Published in final edited form as:

Arch Intern Med. 2011 February 28; 171(4): 313–315. doi:10.1001/archinternmed.2011.3.

Is primary care practice equipped to deal with obesity?

Debra Haire-Joshua^a and Samuel Klein^b

^aProfessor and Director, Center for Obesity Prevention and Policy Research

^bProfessor and Director, Center for Human Nutrition and Institute of Public Health, Washington University School of Medicine, St. Louis, MO

Obesity is associated with a long list of serious medical complications that impair health, reduce quality-of-life, and shorten lifespan (1). These complications can be improved or completely resolved by weight loss. Therefore, obesity is a legitimate medical concern that should involve the implementation of therapeutic weight loss by primary practice physicians. However, an evaluation of a large primary care database in the United States found that only 20% of obese patients were given a diagnosis of obesity and only 40% of those patients were given an obesity management plan (2). These data suggest that general medical practices are not addressing the issue of weight management in obese patients.

In this issue of *Archives*, ter Bogt and colleagues (3) report the results of a randomized controlled trial that evaluated the effect of lifestyle counseling, provided by trained nurse practitioners (NP) within a primary care setting, on long-term weight management. Patients with a BMI between 25–40 kg/m², who had hypertension and/or dyslipidemia, were enrolled from 11 general practices in the Netherlands. The NP lifestyle counseling group had four individual visits (~30 min each) and one telephone feedback session during the first year, then one individual visit and two feedback sessions annually for the next two years. The weight loss differences between groups were small. At the end of year one, NP group participants lost ~1.5% more weight than the usual care group participants ($p=0.002$), but, at the end of year three, the difference in weight loss between groups (~0.6%) was not statistically significant.

The results from this study demonstrate that using a trained NP to provide limited lifestyle counselling within a general medical practice does not result in clinically meaningful long-term weight loss. These results are consistent with recent reviews showing mixed evidence for effectiveness of weight loss interventions in primary care settings (4).

There is however substantial data from large multicenter clinical trials to suggest that *intensive* interventions achieve weight loss that improves health outcomes. In the Diabetes Prevention Program, 16 individual behavior counselling sessions provided in the first 24 weeks followed by monthly individual and group sessions with a case manager resulted in ~7% and ~4% weight loss at year one and four, respectively (5). In the Look AHEAD Trial, overweight or obese adults with type 2 diabetes treated with intensive lifestyle intervention lost ~9% body weight at one year (6). This intensive intervention consisted of counseling from registered dietitians, behavior psychologists, and exercise specialists plus liquid meal replacements, frozen food entrees and obesity drug therapy, delivered through weekly sessions for the first six months and by bi-weekly session for the next six months. A recent study evaluating the effect of dietary macronutrient composition on weight loss found that weekly comprehensive group behavioral treatment for 20 weeks, followed by bi-weekly sessions for 20 weeks, and then bi-monthly sessions for the remainder of the two-year study resulted in a weight loss of ~11% at one year and ~7% at the end of year two (7). These studies represent the positive results of weight loss treatment delivered by expert weight management personnel to people motivated to lose weight.

These findings parallel those of other studies in which health care providers cite concerns about their ability to implement effective weight management counseling due to poor patient motivation coupled with competing demands, and a lack of time, training, or financial incentives (8). Others report weight counseling as ineffective because it does not address the context within which the patient lives. Indeed, patients receiving weight loss counseling in the primary care setting will spend a majority of their time in environments that make implementing healthy choices a challenge. Home settings are often sites in which obesity clusters among family members, spouses, and children, making individual lifestyle changes difficult. Worksite settings may not accommodate healthy choices and sedentary jobs may limit opportunities for physical activity. At a community level, access to affordable low-calorie, nutritious foods may be limited, while neighborhoods without sidewalks or safe parks discourage walking or physical activity (9).

To date, there is no firm evidence to demonstrate the translation of effective weight loss interventions into primary practice ‘systems’ (3, 4, 10, 11). What can be done to address the gap between weight loss research and real world practice within the primary care setting?

Obesity is a multilevel problem, influenced by the environments where people spend a majority of time, such as home, school, childcare, work, or community.(9) Therefore, sustainable weight management will be more readily achieved if implemented within and supported by these multiple settings. A multilevel approach to obesity prevention and treatment should combine the unique strengths of the health care setting with the complementary resources of other settings.

The primary care provider is a critical entry point to the health care setting for the obese population. The high prevalence rate of obesity and its association with medical complications ensures that obese patients are commonly encountered in primary care practice. Patients usually make three health care visits annually, mostly to their primary care physician. Therefore, the primary care provider is uniquely positioned to consistently monitor weight, health indicators and risk, and assist in weight management.(12)

Several important factors make it difficult for primary care physicians to provide effective weight management. First, primary care providers have not received adequate training in providing evidence based weight management counseling. Patients who are screened for obesity, and receive individually focused behavioral counseling, are more likely to be motivated to lose weight (8). Second, a systematic reorganization of office-based processes that encourages comprehensive obesity screening and management is needed to facilitate integrated weight loss interventions (13). Unfortunately, there are several barriers to office reorganization, including financial constraints, resistance to change by office workers, and fragmented resources (8). Third, the use of other approaches that are used to manage chronic diseases, such as the medical home or chronic disease care model, should be considered to provide a basis for evaluating multilevel strategies and community components (13, 14). Fourth, reimbursement of health care services associated with weight management is limited (15).

Effective therapy for obesity will need integrated interventions across multiple environments where individuals spend time. Primary care setting interventions will have limited sustainability if they are not integrated within the financial system of an organization, and limited impact if they are not supported by complimentary actions of other settings, such as worksite or community This system will require new cost-benefit models to determine the most efficient and effective approaches for specific patient populations (16).

References

1. Klein S, Wadden T, Sugerman HJ. American Gastroenterological Association Technical Review: Clinical Issues in Obesity. *Gastroenterology*. 2002; 123:882–932. [PubMed: 12198715]
2. Bardia A, Holtan SG, Slezak JM, Thompson WG. Diagnosis of obesity by primary care physicians and impact on obesity management. *Mayo Clinic Proc*. 2007; 82(8):927–932.
3. ter Bogt NCW, Bemelmans WJE, Beltman FW, Broer J, Smit AJ, van der Meer K. Preventing weight gain by lifestyle intervention in general practice setting: 3-years results of a randomized controlled trial. *Archives of Internal Medicine*. in press.
4. Anderson P. Reducing overweight and obesity: closing the gap between primary care and public health. *Fam Pract*. 2008; 25(Suppl 1):i10–6. [PubMed: 18796703]
5. Knowler WC, Barrett-Connor E, Fowler SE, et al. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med*. 2002; 346(6):393–403. [PubMed: 11832527]
6. Pi-Sunyer X, Blackburn G, Brancati FL, et al. Reduction in weight and cardiovascular disease risk factors in individuals with type 2 diabetes: one-year results of the look AHEAD trial. *Diabetes Care*. 2007; 30(6):1374–83. [PubMed: 17363746]
7. Foster GD, Wyatt HR, Hill JO, et al. Weight and metabolic outcomes after 2 years on a low-carbohydrate versus low-fat diet: a randomized trial. *Ann Intern Med*. 153(3):147–57. [PubMed: 20679559]
8. Leverence RR, Williams RL, Sussman A, Crabtree BF. Obesity counseling and guidelines in primary care: a qualitative study. *Am J Prev Med*. 2007; 32(4):334–339. [PubMed: 17383565]
9. Brownson RC, Haire-Joshu D, Luke DA. Shaping the context of health: a review of environmental and policy approaches in the prevention of chronic diseases. *Annu Rev Public Health*. 2006; 27:341–70. [PubMed: 16533121]
10. Harvey EL, Glenny A, Kirk SF, Summerbell CD. Improving health professionals' management and the organisation of care for overweight and obese people. *Cochrane Database Syst Rev*. 2001; (2):CD000984. [PubMed: 11405970]
11. Harvey EL, Glenny AM, Kirk SF, Summerbell CD. An updated systematic review of interventions to improve health professionals' management of obesity. *Obes Rev*. 2002; 3(1):45–55. [PubMed: 12119659]
12. Ferguson, C.; Langwith, C.; Muldoon, A.; Leonard, J. Improving Obesity Management in Adult Primary Care. George Washington University; Mar 16. 2010 2010
13. Kushner RF. Tackling obesity: is primary care up to the challenge? *Arch Intern Med*. 170(2):121–3. [PubMed: 20101005]
14. Manson JE, Skerrett PJ, Greenland P, VanItallie TB. The escalating pandemics of obesity and sedentary lifestyle. A call to action for clinicians. *Arch Intern Med*. 2004; 164(3):249–58. [PubMed: 14769621]
15. Trogon JG, Finkelstein EA, Hylands T, Dellea PS, Kamal-Bahl SJ. Indirect costs of obesity: a review of the current literature. *Obes Rev*. 2008; 9(5):489–500. [PubMed: 18331420]
16. McKinnon RA, Orleans CT, Kumanyika SK, et al. Considerations for an obesity policy research agenda. *Am J Prev Med*. 2009; 36(4):351–7. [PubMed: 19211215]