

Invited Commentary

Can Primary Care Physician-Driven Community Programs Address the Obesity Epidemic Among High-Risk Populations?

Regina M. Benjamin, MD, MBA; Susan Z. Yanovski, MD; Denise G. Simons-Morton, MD, MPH, PhD

The high prevalence of obesity in the United States threatens to reverse the trend of decades of health improvement. If we are going to stem the tide of the obesity epidemic, we need answers to several key questions: How can we most effectively draw on the 2 main strategies used in disease prevention, a clinical strategy targeting those at high risk and a broad environmental strategy that targets entire communities? What should be the goal of interventions for those who are already overweight or obese—achieving clinically significant weight loss or avoiding additional weight gain? We will also need to consider how to best serve our diverse population. Sadly, some communities face a disproportionate burden of obesity. Obesity is particularly common among some racial and ethnic minority populations, including 59% of African American women.¹ Can interventions be developed that are acceptable, accessible, affordable, and effective in the socioeconomically disadvantaged populations at highest risk for obesity and consequent health problems?



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We have known for decades that successful health behavior interventions—for example, the Diabetes Prevention Program trial²—use behavioral principles to improve diet and physical activity. However, intensive lifestyle interventions require substantial resources, including trained interventionists and time commitments from both clinicians and participants.

The study by Bennett et al³ in this issue of the journal took a different approach in testing an intervention program with a modest goal—preventing weight gain for 12 to 18 months—that is more likely to be feasible in clinical practice. The Shape intervention tested in the study promoted small changes that could prevent the weight gain typically seen in premenopausal African American women. It was culturally sensitive and “designed to improve [the participants’] overall well-being and to maintain their current body shape.”³ The intervention was delivered to women who were primary care patients in a community health center setting. More important, although participants were recruited from primary care, the intervention occurred largely in the community, using participant self-monitoring via interactive voice response, monthly telephone calls with a registered dietitian, and a 12-month YMCA membership.

Weight differences between the randomized groups at 12 and 18 months were statistically significant but small, about 2% of body weight.³ The intervention did not have an effect on cardiovascular disease risk factors, but the study did not have adequate power to detect those outcomes.

These results provide some much-needed evidence to inform discussions about preventing weight gain in popula-

tions at high risk for the health consequences of obesity. Although the study participants were relatively young (aged 25-44 years), they had considerable comorbidity: 6% had diabetes mellitus, more than 30% met criteria for metabolic syndrome, more than a third had hypertension, and more than 20% had clinically significant depressive symptoms.³ Moreover, 29% were not employed and 35% had an educational level of high school. Thus, results demonstrate that a moderate-intensity intervention can prevent weight gain among a high-risk population.

It is unclear which particular elements of the intervention resulted in significant weight differences between the intervention and usual-care groups, but notably, the Shape intervention used a team-based approach involving dietitians and coaches and connected participants to community resources through the YMCA membership. It is often hard to resist an environment that is conducive to sedentary living and unhealthy eating, so patients need resources they can use where they live, learn, work, and play. Because of its outreach beyond the clinical setting, the Shape intervention is an example of linking the clinical approach for high-risk patients with the public-health community approach.

The promising results from this study³ and others testing approaches based in health care settings (eg, the POWER [Practice Based Opportunities for Weight Reduction] trials⁴) suggest that these approaches may be effective for preventing weight gain or promoting weight loss, but additional research is needed to determine the extent to which they reduce obesity-related health risks. More intensive behavioral interventions for weight loss have shown improvements in risk factors such as blood pressure, cholesterol level, and diabetes incidence with body weight reductions in the range of 5% to 10%.² It may be that greater weight losses than those reported by Bennett et al³ are required to achieve improvements in cardiovascular disease risk factors, and weight maintenance may need to be sustained longer to achieve such health benefits.

Although clinical interventions are important to prevent weight gain in adults and reduce weight in obese adults, we also need effective strategies throughout the lifespan to prevent obesity and its comorbid conditions, as seen at baseline by Bennett et al.³ Clinical approaches targeted to high-risk patients and public health approaches aimed at reducing risk in the population are important.

We can envision a time when such interventions for preventing weight gain as well as successful interventions for weight loss are provided under the leadership of primary care physicians, while the broader community receives an intervention program of education and environmental change, in-

cluding effective strategies in worksites, schools, and community organizations. Combining clinical and community approaches may offer the best hope for helping our nation's citizens achieve and maintain a healthy weight.

ARTICLE INFORMATION

Author Affiliations: Department of Health and Human Services, US Surgeon General, Washington, DC (Benjamin); National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, Maryland (Yanovski); National Institutes of Health, Office of Disease Prevention, Bethesda, Maryland (Simons-Morton).

Corresponding Author: Regina M. Benjamin, MD, MBA, Department of Health and Human Services, US Surgeon General, 200 Independence Ave SW, Washington, DC 20201 (reginabenjamin@comcast.net).

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