Weight Management and Obesity Symposium

Scott Gee, MD, advocates for early assessment and intervention in preventing overweight and obesity

A Pound of Prevention … Is Worth a Ton of Cure

Scott M Gee, MD

In the United States, the prevalence of overweight and obesity (body mass index (BMI) ≥ 25) among adults reached 64.5% in 1999-2000.[1] Kaiser Permanente (KP) has taken a proactive response to the epidemic of obesity.[2] This issue of *The Permanente Journal* highlights recent advances in treatment of obesity in adults and current activities in different KP regions. In the article "Obesity Research: Winning the Battle, Losing the War,"[3] (page 11) the authors detail effective weight management interventions from the recent literature and how the health care industry must respond to the epidemic of obesity as they have with the treatment of chronic conditions. This article also describes the chronic nature of obesity and the need for long-term weight maintenance strategies. Comprehensive, moderate-intensity weight management interventions with long-term maintenance have significant costs, which will need to be financed by the health care industry or by consumers. Americans already spend millions of dollars each year on weight loss strategies. With the staggering cost of obesity and the challenges of treatment and relapse, the importance of prevention becomes clear.

Obesity, like many other health conditions, begins very early in life and in most cases can be prevented. From the early 1960s to the late 1990s, prevalence of overweight among children and adolescents more than tripled.[4] Overweight children are at risk for becoming obese adults. About a third of overweight preschool children and half of overweight school-age children remain overweight as adults.[5] The risk for becoming an overweight child or adult can begin during pregnancy with additional risk factors throughout life. Prenatal risk factors for childhood overweight include being small (SGA) or large for gestational age (LGA).[6] Appropriate weight gain during pregnancy,[7] glycemic control, and tobacco cessation are some of the prenatal strategies to prevent SGA and LGA. During infancy, breastfeeding may provide some protection against childhood overweight.[8] Adiposity and BMI decline from infancy and reach a nadir between five and six years of age. Children who reach this nadir earlier (early adiposity rebound) are at increased risk of becoming obese adults.[9] The diagnosis of early adiposity rebound using BMI represents an important early intervention strategy to prevent overweight in childhood and adulthood. A recent review of the literature identified several key strategies for preventing overweight during childhood and adolescence.[10] These strategies included increasing PE and recreational physical activity and decreasing television viewing and sweetened-beverage consumption. During early adulthood, the average weight gain is approximately 1.8-2.0 pounds/year. Weight maintenance by making small improvements in physical activity or portion sizes are key strategies for preventing obesity among young adults.[11] Weight maintenance for a young adult requires a 100 kcal/day deficit compared with a 300-1000 kcal/day deficit required to produce a 10% weight loss in six months for an obese adult. It is therefore much easier and less costly to prevent obesity than to treat obesity. A longitudinal approach to preventing obesity is shown below.

Preventing obesity must begin with conception. BMI and other risk factors must be tracked throughout life and effective weight management interventions must

A longitudinal approach to preventing obesity

Fetus →	Infants →	Toddlers →	Children →	Adults
Preventing: • SGA • LGA	*Promoting:* • Breastfeeding	*Diagnosing:* • Early adiposity rebound	*Increasing:* • Physical activity	*Increasing:* • Physical activity
			Decreasing: • TV viewing • Sweetened beverage consumption	*Decreasing:* • Portion size
				Encouraging: • Weight maintenance

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be directed at different age groups. Early interventions are less intensive and less costly than weight management interventions later in life. KP's integrated structure and information technology systems provide a unique advantage to accomplish this goal. Every physician, nurse, and medical assistant must play a role in preventing and treating of obesity. Physicians and other clinical practitioners can provide lifestyle advice to all patients, identify patients at risk using BMI, and provide counseling to motivate and reinforce behavior change. Environmental changes in homes, schools, worksites, and communities are also needed to facilitate long-term behavior change. Health professionals can play a key role in making environmental changes in schools, communities, and worksites. The health care industry must balance resources between prevention and treatment to manage the obesity epidemic effectively. Past success in reducing tobacco use provides a framework for addressing the obesity epidemic and gives hope for the future. ❖

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Life Goes Not Backward

You may strive to be like them, but seek not to make them like you.
For life goes not backward nor tarries with yesterday. You are the
bows from which your children, as living arrows, are sent forth.

The Prophet, 1923, Kahlil Gibran, 1883-1931, Lebanese poet, philosopher, and artist