both focus groups and questionnaires. All of the females attending the camp (n=10) volunteered for both the focus groups and the questionnaires. In addition, all of the males completed questionnaires; however, results for males are not included in this study due to the small sample size.

Focus group protocols and questionnaires were approved by RTI International's and East Carolina University's University Medical Center institutional review boards. Adolescent participants provided voluntary informed written assent; parents provided voluntary informed verbal consent via telephone.

Qualitative Methodology and Analysis. Two focus groups, comprised of five girls each were conducted in accordance with a phenomenological research design to explore themes regarding family involvement in healthy lifestyle change and family habits.[21,22] Questions allowed each participant to share her own reflective experience about her family and weight-related behaviors.

Nvivo 9 (QSR International) was used to identify inductive themes regarding changes in family involvement with health behaviors. In initial analyses of texts, the research team began by identifying key phrases and then developing coding categories. The texts were coded independently by two primary investigators. The data was analyzed according to Colaizzi's phenomenological data analysis method with verification strategies used throughout all steps of the data analysis process to preserve the integrity of the data and maintain the rigor of the study.[23]

The method of investigator triangulation and peer debriefing was used to assert credibility.[24] The final themes reflect the investigator's, triangulated investigator's, and peer reviewer's agreement. Transferability was addressed through the use of a reflexive journal, which was used to include information about participant recruitment, logistics of the study, data interpretations, personal reflections, and methodological changes.[24] An audit trail consisting of a record of the investigator's daily study activities and decision making procedures, was also used to address dependability and confirmability.[24]

Quantitative Methodology and Analysis. *Family Functioning.* The Family Assessment Device (FAD) is a self-report measure that captures the McMaster model of Family Functioning used to conceptualize family systems.[25] The FAD is appropriate for youth 12 years of age and older and is one of three well established family functioning measures.[26] The FAD contains 60 items rated on a four-point Likert scale. The seven dimensions of the McMaster model measured by the FAD and cut-off points differentiating healthy and impaired functioning within each domain are shown in table 1. A score greater than the cut-off point indicates impairment or family dysfunction within the dimension.[27]

Parenting. The Child Report on Parent Behavior Inventory (CRPBI-30) is a 30 item questionnaire that the child answers for each parent.[28] Each question is rated on a three point Likert scale. The inventory has three subscales: acceptance (10 items), psychological control (10 items), and firm control (10 items). Parenting typologies were created using the median scores for CRPBI-30 report of mother's and father's behaviors on acceptance and psychological control.[28] The parenting typologies include: Indulgent or Permissive (high acceptance, low psychological control), Inductive or Authoritative (high acceptance, high psychological control), Indifferent also known as Neglectful/Uninvolved (low acceptance, low psychological control), and Dictatorial or Authoritarian (low acceptance, high psychological control).