Implementation of a Family-based Obesity Intervention Within a Pediatric Primary Care Clinic

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Background and Significance

Prevalence of Childhood Obesity

The prevalence of childhood obesity has been steadily increasing over the past several decades with a current plateau being achieved in the United States (CDC, 2017a). To date, approximately 1 in 5 school-aged children is obese (CDC, 2017a). The Center for Disease Control and Prevention (2015) defines obesity as having a BMI at or above the 95th percentile, and as of 2014 its occurrence is estimated to have affected 17% or approximately 12.7 million children in the United States. The prevalence of childhood obesity is highest among Hispanic children ages 12-19 years-old followed by 6-11year-old and finally 2-5 year-old children (CDC, 2017a). Some factors that contribute to childhood obesity include excessive caloric intake in the presence of minimal physical activity, genetics, socioeconomic status, sedentary lifestyle, environmental factors, sleep duration, and parent-child interactions including individual parenting styles and feeding practices (Shloim, Edelson, Martin, & Hetherington, 2015). Many avoidable and potentially lifelong health outcomes can occur due to obesity including cardiovascular disease, type 2 diabetes, pulmonary, renal, hepatic, and musculoskeletal problems as well as poor emotional health and quality of life (Waters et al., 2011). Unfortunately, once behaviors are learned leading to the establishment of poor health habits in childhood, obesity can be extremely difficult to reverse and may last well into adulthood leading to chronic health complications (Waters et al., 2011).

Complications of Obesity

Childhood obesity is strongly correlated with an increased likelihood of becoming an obese adult (Bryant et al., 2017; Foster et al., 2015; Gross et al., 2015; Stark et al., 2016; Taylor et al., 2015; & Waters et al., 2011). Additionally, there are many long-term physical, social, and

emotional health complications that result from being obese (CDC, 2017a). In childhood, obesity is often associated with a variety of health complications including sleep apnea, joint problems, poor self-esteem, cardiovascular disease, hypertension, hyperlipidemia, impaired glucose tolerance, headaches, and asthma (Jortberg et al., 2016; Sorg et al., 2013). A meta-analysis revealed a bi-directional association between obesity and depression and discovered up to a 40% increased risk of depression in obese adolescents with the highest prevalence being amongst female adolescents (Mannan et al., 2016). In addition, other comorbidities that often occur when childhood obesity continues into adulthood include heart disease, stroke, diabetes, and several forms of cancer (Jortberg et al., 2016; CDC, 2017a). Fortunately, early interventions that promote healthy lifestyle habits, especially regarding nutritional intake and exercise, provide children with the opportunity to make the changes needed to avoid these long-term health complications and attain positive health outcomes throughout life.

Fiscal Concerns Related to Childhood Obesity

The healthcare cost of obesity in the United States ranges from $147 billion- $210 billion annually (The State of Obesity, n.d.). The cost of childhood obesity worsens as obesity persists into adolescence and adulthood (Wilfley, Staiano, Lindros, Lima, Hassink, Dietz, & Cook, 2017). Some of these costs result from increased emergency room visits, prescription drug costs, and visits with specialists compared to children of normal weight leading to increased Medicaid spending (Wilfley, 2017). Unfortunately, while research supports family-based interventions to improve obesity in children, the majority of obese children do not receive evidence-based care (Wilfley, 2017).

Family-based Interventions

Literature supports family-centered obesity interventions aimed at improving nutritional intake, physical activity level, and screen time as a means to provide long-lasting behavior modifications that result in healthier lifestyle habits and improved BMI levels (Sorg et al., 2013; Waters et al., 2011). Interventions that incorporate the family unit are needed since a child's family establishes the environment and standards by which the child will follow (O'Connor et al., 2011; Sorg et al., 2013). As a result, interventions involving a family-based approach that promote healthy lifestyle habits in a supportive environment provide children with the opportunity to make the changes needed to avoid these long-term health complications and attain positive health outcomes throughout life (Bryant et al., 2017; Sorg et al., 2013).

Research efforts are currently aimed at utilizing the primary care setting as the place where obesity screening, identification, and treatment takes place because this location makes close follow-up with the child and family feasible (Jortberg et al., 2016). Some pediatric primary care clinics are incorporating computerized tools to aid in prompt identification and subsequent treatment of childhood obesity and has been successful in decreasing BMI in children, especially when combined with additional interventions (Taveras et al., 2015). Research studies are also finding that intermittent familial communication and support regarding diet, exercise, and psychosocial health with specialized healthcare professionals resulted in long-term weight loss and improved lifestyle behaviors (Taylor et al., 2016; Waters et al., 2011) (Jortberg et al., 2016; Taylor et al., 2015).

Many ongoing local, state, and federal initiatives have provided resources to children and families in need of assistance to improve overall health and BMI levels. The effectiveness of these interventions is evidenced by the stabilizing obesity rates in the U.S. (CDC, 2017a). For example, in 2005 the National Heart, Lung, and Blood Institute (NHLBI) in collaboration with

four other health-based institutions launched a national initiative called *We Can!®* (**W**ays to **E**nhance **C**hildren's **A**ctivity & **N**utrition) that empowers parents and caregivers as agents of change against the childhood obesity epidemic (NHLBI, 2014). This program provides a variety of resources including educational tools about nutrition, exercise, and other healthy lifestyle patterns while also providing community support programs, so no child, parent, or caregiver is alone in their endeavors to establish health-promoting lifestyle habits (NHLBI, 2014).

Internal Evidence

In Arizona, 26.9% of children ages 10-17 years old are overweight or obese (The State of Obesity, 2016). This quality improvement project was implemented within a pediatric primary care practice located in the southwest region that cares for a variety of children, including many of whom are overweight or obese. In addition, they care for and treat children with obesity-related comorbidities and refer children to specialists when needed. The majority of overweight and obese patients within this clinic are school-age children. A child's BMI is calculated at every well-child visit and under certain circumstances when warranted. Currently, the providers at this practice provide minimal education on nutritional and physical activity recommendations, and often meet resistance from parents when instructed to limit unhealthy snacks and sugary drinks. However, childhood obesity that is treated early could help reduce the prevalence of obesity-related comorbidities that result in undesired long-term health outcomes (CDC, 2017a).

Problem Statement and PICOT Question

The childhood obesity epidemic is a worldwide concern and the healthcare community is struggling to improve the prevention, management, and treatment of childhood obesity before it becomes a chronic condition for today's children. The physical and psychological health complications associated with obesity are numerous and well understood by most pediatric healthcare professionals. Additionally, more recent research is discovering that children with

sedentary lifestyles also have decreased academic and cognitive performance and achievement (CDC, 2017b). As a result, the need for widespread affordable evidence-based management of obesity is needed in childhood so children can live healthy and productive lives. Research supports evidence-based family-focused childhood obesity interventions because the role parents play in supporting energy balance and healthy familial lifestyle behaviors related to nutritional intake, physical activity, screen time, and sleep is becoming well understood (Ash, Agaronov, Young, Aftosmes-Tobio, & Davidson, 2017)

This inquiry has led to the clinically relevant PICOT question, "In overweight and obese children ages 8-12 years old, how does a family-based intervention that addresses obesity-related lifestyle behaviors involving nutritional intake, physical activity, and screen time influence these lifestyle behaviors compared to usual care interventions?"

Search Strategy

Search Strategies for Parenting Styles and Feeding Practices

Databases searched for this literature review included PubMed, CINAHL, and PsycINFO. Keywords included c*hildhood, obesity, child feeding questionnaire, feeding practices, parenting practices, parenting styles, BMI, feeding, family-based intervention, family intervention, treatment, and primary care*. The initial search of childhood and obesity and intervention published within the last 10 years yielded 1,762 results from PubMed, 1,489 results in CINAHL, and 2,487 from PsycINFO. To narrow down search results, an internet search for assessment tools and interventions utilized in treating childhood obesity was performed and the *Child Feeding Questionnaire* resulted most often as the reliable assessment tool of choice in studies about the effects of parenting styles on a child's BMI. The influence of parenting styles on childhood obesity sparked further interest in this phenomenon. As a result, a new search was

performed in the above-mentioned databases using the keywords *childhood*, *obesity*, and *parenting styles* with a date of publication range within the past 10 years. PubMed yielded 43 results (Appendix A), 26 from CINAHL (Appendix B), and 141 from PsycINFO (Appendix C).

Search Strategies for Family-based Interventions

After reading through several articles, it became apparent that family-based interventions were used most often to treat childhood obesity. Another database search for family-based interventions occurred with the initial keywords including *childhood obesity,* and *family intervention* with a publication date range within the past 10 years which yielded 447 results on PubMed, 128 on CINAHL, and 858 on PsycINFO. The keywords used were refined to *childhood obesity* and *family-based intervention* published within the past 5 years yielding 262 results on PubMed, 12 results on CINAHL, and 318 results on PsycINFO.

Exclusion Criteria for Articles of Interest

Exclusion criteria included studies published greater than 10 years ago except for three systematic reviews and a combined systematic review/meta-analysis, studies written in any non-English language, and studies that involved children younger than 2 years old and greater than 17 years old.

Literature Review Specifications

After critical appraisal of 50 research studies that focused on better understanding the various causative factors and treatment modalities utilized in childhood obesity, 10 have been chosen for this literature review. Study reliability, significance of findings, population age, type of intervention, and factors under scrutiny for their relation to childhood obesity were all considered prior to choosing the final 10 articles. Articles assessing family-based interventions needed to include any of the outcomes of interest including nutritional intake, sugar sweetened

beverage consumption, physical activity, and/or screen time. The articles chosen address how specific parenting styles and feeding practices influence a child's BMI or the effectiveness of family-based interventions on child weight loss. The studies included collectively contribute to a better understanding of how childhood obesity arises and is treated. To effectively prevent and treat childhood obesity, it is important to understand what factors contribute to disease severity, including parenting styles and feeding practices, nutritional intake, engagement in physical activity and screen time in addition to which interventions are most effective in achieving sustainable weight loss and the establishment of health-promoting lifestyle practices.

Evidence Synthesis

Evidence suggests that family-based lifestyle interventions are effective at improving short-term and long-term weight loss in children and adolescents (Waters et al., 2011). Ongoing research has identified and acknowledged the varying familial factors that contribute to pediatric obesity which has led to the development of family-based interventions aimed at decreasing the prevalence of childhood obesity through behavior modification (NHLBI, 2013). In 2005, 14 community sites around the country were chosen to implement the National Heart, Lung, and Blood Institute's (NHLBI) *We Can*! childhood obesity prevention and treatment framework. The results revealed improved parental energy balance knowledge and attitudes, portion size attitudes and behaviors, healthy eating attitudes and behaviors, healthy food behaviors, physical activity knowledge, attitudes, and behaviors, and screen time attitudes and behaviors (NHLBI, 2007). Additional findings include improved child food knowledge and attitudes, healthy eating behaviors, physical activity knowledge and attitudes, and screen time behavior (NHLBI, 2007). A decrease in patient BMI scores, sustained changes in lifestyle habits, and improved

physiological health outcomes have resulted when intermittent follow-up and support is provided to the families of obese children (Jortberg et al., 2016; Taylor et al., 2015).

As a result, an evidence-based childhood obesity intervention that incorporates the family unit and intermittent follow-up with the caregivers of overweight/obese children was implemented to improve the lifestyle behaviors related to nutritional intake, physical activity, and screen time of this population of interest in order to improve their short-term and long-term health outcomes.

Purpose Statement

The purpose of this evidence-based practice (EBP) project was to determine if educating overweight and obese children ages 8-12 years old and their families about health promoting lifestyle modifications utilizing the National Institute of Health's *We Can!* childhood-obesity prevention and treatment framework in combination with healthcare provider follow-up will result in a reduction of obesity-promoting behaviors and an increase in the prevalence of health-promoting behaviors.

Evidence Based Practice Model and Conceptual/Theoretical Model

Model for Evidence-Based Practice Change

The Model for Evidence-Based Practice Change guided each step of this evidence-based quality improvement project. This model provides a framework to identify the need for practice change, determine and analyze the best evidence in support of practice change, design practice change, implement and evaluate changes made in practice, and ultimately implement and sustain newly established practice changes (Dang, Melnyk, Fineout-Overholt, Ciliska, DiCenso, Cullen, Cvach, Larrabee, Rycroft-Malone, Schultz, Stetler, & Stevens, 2015). First, the need for a standardized process to identify, treat, and manage obesity was identified in a primary care

clinic. Next, research regarding best practice recommendations, which included family-based obesity interventions, was collected and analyzed. Then, the *We Can!* childhood-obesity prevention and treatment framework was chosen, and a 15-minute educational intervention was designed from its online resources and implemented within the clinic. Lastly, when the intervention came to a close, the data obtained was evaluated and a plan to integrate and sustain this practice change was devised and presented to the providers at the clinic.

Health Belief Model

The Health Belief Model (HBM) provides a set of criteria that identifies potential barriers preventing a person from engaging in illness prevention, identification, and treatment (Glanz, Burke, & Rimer, 2015). For this quality improvement project, the HBM was first used to assess whether or not the primary caregiver understood how familial lifestyle behaviors influence whether their child becomes overweight or obese and any health consequences that can occur or are occurring as a result. The child and caregiver were informed that they can institute changes to prevent disease as well as improve their health and that the benefits of choosing to adopt the healthy lifestyle behaviors presented in the *We Can!* framework outweigh the risks of choosing to ignore this perceived threat. After receiving this cue to action, the families chose to participate in the intervention thus increasing the likelihood of engaging in the health-promoting behaviors presented to them. The pediatric primary care setting provides an atmosphere where obesity and any comorbidities are identified and thus prompt the caregiver and child to action. It also enables the provider to instill confidence in the caregiver and child through education regarding obesity-focused family-based interventions. As knowledgeable and empowered individuals, children and families are better equipped to implement and sustain the necessary changes needed to improve their health.

Project Methods

Setting, Participants, Inclusion and Exclusion Criteria

English speaking caregivers of children ages 8-12 years old with a BMI ≥ the 85th percentile with an appointment at a pediatric primary care clinic for a well-visit were recruited by one of the two participating primary care providers within the clinic to participate in a family-based obesity-related quality improvement project being implemented at the practice. Exclusion criteria included families with children younger than 8 years old or older than 12 years with a BMI <85th percentile, co-morbid conditions including but not limited to: hypothyroidism, hyperthyroidism, or other endocrine disorders that affect body weight, metabolic disorders, medical problems that affect feeding or eating, genetic disorders that affect body weight, and co-morbid conditions requiring medication that can cause obesity. The clinic was located in a suburban neighborhood in the southwest region. Interested caregivers received more information about the project from the DNP student, and if they desired to participate consent was obtained. The two children and their families who met inclusion criteria were recruited to participate and consent for participation was obtained.

Intervention

Familial lifestyle behaviors were assessed using the Family Health Behavior Scale (FHBS) prior to receiving an educational intervention based on the *We Can!* framework addressing nutritional, physical activity, and screen time recommendations and again after following these recommendation for 6-weeks. Then, scheduled follow-up phone calls were made every 3 or 6-weeks depending on parental preference that addressed any questions or barriers that surfaced. All patient-related information and data was de-identified, and all documents obtained were stored in a safe place only accessible by the DNP student and PI.

Outcome measures

The FHBS consists of four subscales related to familial lifestyle behaviors known to influence weight status in children which include parental behaviors, child behaviors, physical activity, and mealtime routines. The reliability of the resulting FHBS total score demonstrated favorable internal consistency and temporal stability as evidenced by a coefficient alpha of 0.86 and a correlation coefficient of 0.85 respectively (Moreno et al., 2011). The individual subscales also demonstrated good internal consistency and test-retest reliability demonstrated by coefficient alphas ranging from 0.66-0.81 and correlation coefficients ranging from 0.56-0.84 respectively (Moreno et al., 2011). Validity of the FHBS was demonstrated by lower rates of health-promoting behaviors being associated with higher levels of body fatness in children (Moreno et al., 2011).

Data collection, Data Analysis Plan, and Budget

Pre-intervention FHBS data was obtained immediately prior to the education intervention and the re-assessment occurred over the phone after the 6-week time frame ended. Data was insufficient to undergo statistical analysis so anecdotal findings were utilized for future implementation of this intervention and for clinic site obesity-related care quality improvements. The proposed budget was $100 which covered the cost of the *We Can!* educational resource packet that was constructed and provided to the families at the time of the intervention. No additional materials were required.

Organizational Culture

Prior to this intervention, although BMI was obtained for every 2-years-old and greater well-child visit within the clinic, obesity treatment and management was inconsistent among the clinic's providers. The clinic was in obvious need of a standardized process to prevent, treat, and

manage overweight and obese patients. One nurse practitioner and one physician's assistant within the clinic acknowledged the need to address this gap in practice and assisted with project implementation by participating in the recruitment process. They will likely be the innovative agents of culture change within the practice for obesity prevention, treatment, and management.

Project Outcomes

Family Health Behavior Scale (FHBS) Results

Of the two patients who participated, pre- and post-intervention data was completed and obtained from only one of the participating families. The data obtained from the family that participated in the intervention from start to finish showed improved scores within each of the 4 FHBS subscales. Overall, 11 of the 27 behaviors assessed improved, 12 behaviors resulted in no change, and 4 behaviors worsened.

Parental behaviors subscale.

In the parent behaviors subscale, 4 of 10 behaviors improved, 2 worsened, and 4 stayed the same. Specific behaviors that improved include: child assistance in choosing healthy food options, preparation of low fat-low calorie family meals, personal consumption of low fat-low calorie foods, and choosing healthier food options when eating out. Parent behaviors that worsened include the provision of healthy food options when the child asks for junk food and the provision of fresh fruits and vegetables during mealtimes. Parental behaviors that stayed the same include: the amount of junk food in sight of the child at home, quantity of vegetables eaten, participation in physical activity, and child education regarding the importance of making healthy food choices.

Physical activity subscale.

In the physical activity subscale, 2 of the 6 behaviors improved, 1 worsened, and 3 stayed the same. Specific behaviors that improved includes child engagement in physical activity with caregiver and parental engagement in physical activity with their child. The behavior that worsened includes child engagement in sports. Physical activity behaviors that remained the same include: child preference for indoor activities over outdoor activities, participation in physical activity or at least 30 minutes/day, and the amount of time the child spends playing outdoors.

Mealtime routines subscale.

In the mealtime routines subscale, 2 of 5 behaviors improved, 1 worsened, and 2 stayed the same. Specific behaviors that improved include how often the child eats meals at a routine time and how often they remain seated at the table during meals. The behavior that worsened included daily consumption of breakfast by the child. Mealtime routines that remained the same include how often the child ate meals at the table and consumption of 3 meals a day by the child.

Child behaviors subscale.

Lastly, in the child behaviors subscale, 3 of 6 behaviors improved, and 3 stayed the same. Specific behaviors that improved include: how often the child was offered unhealthy foods by family members, child consumption of unhealthy foods when feeling bored, sad, mad or nervous, and how often the child was offered unhealthy foods by other children. No child behaviors worsened. Child behaviors that remained the same include: how frequently the child eats throughout the day, the frequency in which the child requests unhealthy snacks, and the frequency in which the child sneaks food.

Future Implementation Recommendations

Recommendations related to a more successful implementation of this intervention in the future include improved provider participation, utilization of broader inclusion criteria, consideration of the implementation time-frame, application of the Health Belief Model for addressing existing barriers for each patient prior to implementing the intervention, and implementation of the FHBS into the EHR. Since only 2 of the 4 primary care providers at the clinic participated in the recruitment process, it likely negatively influenced the number of patients who enrolled in the project. In order to improve provider participation, culture change within the clinic, one that values investing in the prevention, management, and treatment of overweight-obese children, is needed improve future implementation of any obesity-related intervention (Douglas, Button, & Casey, 2015).

Inclusion criteria should be modified so that it incorporates as many relevant and interested patients and families as possible. The narrow inclusion criteria may have prohibited patients from participating in the intervention, especially since the recruitment time frame occurred during the fall and winter months when the majority of patients were visiting the clinic due to illness which was part of the exclusion criteria. Using the Health Belief Model more closely to provide structure to the intervention could help better address patient health beliefs and attitudes that prevent them from engaging in health-promoting behaviors.

Lastly, incorporation of the FHBS into the EHR could serve as a measurement feedback system (MFS) and would help the providers guide obesity treatment, manage patient progress, illuminate outcomes, and provide feedback (Douglas, Button, & Casey, 2015). Doing so would also align with the national movement of utilizing information technology to enhance clinical

decision making and overall care quality (Douglas, Button, & Casey, 2015). Incorporating a MFS into current workflow would decreases provider burden and resistance to change (Douglas, Button, & Casey, 2015).

Discussion

Sustainability

In order to sustain an evidence-based family-centered childhood obesity intervention in the primary care setting, several factors must be considered. The effectiveness of family-based obesity interventions is widely supported by research, however, there are a variety of barriers in the primary care setting that prevent these interventions from being implemented. For example, many providers feel they lack the training to provide evidence-based care to obese children and would therefore require comprehensive standardized training in order to achieve desired treatment outcomes and improve provider confidence in implementing such interventions (Wilfley et al., 2016). Another barrier identified involves the lack of reimbursement for childhood obesity treatment services (Wilfley et al., 2016). As a result, a widely accepted policy change related to reimbursement for childhood obesity treatment services is needed to improve provider adoption and implementation of evidence-based obesity interventions (Wilfley et al., 2016).

Additionally, utilizing a relevant theoretical framework, in this case the Health Belief Model, provides a scientific foundation for implementing change and increases the likelihood of sustaining behavior changes that improve health (Glanz, Burke, & Rimer, 2015). It also provides a framework for identifying barriers that are preventing the establishment of health-promoting behaviors which allows the primary care provider to customize their care accordingly (Glanz, Burke, & Rimer, 2015). Furthermore, without a measurement feedback system in place to monitor patient progress and outcomes, interventions are unlikely to be properly implemented,

sustained, or result in desired outcomes (Douglas, Button, & Casey, 2015). With improved knowledge, confidence, an improvement in familial obesogenic lifestyle behaviors, and adequate reimbursement for services provided, primary care providers would be better equipped to implement practice change and sustain these much-needed interventions within the primary care clinic setting.

Strengths

There were several strengths associated with this quality improvement project. Two of the four providers in the clinic acknowledged the need for improved practice culture regarding the prioritization of obesity prevention, treatment, and management and were therefore actively invested in recruiting patients who met inclusion criteria. The one family who participated in the project from start to finish not only followed the intervention framework as recommended but achieved an improvement in 11 of the 27 familial behaviors assessed in just six weeks. Additionally, the providers at the clinic who participated in the project verbalized intent to utilize several aspects of the intervention for the prevention, treatment, and management of their overweight and obese patients.

Limitations

This primary care-based quality improvement project had several limitations. The lack of involvement in patient recruitment by two of the four primary care providers at the clinic site resulted in low participant enrollment in the intervention. The narrow inclusion criteria and the requirement that the child could not be ill during their clinic visit disqualified many pertinent and potentially interested patients and families from participating. Participant enrollment was also hindered because it occurred during the fall and winter months when most children who would have qualified for inclusion in the project were scheduled for sick visits.

Furthermore, having a short 6-week intervention time-frame may have prevented participants from achieving better results on the FHBS from pre- to post-intervention. A longer intervention duration involving additional follow-up communication instances between the caregiver and provider may have improved the patient's and family's outcomes. Also, low patient enrollment and lack of post-intervention FHBS completion by one of the two participants in the project resulted in data that was insufficient to perform statistical analysis. Additionally, findings would be more generalizable if a larger participant sample size was achieved.

Conclusion

Family-based interventions implemented in families with overweight or obese children can lead to improved lifestyle behaviors consistent with decreased future adverse health outcomes (Foster et al., 2015; Sorg et al., 2013; Waters et al., 2011). By using the FHBS to assess familial lifestyle behaviors related to nutritional intake, physical activity, mealtime routines, and screen time, obesogenic behaviors can be identified and replaced with health-promoting behaviors that can improve overall health outcomes for overweight-obese children and their families. Healthier lifestyle practices recommended in the NHLBI *We Can!* framework focus on improving nutritional intake, physical activity, and screen time and can help families not only establish these health-promoting behaviors but have the potential to decrease child BMI measurements over time (NHLBI, 2014). This family-based intervention allows for sustainable changes that will not only decrease the prevalence of childhood obesity in this pediatric primary care practice, but also provide the tools needed to adopt healthier lifestyle practices and avoid future health complications associated with obesity (NIH, 2014), especially when an evidence-based framework is utilized to guide the intervention (Glanz, Burke, & Rimer, 2015), and a

measurement feedback system is implemented to monitor patient progress and outcomes (Douglas, Button, & Casey, 2015).

Moreover, primary care providers are ideal when it comes to implementing family-based obesity interventions. They have a variety of opportunities to do so in the clinic setting, for example during well-child visits, they serve as models for how to live a healthy lifestyle, and they have an abundance of knowledge regarding community resources that can further support family's initiatives to establish healthy lifestyle habits (Vine, Hargreaves, Briefel, & Orfield, 2013). By addressing primary care provider resistance to implementing evidence-based pediatric obesity interventions, the prevention, treatment, and management of childhood obesity can improve not only the health of the child, but the health of the entire family (Wilfley et al., 2017).

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