Managing pediatric obesity
Barriers and potential solutions

Gilles Plourde MSc MD PhD

Although obesity interventions frequently involve changes in family lifestyle, schools, community environment, and national policies, family physicians can play an integral role in the management and prevention of pediatric obesity, as they have long-standing relationships with obese children and their parents.1-3

Family physicians can readily identify children at high risk of becoming obese, intervene, and follow up on progress.1-3 However, most family physicians believe they are unprepared to manage childhood obesity, or they perceive their efforts as ineffective. Table 12-9 shows multiple barriers that are associated with family physicians’ failure to recognize childhood obesity early and provide appropriate interventions.

With the increasing prevalence of childhood obesity and the commitment of governments and the World Health Organization to addressing the problem, more pressure will obviously be put on family physicians to further intervene. These constraints and pressures create an urgent need in the primary care setting to develop and evaluate novel clinical strategies that directly address these barriers. The objective of this article is to identify barriers to pediatric obesity management and prevention, and to provide simple and practical strategies to overcome these barriers.

Strategies

Table 21,2,10-19 outlines strategies proposed by family physicians to overcome barriers in the prevention of pediatric obesity. Some of the studies reviewed here are surveys; they are subject to sampling and self-reporting biases and low response rates. In the case of interviews, the open nature meant that the interviewed practitioners could detail their views and raise issues salient to them and ignore other issues. The attitudes and behaviour of family physicians not surveyed or interviewed might be different. Therefore, the information gathered from surveys and interviews cannot be generalized to all family physicians. However, the information provided by these studies is sufficient to identify solutions to most family physicians’ concerns.

It is encouraging to note that family physicians who reported receiving obesity-management training rated themselves as considerably more competent. Likewise, family physicians aware of recommendations more readily have positive attitudes about their personal counseling abilities and their overall effectiveness in obesity prevention.5,10 The availability of these tools will eventually help family physicians follow clinical practice recommendations on the management and prevention of pediatric obesity.

Davis et al10 and Koplan et al17 recommended that family physicians in primary care settings 1) calculate and plot age- and sex-specific body mass index (BMI) percentiles in all children and adolescents once a year; 2) use changes in BMI to identify rate of excessive weight gain relative to growth; and 3) encourage children and parents to eat a healthy diet, be physically active, and limit sedentary activities.

The Canadian Medical Association11 published clinical practice guidelines for the management and prevention of obesity in adults and children. For the prevention of pediatric obesity, the authors recommended limiting screen time to 2 or less hours a day, encouraging more activity and less food consumption, and limiting exposure to food advertising. In 2006, I provided recommendations for family physicians specific to pediatric patients. I explained that family physicians needed to identify patients at risk; encourage reduced consumption of sugar-sweetened soft drinks; decrease sedentary behaviour; involve parents; and provide age-appropriate anticipatory guidance and early surveillance.1 Nevertheless, the prevalence of pediatric obesity continues to rise in Canada and worldwide. Obviously, efforts to develop better ways of preventing pediatric obesity are needed.

Greater roles

It is difficult to confirm the effectiveness of family physicians’ interventions in the management of pediatric obesity. Nevertheless, with the tools provided here, family physicians should be able to improve their roles in the management of pediatric obesity. To further help family physicians, policy makers should support education and training, and facilitate collaboration between family physicians and community organizations to ensure that the use of existing infrastructure and local resources is maximized. They should promote good lifestyle habits such as using the following “5, 3, 2, 1, 0” daily slogan: 5 or

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more servings of fruits and vegetables; 3 structured
meals (including breakfast); 2 hours or less of televi-
sion or video games; 1 hour or more of moderate to
vigorous physical activity; and 0 sweetened bever-
dages. Finally, family physicians should take an active
stance in the management and prevention of obe-
sity, as well as take advantage of resources such as
continuing medical education training to keep well
informed on BMI measurements and new effective
counseling techniques.

Table 1. Barriers to pediatric obesity prevention identified by family physicians

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<tr>
<th>BARRIER</th>
<th>EXPLANATION</th>
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<tbody>
<tr>
<td>Belief that pediatric obesity is a social or family problem</td>
<td>Prevention of pediatric obesity strictly concerns the individual, his or her parents, or society at large, and a family physician's duty should be limited to simply raising the issue</td>
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<tr>
<td>Parents</td>
<td>Parents who themselves have weight problems, low levels of education, and high levels of stress might lack motivation and involvement, and deny the weight problems of their children</td>
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<tr>
<td>Family physicians' practice level</td>
<td>Family physicians' lack of time, resources, knowledge of published recommendations, referral options, monetary incentives, reimbursement for services, and tools to calculate BMI and its associated health risk, as well as their desensitization to the issue</td>
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<td>Unwillingness to change</td>
<td>Parents and children who are unprepared for, or uninterested in, lifestyle changes</td>
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<tr>
<td>Incongruence of goals and perceptions</td>
<td>Weight reduction is difficult when each member involved (ie, parents, children, and family physicians) has a different perception about weight loss</td>
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<tr>
<td>Socioeconomic status</td>
<td>Childhood obesity is more prevalent among families with low socioeconomic status; these families are less able to afford services and healthy foods. Junk food industries offer low prices on products and they also exert a greater influence on dietary habits</td>
</tr>
</tbody>
</table>

BMI—body mass index.
Data from Plourde,1 Dorsey et al,2 Baker et al,3 Turner et al,4 Franc et al,5 Spivack et al,6 Walker et al,7 Sesselberg et al,8 and Heintze et al.9

Table 2. Strategies proposed by family physicians to overcome barriers to prevention of pediatric obesity

<table>
<thead>
<tr>
<th>STRATEGY</th>
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<tr>
<td>Attend education sessions and receive support</td>
<td>Providing short education sessions (on-site visits) regarding new BMI growth charts and updated clinical practice guidelines revealed a dramatic increase in self-reported counseling ability</td>
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<td>Provide adequate training</td>
<td>Medical school curricula should include a comprehensive component on assessing and counseling children with weight problems</td>
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<td>Provide workshops with experts</td>
<td>Workshops given by exercise specialists and experts in pediatric obesity, dietetics, and child psychology can provide valuable insight on new treatment options, improving current health care methods, and addressing motivation</td>
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<td>Use patient-centred software</td>
<td>Standardizing the collection of relevant patient information from initial medical assessments and follow-up visits saves time and improves efficiency</td>
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<td>Use learning modules</td>
<td>Learning modules provide guidance on nutrition, physical activity, and behaviour modification using a structured treatment manual for weight counseling</td>
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<tr>
<td>Use electronic health records with automatic electronic alerts</td>
<td>Electronic health records with automatic electronic alerts provide easy calculation of BMI values and automatically display trends in patient weight changes. Electronic health records also force documentation and allow for efficient follow-up</td>
</tr>
<tr>
<td>Provide parents with take-home messages</td>
<td>Most parents become more receptive to providing weight-related counseling and less resistant to behaviour changes when they are well informed about their children's health</td>
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<tr>
<td>Encourage parents</td>
<td>Parents can serve as models for change; primary care providers should encourage them to make lifestyle adjustments a family affair</td>
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<td>Provide resources to patients and parents</td>
<td>Detailed weight management recommendations (eg, handouts of Canada's Food Guide, Canada's Physical Activity Guide) and links to accredited websites might ease the work of family physicians</td>
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<tr>
<td>Use the Standardized Obesity Family Therapy treatment model</td>
<td>By focusing on family interactions, this model can help improve obesity, physical fitness, self-esteem, and family functioning</td>
</tr>
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</table>

BMI—body mass index.
Data from Plourde,1 Dorsey et al,2 Davis et al,10 Lau et al,11 Nowicka and Flodmark,12 Perrin et al,13 Young et al,14 Polacek et al,15 Ett et al,16 Koplan et al,17 Whitlock et al,18 and Rodin et al.19

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Competing interests
None declared

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References