Factors Impacting Receipt of Weight Loss Advice from Providers Among Patients with Overweight/Obesity

Halbert CH, Jefferson M, Melvin CL, et al. Provider advice about weight loss in a primary care sample of obese and overweight patients. J Prim Care Community Health 2017 Jun 1:2150131917715336.

Study Overview

Objective. To examine receipt of provider advice to lose weight among primary care patients who are overweight or obese.

Design. Cross-sectional study.

Setting and participants. Participants were recruited through convenience sampling of primary care practices that were members in a national practice-based research network or part of federally qualified health care system based in the Southeastern United States. Each practice used 1 or more of the following recruitment strategies: self-referral from study flyers posted in practices, given during clinic appointments, or posted on the practice portal (n = 3 practices); mailed invitations to patients part of a practice registry (n = 7 practices); and on-site recruitment by research staff during clinic hours (n = 2 practices). Inclusion criteria included having at least a 3-year history of being a patient in the practice, being aged 18 years or older, and having an overweight or obese status according to Centers for Disease Control definitions (body mass index [BMI] 25.0–29.9 kg/m^2 = overweight, ≥ 30 kg/m^2 = obese). After completing informed consent, participants completed an interview comprising a 20-minute survey, either in English or Spanish, either in-person or by telephone.

Measures. The survey obtained measures related to sociodemographic characteristics (race, gender, age, marital status, education level, employment status, income level), clinical characteristics (height and weight, history of diabetes/hypertension), psychological variables (readiness to make weight loss or maintenance efforts and confidence in their ability to lose or maintain weight), shared decision-making about weight loss/management (using the SDM-Q-9, with a higher total score indicating greater shared decision-making), and physician advice about weight loss (whether they had ever been advised by a doctor or other health care professional to lose weight or reduce their weight).

Main results. Among the study sample (n = 282), 65% were female, 60% were from racial and ethnic minority groups, 55% were married, 57% had some college education or higher, and 37% had an income level below $20,000/year. The mean age of participants was 53.1 (± 14.4) years. 59% had been advised by their physician to lose weight.

The percentage of participants who reported receiving provider advice was statistically different from 50% using the binomial test (P = 0.0035). Based on bivariate analysis of provider advice about weight loss, women were significantly more likely than men to report that their provider had advised them to lose weight (P = 0.001).

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Both actual and perceived obesity were associated significantly with receiving provider advice about weight loss (both $P = 0.001$). Diabetic patients were also significantly more likely than nondiabetic patients to report that their provider had advised them to lose weight ($P = 0.01$). Participants who reported greater readiness to lose or maintain their weight were more likely to report provider advice about weight loss compared to those with less readiness ($P = 0.003$). While employed patients, those who had at least some college education, and those who were hypertensive were more likely to report provider advice compared to those who were unemployed, had less education, and were not hypertensive, these associations were not statistically significant ($P = 0.06$, $P = 0.06$, $P = 0.10$, respectively). There were no racial/ethnic differences in receipt of provider advice to lose weight ($P = 0.76$). Participants with greater shared decision-making were more likely to report provider advice about weight loss ($P < 0.001$).

Based on results of the multivariate logistic regression analysis, obesity status, perceived obesity, and SDM about weight loss/management had significant independent associations with receiving physician advice about weight loss. Participants with obesity were more likely than those with overweight status to report provider advice (odds ratio [OR] = 1.31, 95% CI = 1.25–4.34, $P = 0.001$). Similarly, participants who believed they had overweight/obesity had a greater likelihood of reporting provider advice compared with those who did not believe they were obese/overweight (OR = 1.40, 95% CI = 2.43–6.37, $P < 0.001$). Shared decision making about weight loss/management was associated with an increased likelihood of reporting provider advice (OR = 3.30, 95% CI = 2.62–4.12, $P < 0.001$).

Conclusions. Many patients with overweight/obesity may not be receiving advice to lose/manage their weight by their provider. While providers should advise patients with overweight/obesity about weight loss and management, patient beliefs about their weight status and perceptions about shared decision-making are important to reporting receipt of provider advice about weight loss/management. Patient beliefs as well as provider behaviors should be addressed as part of efforts to improve the management of obesity/overweight in primary care.

Commentary

Over 35% of adults in the United States have a BMI in the obese range [1], putting them at risk for obesity-related comorbidities [2], often diagnosed and treated within primary care settings. The US Preventive Services Task Force recommends that all patients be screened for obesity and offered intensive lifestyle counseling, since modest weight loss can have significant health benefits [3]. Providers, particularly within the primary care setting, are ideally situated to promote weight loss via effective obesity counseling, as multiple clinic visits over time have the potential to enable rapport building and behavioral change management [4]. Indeed, a 2013 systematic review and meta-analysis of published studies of survey data examining provider weight loss counseling and its association with changes in patient weight loss behavior found that primary care provider advice on weight loss appears to have a significant impact on patient attempts to change behaviors related to their weight [5]. In this study, the authors reported higher rates of physician advice about weight loss compared to other studies, however, the results still demonstrate that based on patient reporting, not all providers are advising weight management or weight loss. Several studies have discussed barriers to weight management and obesity counseling among adults by physicians, which include lack of training, time, and perceived ineffectiveness of their own efforts [6–8].

Additionally, and perhaps more importantly, different factors can impact patient perception of provider advice and/or counseling around weight management, weight loss, or obesity. These can include race/ethnicity [9], health literacy [10], and motivation [11]. This study adds to the literature by shedding new light on variables that are important to patients being advised by providers to lose/manage their weight, including actual and perceived obesity status, and perceived shared decision-making. Previous research has focused on patient-provider communication and shared decision-making in the areas of antibiotic use [12], diabetes management [13], and weight loss [14].

Strengths of this study included the variety of recruitment methods employed to enroll patients from multiple clinic sites, the diverse sociodemographic characteristics of the study sample that resulted, the assessment of variables using standard or previously used measures, and the use of both bivariate and multivariate analyses to assess relationships between variables. Key limitations were acknowledged by the authors and included the cross-sectional design, which does not allow for causal-

ity to be assessed; the use of surveys for data collection, which relies on subjective and self-reported data; the assessment of weight management/loss advice only from the perspective of the patient, as opposed to including the provider perspective or using objective observations/data; and the lack of assessment of advice content or frequency of advice given.

Applications for Clinical Practice

As the authors suggest, this study highlights opportunities for improving weight-related advice for patients. Providers should incorporate obesity screening and counseling with all patients, as recommended by clinical care guidelines and the literature. In weight management conversations, providers should also be mindful of patient beliefs and understanding of their weight status, and incorporate shared decision-making practices to increase patient self-efficacy (ie, confidence, readiness) to make weight loss efforts.

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References

1. Flegal KM, Kruszon-Moran D, Carroll MD, et al. Trends in obesity among adults in the United States, 2005 to 2014. JAMA 2016;315:2284–91.
2. Guh DP, Zhang W, Bansback N, et al. The incidence of co-morbidities related to obesity and overweight: a systematic review and meta-analysis. BMC Public Health 2009; 9:88.
3. Moyer VA. Screening for and management of obesity in adults: U.S. Preventive Services Task Force recommendation statement. Ann Intern Med 2012;157:373–8.
4. Schlair S, Moore S, Mcmacken M, Jay M. How to deliver high quality obesity counseling using the 5As framework. J Clin Outcomes Manag 2012;19:221–9.
5. Rose SA, Poynter PS, Anderson JW, et al. Physician weight loss advice and patient weight loss behavior change: a literature review and meta-analysis of survey data. Int J Obes (Lond) 2013;37:118–28.
6. Forman-Hoffman V, Little A, Wahls T. Barriers to obesity management: a pilot study of primary care clinicians. BMC Fam Pract 2006;7:35.
7. Jay M, Gillespie C, Ark T, et al. Do internists, pediatricians, and psychiatrists feel competent in obesity care? Using a needs assessment to drive curriculum design. J Gen Intern Med 2008;23:1066–70.
8. Leverence RR, Williams RL, Sussman A, Crabtree BF. Obesity counseling and guidelines in primary care: a qualitative study. Am J Prev Med 2007;32:334–9.
9. Durant NH, Bartman B, Person SD, et al. Patient provider communication about the health effects of obesity. Patient Educ Couns 2009;75:53–7.
10. Zarcadoolas C, Levy, J, Sealy Y, et al. Health literacy at work to address overweight and obesity in adults: The development of the Obesity Action Kit. J Commun Health 2011;4:88–101.
11. Befort CA, Greiner KA, Hall S, et al. Weight-related perceptions among patients and physicians: how well do physicians judge patients' motivation to lose weight? J Gen Intern Med 2006;21:1086–90.
12. Schoenthaler A, Albright G, Hibbard J, Goldman R. Simulated conversations with virtual humans to improve patient-provider communication and reduce unnecessary prescriptions for antibiotics: a repeated measure pilot study. JMIR Med Educ 2017;3:e7.
13. Griffith M, Siminerio L, Payne T, Krall J. A shared decision-making approach to telemedicine: engaging rural patients in glycemic management. J Clin Med 2016;5:103.
14. Carcone AI, Naar-King S, E. Brogan K, et al. Provider communication behaviors that predict motivation to change in black adolescents with obesity. J Dev Behav Pediatr 2013;34:599–608.

CORRECTION

In the Case-based Review entitled "Management of patients with HIV and Hepatitis B Coinfection" published in the October 2017 issue of JCOM, there is an error on page 478. In the last 2 sentences in the first paragraph under the heading "Summary," *anti-HBsAg* should read *anti-HBs*.