

Empathy goes a long way in weight loss discussions

Female patients are more likely to step up weight loss efforts when a physician shows empathy and offers support

Practice recommendation

- A physician's empathy, collaborative approach, and words of support can have a positive effect on overweight and obese women's weight loss efforts.

Abstract

Purpose This study explores how weight-related topics are discussed between physicians and their overweight and obese female patients.

Methods We surveyed and audio-recorded preventive health and chronic care visits with 25 overweight and obese female patients. We coded both for quantity (content and time) of weight-related discussions and quality (adherence to Motivational Interviewing [MI] techniques). We then tested correlations of these measures with patients' reported attempts to lose weight, change diet, and change exercise patterns 1 month after the visit.

Results Weight was routinely addressed (19 of 25 encounters). Patients usually initiated the topic (67% of time). Physicians' use of MI techniques resulted in patients attempting to lose weight and changing their exercise patterns.

Conclusion Physicians may benefit from MI training to help patients lose weight.

Research has shown that when physicians advise overweight patients to lose weight, improve their diet, or increase their physical activity, patients are more likely to report attempting to do so.¹⁻³ In a study of 433 primary care patients, 46% reported trying to lose weight after their physician counseled them about nutrition, compared with 37% who were not counseled.¹

The reality, though, is that physicians are not very likely to address weight loss. Data from the Behavioral Risk Factor Surveillance System indicate that patients report their providers address weight loss in fewer than 20% of their examinations.⁴ These low rates are concerning; when physicians do not advise patients to lose weight, patients may believe their weight is not a problem.⁵ Even more worrisome: Physicians are rarely trained on how to counsel patients about weight loss. So, when physicians do counsel patients, it may not be effective.

Using Motivational Interviewing

One effective style of counseling is Motivational Interviewing (MI). MI is a patient-centered, directive counseling style used to help patients explore and resolve their ambivalence related to a particular behavior change (see **What is Motivational Interviewing?**).^{6,7} Researchers have studied the use of MI by counselors and

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What is Motivational Interviewing?

Motivational Interviewing is a counseling style intended to create changes in behavior by helping patients to explore and resolve their ambivalence.⁷ In a patient-physician encounter guided by MI:

- The motivation to change comes from the patient.
- It is the patient's job to articulate and resolve his or her ambivalence.
- Direct persuasion is not used; the physician is quiet and eliciting, but directive in helping the patient examine his or her ambivalence.
- Readiness for change is recognized not as a patient trait, but as a part of the interaction between physician and patient.
- The patient-physician relationship is regarded more like a partnership.

case managers (in handling smoking cessation),⁸⁻¹¹ but not by physicians. Further, no one has examined whether physicians instinctively use MI techniques when discussing weight loss with their patients, or whether MI counseling results in patients trying to lose weight.

The primary aim of this study was to assess how overweight and obese female patients discuss weight loss with their physicians. We also wanted to explore the role that physicians' way of discussing weight loss—and the use of MI in particular—might play in their patients' motivation to lose weight.

■ Methods

Setting and recruitment

All data were collected in a family practice clinic within Duke University Medical Center. We approached 9 physicians in the practice to participate, and all consented. Only 7 physicians had visits with overweight or obese patients and were included in this report. We reviewed their electronic patient appointment schedules twice a week to identify female patients meeting the following criteria: English-speaking, overweight or obese (body mass index [BMI] ≥ 25 kg/m²), 40 years of age or older, and with health maintenance or chronic

care appointments scheduled at least 7 days later. We sent these patients a letter describing the study, and allowed them 7 days to call a toll-free number if they didn't want to participate.

We took several steps to avoid priming physicians and patients about the purpose of the study. First, both physicians and patients were told the study was about how doctors and patients discuss preventive health topics—they were not told the study was about examining discussions of weight. Second, we surveyed physicians 1 month prior to audio-recording visits, and patients 1 week prior to their visit. Third, we included measures for other preventive health topics (eg, smoking and alcohol) to detract attention from weight.

Gathering data

1. Phone survey before patient visit. We telephoned those patients who did not refuse participation and conducted a baseline survey. We asked about date of birth, race, marital status, level of education, income, weight, height, history of weight loss attempts, and whether this was their first visit with that physician. We categorized women with a BMI ≥ 25 but < 30 as overweight, and those with a BMI ≥ 30 as obese.¹²

We also assessed each patient's

- **self-efficacy**—that is, confidence in their ability to lose weight. We asked: "How confident are you that you can lose weight?" (1=not at all confident, 5=extremely confident).

- **readiness to lose weight.** We asked: "Are you seriously considering trying to losing weight within the next 6 months?" and, if yes, "Are you planning to try to lose weight in the next 30 days?"¹³ Those not considering trying to lose weight were staged as *precontemplation*; those who were considering trying but not planning to try in the next 30 days were staged as *contemplation*; and those who were planning to try to lose weight in the next 30 days were staged as *preparation*.

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When physicians showed more empathy, patients were more likely to report changing their exercise patterns 1 month after the visit

2. Office visit. When patients came in for their appointments, the research assistant gave them consent forms to sign. The assistant then escorted the patient to the examination rooms and started the digital audio recorder. The exams typically took 27 minutes.

Immediately following the exam, the research assistant surveyed the patients. The assistant asked 2 questions we'd asked at baseline: "How confident are you that you can lose weight?" and "Are you seriously considering trying to losing weight within the next 6 months?" (If yes, "Are you planning to try to lose weight in the next 30 days?") She also made an appointment to conduct a 1-month follow-up telephone survey.

3. One-month follow-up survey. During a follow-up phone survey, we asked patients whether they had attempted to lose weight by changing their diet, exercise patterns, or both. Subsequent to this call, we sent the study participants a \$25 check.

Analyzing the patient-physician discussion

Content. Two authors coded 9 topics that physicians and patients discussed that were "weight-related." Topics included: physical activity, diet, BMI, psychosocial issues, referral to a nutritionist, weight loss surgery, goal setting, weight loss medications, and health care avoidance. We also coded who first brought up the topic.

Time spent. We calculated time spent discussing weight-related topics and also the total time of the patient's visit.

Motivational Interviewing. Two coders assessed MI. To assess fidelity to MI principles, we used sections of the Motivational Interviewing Treatment Integrity scale (MITI)¹⁴ to rate patient interactions on a scale of 1 (low) to 7 (high) in 2 categories: empathy and MI spirit.

- **Empathy** is when physicians convey understanding of patients' perspective.

- **MI spirit** includes evocation, collaboration, and autonomy. *Evocation*

is when physicians draw out patients' own reasons for change. *Collaboration* is when physicians act as partners, supporting and exploring patients' concerns. *Autonomy* is when physicians convey that decisions to change lie completely with patients. Inter-rater reliability for the Empathy and MI Spirit was adequate (ICC=.94 and .97, respectively).

Coders also counted MI-adherent and MI-nonadherent behaviors.

- **MI-adherent behaviors** were those where the physician asked permission to do things, affirmed statements, offered words of support, and emphasized patient control. For instance, the physician might say, "It's great that you have stopped drinking sweetened tea" or "Whether you lose weight is up to you."

- **MI-nonadherent behaviors** were those where the physician advised without asking permission. For example, the physician might say, "Let me tell you what you need to do to make this work..." or "Well, if you want to continue on the way you are, you know your diabetes is only going to get worse."

These were combined to create a ratio of percentage MI-adherent behaviors by dividing MI-adherent by MI-nonadherent. There was an excellent level of agreement between coders for MI-nonadherent (kappa=.80) and a moderate level of agreement for MI-adherent (kappa=.52) behaviors.

Data analysis

We used Spearman correlations to assess the relationship between our predictors, quantity (time spent and whether weight was addressed) and quality (MI techniques), and mediators of behavior change (readiness to lose weight and self-efficacy to lose weight) and behavior change (attempts to lose weight, change in diet, and change in exercise patterns). We used SAS 9.1 (SAS Institute, Inc, Cary, NC) for all analyses. The study was approved by the Duke University Medical Center Institutional Review Board.

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When physicians used techniques compatible with Motivational Interviewing, patients were more likely to attempt to lose weight

TABLE 1

Characteristics of patients and physicians

CHARACTERISTIC	PATIENT (N=25)	PHYSICIAN (N=7)
Age (M, SD)	59 (11)	43 (10)
Race (%)*		
White	50	57
Black	50	29
Indian		14
Female (%)	100	57
Married (%)	46	--
Employed (%)	54	100
College graduate (%)	42	100
Health status, self-reported (%)		
Poor to fair	42	--
Good	37	--
Very good to excellent	21	--
Times lost at least 10 lbs (mean, SD)	5.8 (4.0)	--
New patient with physician (%)	12	--
Body mass index (mean, SD)	37 (11)	22 (3)

* One participant did not provide his/her race.

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Example of MI-adherent dialog:

■ **“It’s great that you have stopped drinking sweetened tea”**

■ **“Whether you lose weight is up to you”**

Results

We identified 202 eligible female patients. Of those, 96 had appointments that passed before we could contact them; 11 called the 800 number to refuse. Of the remaining 95 women, we reached 94 by phone. Of those, 19 refused to participate, 46 were ineligible because we had reached the targeted number of women in their weight category, and 4 skipped their appointments. Thus, we audio-recorded 25 encounters (for 14 obese and 11 overweight patients). Of these 25 patients, 24 completed the 1-month follow-up.

Patient demographics. Patients had a mean age of 59 years (standard deviation [SD]=11). Half were white; 42% were college-educated. Forty-two percent reported being in poor to fair health (TABLE 1).

The typical participant was moderately confident and ready to lose weight both before and after their visit. One month after their visit, 63% reported attempting to lose weight. More than half attempted to change their diet (67%); slightly more than half changed their

exercise patterns (58%) (TABLE 2).

Physician demographics. Physicians had a mean age of 43 years (SD=10). About half were white; about half were female. No physicians were overweight.

Patients were more likely to raise the weight issue

Weight-related topics were addressed in 19 of the 25 encounters (11 out of 12 preventive health visits, 8 out of 13 chronic care visits). The mean time spent discussing weight-related topics was 6.9 minutes out of an mean total of 27.0 minutes, or 26% of the total patient-physician time. Weight was more likely to be addressed with obese patients (86%) than with overweight patients (63%).

Patients were more likely than physicians to initiate discussions on weight. Physicians raised weight-related topics 37% of the time. Obese patients were slightly more likely to raise weight-related topics (8 out of 12 times [67%]) than overweight patients (4 out of 7 times [57%]).

The weight-related topics addressed were, in order from most to least frequent: physical activity, diet, BMI, psychosocial issues (eg, motivation to lose weight, triggers for unhealthful eating [such as family cookouts], negative talk [such as telling oneself that losing weight is too hard]), referral to a nutritionist, weight loss surgery, goal setting, health care avoidance, and weight loss medication. When comparing those who attempted to lose weight (n=15) with those who did not (n=9), there was no significant difference in whether or how often a topic was addressed.

Physicians’ empathy scores are moderate

Physicians had a moderate score for Empathy (mean=3.8, standard deviation [SD]=1.5, on 7-point scale), a low score for MI Spirit (mean=2.4, standard deviation [SD]=1.4, on 7-point scale), and displayed fewer MI-adherent behaviors than MI-nonadherent behaviors (mean=0.4, SD=0.3). These means did

not differ significantly based on the patients' weight.

Weight loss conversations linked to patients' readiness

The discussion of weight-related topics, and the time spent doing so, were related to patients' readiness to lose weight after their initial examination, when patients' baseline readiness to lose weight was controlled. The more ready patients were to lose weight after their visit, the more likely they had discussed weight (Spearman's rank correlation coefficient [r]=.52, P=.01) and spent more time discussing weight (r=.42, P=.05). No other associations were statistically significant (TABLE W1, available online at www.jfponline.com).

Several of the Motivational Interviewing scores predicted patients' outcomes. When physicians showed more empathy, patients were more likely to report changing their exercise patterns 1 month after the visit (r=.50, P=.02). When physicians displayed more of an MI Spirit, patients were more likely to be ready to lose weight (r=.63, P=.005) and change their exercise patterns (r=.47, P=.04). Further, when physicians used more MI-adherent techniques, patients were more likely to attempt to lose weight (r=.42, P=.08).

Discussion: Good quality discussions lead to change

While more discussion about weight loss led to a greater readiness to lose weight, it was the quality of the discussions that actually led to behavior changes. Most patients had virtually the same levels of readiness to lose weight before and after the visit. It is likely that patients who were ready to lose weight discussed their weight with their physicians—and spent more time discussing it than those patients who were not ready to lose weight.

How patients and physicians discussed weight influenced behavior change. When physicians were more empathic and used techniques consistent with Motivational

TABLE 2

Feeling about weight loss before and after the visit

	BASELINE	POST-VISIT	1 MONTH
Mediators of behavior change			
Confidence in losing weight (M, SD)*	3.8 (1.4)	3.8 (1.1)	—
Stage of readiness to lose weight (%)			
Precontemplation	25%	28%	—
Contemplation	8%	8%	—
Preparation	67%	64%	—
Behavior change variables			
Attempted to lose weight (%)	—	—	63%
Attempted to change diet (%)	—	—	67%
Changed exercise patterns (%)	—	—	58%

* Scale ranged from 1= not at all confident to 5 = extremely confident.

Interviewing, patients were more likely to report changing their exercise routine and attempting to lose weight.

To date, no one has examined the effect of physicians' MI techniques on weight-related behavior change in a large study. The low adherence to MI techniques suggests that physicians can improve their counseling skills.

Patients aren't afraid to talk about their weight

Unexpectedly, patients were more likely than physicians to initiate weight-related discussions. Only one third of the time did physicians raise the topic. Patients appear to be "empowered" to initiate discussions about weight loss. We expected physicians and patients to both be somewhat apprehensive about raising this sensitive topic. However, these findings suggest that overweight and obese patients will initiate the discussion most of the time.

Limitations and strengths of this study

The small sample size limited the analyses. Nonetheless, we found strong correlations in this sample that suggest true relationships that were unlikely to have occurred by chance. Also, we were unable to conduct nested analyses to account for the clustering of patients seen

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The low overall adherence to MI techniques suggests that physicians' counseling skills need improvement

by the same physicians. The results may not generalize to settings outside of academic medical centers and practices in which physicians have less time to spend with patients.

The physicians in this study were not overweight, which could limit the generalizability of the results. Patients may be less likely to raise the topic of weight with physicians who were themselves overweight. In addition, while we assessed single-item outcomes, more objective and extensive standard measures of diet, physical activity, and weight loss would have been optimal.

Some notable strengths of this study were that we used a comprehensive multimodal measurement in assessing both content and style of conversations in addition to patient self-report. We also examined Motivational Interviewing techniques among physicians with little or no MI training; most studies have examined MI among trained counselors only.

How to talk about weight loss: More study is needed

The most commonly addressed weight-related topics were diet and physical activity. However, when looking at the topics that were discussed, we found no patterns between those who attempted to lose weight and those who didn't. This may mean that because weight loss is such a complex behavior, mention of any aspect of it—be it physical activity, diet, psychosocial issues, and so on—helps patients in their efforts. It also could be that the physician and patient discussed some other aspects in a previous visit; therefore, it was the cumulative effect of many conversations that influenced the patient to change.

These results need to be explored in a larger study to understand whether discussing certain topics is more influential than discussing others in promoting weight loss. ■

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We expected physicians and patients to be apprehensive about raising this topic, but our findings suggest that overweight patients will bring it up most of the time