Outpatient Multidisciplinary Interventions for the Treatment of Pediatric Obesity 2009: Practical Suggestions from Lessons Learned

Amy F. Sato, PhD1 and Elissa Jelalian, PhD1,2

1Alpert Medical School of Brown University, Providence, RI
2Bradley Hasbro Children’s Research Center, Providence, RI

Abstract

A growing body of literature supports the use of outpatient multidisciplinary interventions as an effective strategy for the treatment of obesity among children and adolescents. New findings support this approach for at-risk/increased risk populations, such as ethnic minority youth. Emerging ideas in the literature on multidisciplinary interventions for pediatric obesity include the use of developmentally sensitive interventions, alternative settings for treatment delivery, and use of meal replacements as an alternative dietary intervention. This review examines pediatric outpatient weight control interventions delivered by a multidisciplinary team, including a summary of key findings, new ideas in the field, and practical suggestions regarding what to look for in a high-quality outpatient program.

Introduction

Multidisciplinary outpatient intervention is a common approach for treatment of pediatric overweight and obesity. Comprehensive outpatient interventions (or “lifestyle” interventions) for pediatric obesity are designed to decrease overweight in overweight or obese children or adolescents and may be presented in either individual or group format. Treatment consists of several components, including dietary restriction, physical activity prescription, behavior modification strategies (e.g., self-monitoring, goal-setting, problem-solving, contingency management, stimulus control), varying levels of parent involvement, and ongoing assessment of diet, physical activity, and weight.1,2 Although education regarding nutrition and/or physical activity constitutes one component of this approach, a more primary focus involves attention to behavioral or cognitive–behavioral strategies that are critical in supporting individual changes in diet and physical activity. Behavioral interventions are delivered by therapists or counselors who have received at least some postcollege training and at least a master’s degree or its equivalent, or who are receiving training and direct supervision by a licensed therapist or counselor during the intervention. Although there is not a specific minimum or maximum length of treatment for outpatient interventions, they commonly include 6 months of active treatment.

This type of intervention is distinguished from education-only interventions, which typically provide information to families without the context of personalized
guidance on how to change behavior and immersion treatments, which involve 24-hour per day removal of clients from their homes for extended periods of time (i.e., typically more than 9 consecutive days). It is also important to distinguish active outpatient treatment from follow-up. One suggested definition is that active treatment involves the period during which clients are seen for in-person intervention with a maximum of 6 weeks between visits.3

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In contrast, follow-up care, which sometimes follows active treatment, can consist of any variety and frequency of patient contact (e.g., by phone, mail, or the Internet) or infrequent in-person consultations (7 weeks or longer between visits).

In this article, we consider what we know based on recent reviews of the literature on outpatient treatments and findings from several recent studies. We also provide practical suggestions for how healthcare providers can use this information to assist families with overweight and obese children and teens.

What We Know—Prior Reviews

Many recent reviews support the effectiveness of multidisciplinary interventions delivered within an outpatient setting. We provide a brief summary of key points from three such reviews, followed by consideration of recent studies that build on this foundation. Goldfield and colleagues3 reviewed a total of 39 studies with overweight/obese youth conducted in a clinic setting. They noted several important findings: (1) the most successful programs were those that included multiple components, including attention to diet, exercise, and integration of behavioral modification strategies; (2) treatments that included exercise without diet did not seem effective, but adding exercise to diet did appear to result in better weight losses; (3) including parents in treatment enhanced weight-loss outcomes for children; and (4) longer treatments seemed to produce better outcomes.

The recent Cochrane Collaborative Review examined 54 randomized controlled trials that utilized lifestyle intervention delivered in an outpatient setting.4 Consistent with the findings of Goldfield and colleagues,3 the authors concluded that an approach combining dietary change, physical activity, and behavioral components was effective compared to standard care and self-help.

A recent meta-analysis by Wilfley and colleagues5 posed a more basic question and sought to determine how lifestyle interventions compared to no treatment or education-only interventions. Their findings clearly demonstrate that lifestyle interventions promote significant decreases in pediatric obesity immediately following treatment and at follow-up compared to education only or wait-list/no-treatment control groups.

What Conclusions Can Be Drawn?

Collectively, the reviews indicate that:

1. Outpatient treatment that includes diet, exercise, and behavioral modification can have significant lasting effects compared to no treatment and educational comparison groups.

2. Although these effects are significant, it must be recognized that typical outcomes are modest, and that there is considerable variability in treatment outcomes, even using the same high-quality intervention.

3. Behavioral and cognitive–behavioral strategies are critical components. Among the behavioral strategies employed, self-monitoring (e.g., of food intake, physical activity) is potentially one of the most important.6 Consistent use of these strategies by participants and parents generally produces better outcomes.

4. Parent involvement is important, particularly for younger children, and probably produces better results when parents model dietary, physical activity, and self-regulatory behaviors (e.g., self-monitoring; wearing pedometers), and have positive attitudes about the benefits of making these changes.

Recent Studies

Discussion of three interesting new randomized controlled trials examining multidisciplinary outpatient interventions for pediatric obesity will help to elaborate on the four conclusions developed based on the prior reviews. First, in one
study, a cognitive–behavioral program delivered via the Internet produced greater reductions in z-BMI (at posttreatment) relative to usual care in 80 overweight adolescents. Another study examined a parent-only versus family-based (parent plus child) intervention among 93 overweight or obese youth in an underserved rural setting. Results of this study indicated that 10 months after the end of treatment, children in the parent-only group and children in the family-based group both had greater decreases in BMI z-score compared to the control group, with no differences in weight status change between youth in the parent-only and family-based groups. Finally, in a family-based lifestyle intervention with severely obese children (defined as child BMI ≥ 97th percentile) an outpatient intervention was successful, relative to usual care, at the end of a year only among children who attended three fourths or more of the sessions.

The use of meal replacements is also a new approach for treatment of obese children and adolescents. This strategy has been effective for weight loss in adults. Recent work with obese adolescents also supports an approach combining meal replacements (Slim-Fast® shakes and prepackaged meals) with behavior therapy for weight loss.

Findings from these studies help to illustrate four key points. First, comprehensive interventions that include the components of diet, activity, and behavioral intervention can be delivered in novel ways and in community settings with positive results. Second, parents play critical roles in pediatric weight control, as highlighted by the efficacy of treatment conditions that target only parents. Third, high levels of participation and involvement in treatment are important. Finally, innovations like including meal replacements may help improve the efficacy of outpatient treatments.

### Practical Suggestions

Based on examination of the current literature on multidisciplinary outpatient interventions, several considerations should be kept in mind when working with overweight/obese youth and their families. To succeed using this modality of treatment, parents/caregivers must demonstrate a willingness to participate in every way, from attendance at sessions to modeling appropriate dietary, physical activity and self-regulatory behaviors.

Programs that seem to work best include specific recommendations for diet and physical activity, parental involvement (especially for younger children), ongoing assessment of diet, physical activity, and weight, structured behavioral programming (e.g., self-monitoring, goal setting), and parent/caregiver training. Comprehensive multidisciplinary programs are often affiliated with hospitals or medical centers, which may serve as a starting point for identifying local programs. In addition, psychologists in the family’s area may be found by searching the “Find a Therapist” button on the website of the Association for Behavioral and Cognitive Therapies (www.abct.org/dMembers/?m=FindTherapist&fa=FT_Form&nolm=1&CFID=696447&CFTOKEN=53760523) or the “Find a Psychologist” button on the website of the American Psychological Association (http://locator.apa.org/). Finally, the American Academy of Pediatrics (www.aap.org/obesity/index.html) includes recommendations for outpatient interventions along with other suggestions for pediatricians/health professionals working with overweight children.

### Author Disclosure Statement

No competing financial interests exist.

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### References