

Research

Chiropractic Approaches to Discussing Weight Management With Overweight and Obese Patients: A Focus Group Study

Anna L. Walden, MS, DC^{1*}, Stacie A. Salsbury, PhD, RN², Dana J. Lawrence, DC, MMedEd, MA³

Address: ¹Founder, Objective Network Enterprises (ONE), Bettendorf, IA, USA, ²Clinical Project Manager, Palmer Center for Chiropractic Research, Davenport, IA, USA, ³Senior Director, Center for Teaching and Learning, Professor, Palmer College of Chiropractic, Davenport, IA, USA.

E-mail: Anna L. Walden, MS, DC – drannawalden@gmail.com

*Corresponding author

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Abstract

Purpose: Most adults in the United States are overweight. Physician counseling on weight management is a recommended intervention for overweight patients. The purpose of this study was to describe the attitudes, perceptions, and barriers of faculty clinicians and chiropractic students toward the discussion of weight-management with overweight and obese patients.

Methods: Three focus groups were conducted; 1 consisted of faculty clinicians (n=4) and 2 included 8th-10th-trimester student interns (n=8). Focus groups were audio-recorded while researchers took field notes, and focus group participants were debriefed immediately following the discussion to confirm accuracy of field notes. Audio-recordings were transcribed verbatim and participant information was de-identified. Data were analyzed using thematic content analysis by 2 researchers and other researchers verified data interpretation.

Results: Participants noted many challenges to providing chiropractic treatments to overweight patients. Four themes on discussing weight management with these patients emerged: 1) perceptions about obesity, 2) soft-approach techniques, 3) barriers to discussing weight, and 4) the professional responsibility of chiropractors in weight management. Faculty clinicians and interns expected patients to initiate conversations about weight management with their chiropractors. When weight management was discussed, participants offered indirect

suggestions for small-scale lifestyle changes, rather than directly addressing the need for weight loss with their patients. Participants identified the sensitive topic of obesity and fears of losing patients as barriers to discussing weight management.

Conclusion: Chiropractors may require further training in applying prevailing models of behavior modification and weight management counseling to overcome barriers to discussing weight management with their overweight patients.

Introduction

The Centers for Disease Control and Prevention estimate that nearly 70% of U.S. adults are overweight; of those, 36% are obese.¹ Due to the rate at which the prevalence of obesity is growing, the American Medical Association recently made a controversial decision to declare obesity a disease.² Compared to normal weight individuals, people with obese body mass index (BMI) scores (≥ 30) are significantly more likely to suffer from all-cause mortality and serious co-morbidities including hypertension, type II diabetes, hypercholesterolemia, heart disease, strokes, gastro-esophageal reflux, osteoarthritis, back pain, depression, sleep apnea, and cancer.³⁻⁹ Obesity is a leading cause of mortality in the U.S., with 1 in 5 preventable deaths now linked to excess weight.^{10,11} Obesity-related annual medical costs grew from \$78.5 billion in 1998 to \$147 billion in 2008.¹²

Factors that may contribute to excess weight and obesity include genetics, environment, stress levels, and economic status.¹³ Lifestyle habits related to diet, exercise, and sedentary work environments also directly influence adiposity.¹⁴⁻¹⁹ Obesity is a preventable lifestyle condition, and often can be reversed with successful diet, exercise, and lifestyle interventions.^{20,21} Physician counseling is an effective intervention for helping patients change their health risk behaviors, including excess weight.²²⁻²⁴ The National Institutes of Health recommend that health professionals advise patients who are overweight to lose weight.²⁵ However, less than half of obese patients report receiving any advice to lose weight from their healthcare providers.²⁶⁻²⁸

A study published in 2010 evaluating the effect of the 2007 Council on Chiropractic Education (CCE) Standards on Wellness and Health Promotion²⁹ found that chiropractic students provided health advice to less than 7% of their overweight or obese patients.³⁰ Little is known about the perceptions of chiropractic students or faculty on counseling patients on weight management.^{30,31} The purpose of this pilot study was to explore the perceptions of doctors of chiropractic (DCs) and chiropractic student interns working in an academic health center toward discussing weight management with overweight and/or obese patients. We also identified barriers to discussing weight management concerns and described recommendations for initiating weight-loss discussions.

Methods

Design

We conducted a pilot study to explore chiropractic faculty and student interns' perceptions of their professional role in discussing weight management with their overweight and obese patients. Focus group methodology allowed researchers to explore the diverse opinions of selected participants on a topic of which little information currently is known.³² The focus group method consists of multiple, moderated and structured group discussions on the interview topic. The group style interview allows participants to respond to the comments of other group members, often generating previously unexplored themes related to the topic under investigation.³² Previous focus group studies have explored the topics of obesity and weight management with physicians³³⁻³⁵ and with community-based adults.^{36,37}

Ethics Approval and Informed Consent

The Institutional Review Board at the participating college approved the human participant protections for this study. The procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration. Clinic administration of the academic health center agreed to allow the investigators to recruit staff doctors and student interns for this study. Each participant completed a written informed consent to enroll in this study.

Participants and Recruitment

Participants included DCs serving as faculty clinicians and 8th, 9th, or 10th trimester student interns in a chiropractic academic health clinic. Recruitment methods included written and word-of-mouth invitations, and flyers posted within the clinics.

Interview Schedule

Our interview schedule included six open-ended questions (**Table 1**) designed to elicit participants' views on the obesity epidemic, their approach to caring for a patient who is overweight or obese, approaches to talking with patients about weight management, health promotion resources for overweight patients, and the role the chiropractic profession should play in treating obesity. We also asked a question about the challenges of providing chiropractic adjustments to overweight persons. The interview schedule was based upon previous studies evaluating the perceptions of primary care providers toward weight management in overweight patients.³³⁻³⁵ A preliminary interview schedule was pre-tested during a focus group held with research department graduate students and employees and refined based upon feedback of the group participants.

Table 1. Interview Schedule

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1. What are your views about the current obesity epidemic?
 2. As a chiropractor, what is your approach to the patient who is overweight or obese?
 3. How does adjusting an overweight or obese person differ from adjusting someone who is not overweight or obese?
 4. How do you talk to your patients about weight management?
 5. What are some useful health promotion resources you offer your overweight patients?
 6. In the best of all worlds, what role should the chiropractic profession play in treating obesity?
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Data Collection

Participants received an overview of the focus group study, signed a written consent, and completed a demographic survey before the discussion. The focus groups were held in conference rooms, moderated by the principal investigator, audio-recorded, with field notes on the session taken by assistant moderators. Each session lasted 45-60 minutes. The audiotapes were transcribed verbatim into Microsoft® Office Word by the principal investigator. Any potentially identifiable participant information was removed from the transcripts.

Data Analysis

Transcripts were analyzed using thematic content analysis.³⁸ The transcripts were read and re-read for emerging patterns. Two investigators (ALW, SAS) coded the text and created categories of recurrent themes based on responses to each question that were then compared across focus groups. Data were evaluated on 3 dimensions: 1) chiropractors' beliefs about how much responsibility they should take in evaluating and managing overweight patients, 2) challenges chiropractors face when communicating with patients about being overweight or obese and, 3) chiropractors' views about effective intervention strategies for overweight and obese patients. Corroboration and validation of data analyses were conducted via peer review and auditing provided by the co-investigator. To strengthen coding and interpretation, the findings were determined collaboratively by the research team and evaluated for accuracy of interpretation.

Results

Participant Characteristics

We conducted 3 focus groups with 12 participants in total, 2 groups with chiropractic student interns and 1 with faculty clinicians. **Table 2** presents the demographic and clinical background of study participants. Most participants were white (91%), non-Hispanic (100%), and male (58%). Participants' perceived personal weight categories were normal weight (42%), overweight (42%) and obese (17%). Participants estimated that a third to a half of their patients were overweight or obese, but that less than 25% of their patients request advice about weight management, exercise, or lifestyle changes.

Table 2. Participant Demographics.

Characteristic	n	%
<i>Sex (n=12)</i>		
Male	7	58
Female	5	42
<i>Ethnicity (n=12)</i>		
Not Hispanic or Latino	12	100
<i>Race (n=11)</i>		
Black or African American	1	9
White	10	91
<i>Education (n=12)</i>		
Some college, no degree	2	17
Bachelor's degree	4	33
Graduate or professional degree	6	50
<i>Current Status at Palmer (n=12)</i>		

Faculty clinician	4	33
8th trimester student	3	25
9th trimester student	4	33
10th trimester student	1	8
Average % of Overweight or Obese Patients (<i>n=11</i>)		
<25%	2	18
26-50%	5	45
51-75%	4	36
Average % of Patients Who Request Weight Management Advice (<i>n=11</i>)		
<25%	9	82
26-50%	2	18
Average % of Patients Who Request Exercise or Lifestyle Change Advice (<i>n=11</i>)		
<25%	8	73
26-50%	3	27
Self-perceived Weight Category (<i>n=12</i>)		
Normal weight	5	42
Overweight	5	42
Obese	2	17

Note. *n = 12; missing data if n is less than 12.*

Providing Chiropractic Care to Overweight Patients

These chiropractic professionals identified many challenges in caring for the spinal health needs of their overweight patients. For example, participants noted that some overweight patients experienced difficulties when moving their bodies into position for certain techniques. Many treatment tables are not built to accommodate the weight or size of overweight people or were uncomfortable for these patients. Some DCs and students noted that it was more difficult to palpate the spinal anatomy of overweight persons, as this student participant noted: “It’s definitely more challenging to palpate and find things”. Other participants expressed numerous issues when delivering spinal adjustments, such as the challenges of setting up a side posture manipulation, the need to find a ‘mechanical advantage’, and the substitution of less effective techniques for more preferred methods. One faculty member stated: “For many of them, I can’t adjust them the way I would really like to adjust people so it certainly has an effect there. I don’t think I’m doing as good of a job when I have to use drops or other techniques to adjust people, so it definitely changes there for sure.”

Discussing Weight Management with Overweight and Obese Patients

Four themes emerged from our analysis of chiropractic faculty and student approaches to discussing weight management with overweight and obese patients. First, the participants discussed their perceptions of the current obesity epidemic, and the role that American culture plays in the increasing prevalence of overweight persons in the US. Next, the participants described their preferences for patient-initiated discussions of weight management and use of “soft-approach techniques” to talk with patients about their weight. Next, these chiropractic professionals identified key barriers to discussing weight management. Finally, the participants expressed the professional responsibility of chiropractors in discussing weight management with their patients. **Table 3** provides an overview of the four main themes identified in this analysis.

Table 3. Four major themes.

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1. Perceptions about obesity
 2. "Soft-approaches": Techniques chiropractors use when managing overweight and/or obese patients
 3. Barriers to managing overweight and/or obese patients
 4. The role responsibility of chiropractors in weight management
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Theme 1: Perceptions about Obesity

Chiropractic faculty clinicians and student interns discussed their perceptions of the current obesity “epidemic” in depth, sharing that they agree that obesity may be a problem, but perhaps not truly as “epidemic” as publicized. The perceptions of these chiropractic professionals on the subject of obesity were not based on its impact on health or healthcare. Rather, participants described the rise in overweight and obesity as a result of the modern western culture. Cultural instigators of obesity included (a) the increase in sedentary but hurried lifestyles, (b) poor diets of fast food and refined sugar, (c) social norms surrounding eating as established in childhood, and (d) effective marketing strategies of the food, lifestyle, healthcare and insurance industries. One participant commented, “Until the culture changes how we live our lives there is really not much change in terms of how we’re looking for a quick meal; we’re very sedentary whether it be video games or just sitting in front of the computer and the 8 hour workday.” Another participant echoed: “I think Americans just want something that's simple and fast and if it's not simple and fast than they're not going to do it.”

Participants also perceived that deceptive food product packaging and advertising might lead patients to make poor nutritional choices. For example, chiropractic faculty and students acknowledged that food research and development creates foods that taste better so people eat more and become “addicted” to certain foods. Participants identified strategic food marketing and packaging of products with pictures of cartoon characters as starting poor eating habits early in life, making it more difficult to change when weight becomes an issue.

For this group of chiropractic health care providers, the issue of an obesity “epidemic” was viewed as perhaps little more than propaganda with the agenda to create a market for higher health insurance premiums, more diet foods, gym memberships, and other weight-loss products. One participant stated, “I don’t think we all the sudden became this obese nation, it’s just that more people are pointing it out now and we’re more aware of it. It’s a market driver.” A participant commented, “They’re going to use the BMI to figure out how much you're going to have to pay for the affordable health care insurance that has been passed.” Participants were less concerned with obesity than the overall health status of their patients. For example, “I don't believe it necessarily matters if the patient is overweight or obese. That's not.... yes, it's something physical that you can recognize on the outside but there's a lot of thin people too that don't necessarily make healthy choices and that can also have an impact on their health.”

Theme 2: "Soft Approaches": Techniques Chiropractors Use When Talking to Overweight or Obese Patients about Their Weight

Faculty clinicians and interns stated they had to sense that their patient was ready and willing to make weight changes before they initiated any direct weight management discussions. The participants expected patients to indicate when they want to make changes and what advice they are open to receiving. One participant provided an example related to a new supplement display: “Interestingly they put out that big display in our waiting room and I have not had one person comment on that to me. Not

one patient has commented to me on that at all.” In contrast, another participant described a recent successful dietary intervention in which the patient first displayed personal interest and accountability, “She had an interest in helping herself, she was looking for a way, she was seeking suggestions.”

Participants acknowledged that they routinely assess a patient’s weight on the first visit but they do not address any weight-related concerns unless a patient directly requests an intervention because they want to first establish rapport with their patients. They described building rapport by addressing any patient-initiated health concerns. Once rapport is established, they believe that patients will, “see that you are helping and if they see that you care about them, then when they’re interested and ready, they will bring it (*weight concerns*) up to you.”

Although the participants indicated that they do not directly offer nutritional counseling or exercise advice unless a patient requests, they felt it was important to “plant-the-seed” to bring awareness to the patient about their weight status in an indirect way. One participant described, “You get the patient’s BMI and all you have to do is plant the seed. You don’t have to give them a nutrition plan on the first day in.” An indirect approach to initiating a weight-management discussion was detailed in the following comment, “Describe talking about the inflammatory response, why do they think they’re hurting in multiple locations...and then explain to them how food can have such an influence on inflammation that’s present and talk about would they be interested in trying to get out of pain and then presenting them with the diet that supposedly is to reduce inflammation although at the same time it is a weight loss diet.” Providing small recommendations, or “baby-steps”, was an approach discussed by all 3 focus groups. Examples of feasible advice provided to patients included suggestions to drink more water, take the stairs instead of the elevator, plan meals, use a smaller plate to encourage smaller portions, and keep a food diary to raise caloric-intake awareness.

Theme 3: Barriers to Discussing Weight Management

One barrier to discussing weight management with their overweight and obese patients was the fear of offending patients. These participants described weight as a “sensitive subject” that should be approached with caution, as weight often was “embarrassing” for the patient. If a patient does not bring up their weight as a concern, they do not believe it is appropriate to address the topic. These chiropractic professionals believed that patients already know they are overweight and therefore the patient will request weight management advice when they are ready to make a change.

Two focus groups discussed fear of losing patients as a challenge that chiropractors face when communicating with patients about being overweight or obese. One participant described previous attempts to discuss weight with patients that discouraged any future attempts, “You have a couple people that don’t come back because you talked to them about their weight, and pretty soon you don’t talk about that.”

Another barrier to addressing patients’ weight concerns was that this group of chiropractors and students did not view overweight or obesity as a chiropractic priority. When a patient presents with

excess weight, participants believed their primary function was to address neuromusculoskeletal concerns. According to one participant, “It’s (*weight management*) not a huge part of our practice. We do not focus on that...we’re focusing on the correction of the vertebral subluxation and the nutritional...that is a secondary thing.” Although many of the participants agreed that discussing diet and exercise was a part of their chiropractic training, they viewed the training as reserve knowledge to incorporate in the event a patient asks a question.

Theme 4: Professional Responsibility of Chiropractors in Weight Management

All of the focus groups initially acknowledged that chiropractors should play a vital role in weight management by influencing patients to make better nutritional choices and exercise more. The major role of a chiropractor is to encourage the optimal health of their patients. The participants acknowledged that it is both important and challenging for chiropractors to be good role models for healthy lifestyles. They also acknowledged that their own weight and health status may discredit the weight advice they offer their patients. Therefore, these chiropractic representatives discussed that being a health advocate requires either setting a good example or disclosing personal experiences with patients to maintain credibility and rapport.

Once the participants agreed that chiropractors have a role to play in addressing the weight management concerns of their patients, the conversation in all 3 groups shifted toward the limitations of a chiropractor and the need for collaboration with other healthcare providers. These discussions involved interwoven themes of the chiropractic philosophy regarding health and disease and the need for a collaborative care model to best serve the patients. One participant stated, “In a perfect world nutrition should be addressed with every patient to make sure that they are functioning to the best of their abilities, their optimal level at all times so that they can get better.” In response, the next participant’s statement was, “I think we gotta be careful to a point in chiropractic that we have to understand that we can’t be everything to everybody so we also need to limit... a nutritionist or maybe a dietician may be able to handle that a little bit better than of something that we’re great at...Allow for a team thing but be cautious about becoming everything to everybody.”

Discussion

The purpose of this study was to describe the perceptions of faculty clinicians and student interns toward addressing weight management concerns with their overweight and obese patients. The findings of this study support the work of Ndetan, Evans, and Lo (2010)³⁰ who suggest that there is a disconnect between the teaching standards of chiropractic institutions and what is practiced regarding weight management counseling in chiropractic teaching clinics. As described in the ‘Perceptions about Obesity’ theme, the participants in our study identified many cultural barriers to weight management while downplaying the health risks of excess weight for their patients. The participants communicated that conversations about weight management are primarily the patients’ responsibility and that they preferred to address musculoskeletal concerns of their overweight patients. However, these faculty

clinicians and interns considered diet and exercise advice important for the overall health of their patients rather than specifically as weight management topics. These findings appear consistent with a study that found a positive association between medical students' personal habits and their attitudes toward preventive counseling.³⁹

Motivators for the participants to engage in weight management conversations with their patients included having personal experiences with weight management challenges, feeling a deep sense of rapport with their patients, and believing that their patient's pain may be somehow directly related to excess weight. Many of the faculty clinicians experienced multiple failed attempts at addressing the weight concerns of their patients. This sentiment has been identified as a barrier to obesity intervention within other healthcare practices.⁴⁰ These previous failed attempts discouraged these clinicians from initiating future conversations about weight management. Faculty clinicians are in a position of mentorship to their assigned students and evidence suggests that weight management within chiropractic settings can be effective.²⁴ Therefore, the clinician's hesitancy or avoidance of addressing weight management concerns is a considerable barrier to providing effective student learning experiences in this area. A study investigating the perspective of weight management from an obese person's perspective suggests that obese patients not only expect an intervention from their healthcare providers, they desire it.⁴¹

Many of the barriers discussed in this study, such as fear of losing or offending patients and lack of confidence in weight management expertise, suggest the need for further training to overcome provider apprehensions of offending patients. To improve weight management strategies, clinicians must be able to encourage counseling that effectively distinguishes between blame for weight gain versus responsibility for weight control. Developing the communication skills necessary to effectively frame weight counseling practices in a positive, non-stigmatizing way may be one approach to creating patient interactions with better results. The "soft-approach" techniques within in healthcare may no longer be adequate as more nationally instituted weight management programs are being implemented and scrutinized.^{42,43} Applying prevailing models of behavior modification may aid in identifying with whom, when, and how to support weight-management counseling and may provide chiropractors a more systematic approach in effectively identifying a patients' willingness to change.⁴⁴

Limitations

The qualitative methodology and small sample of chiropractors and students from one chiropractic college limits the generalizability of the results to all faculty clinicians and student interns treating patients within an academic setting, including at this institution. Participants in this study were self-selected volunteers; therefore, they may have stronger opinions on the topic of obesity and weight management than those who did not volunteer. As this was a pilot study, the researchers completed only 3 focus groups, which may have precluded our team from reaching thematic saturation.³² While analysis of these groups demonstrated an overall agreement on the topic of weight management discussions held by DCs with their overweight patients, additional groups held with other providers and students may identify additional important themes in future studies.

Summary

This focus study explored the perceptions of chiropractic faculty and interns regarding discussing weight management with their overweight and obese patients. The results suggest that this group of participants did not perceive patient obesity and weight-management as a chiropractic priority. Rather, the participants believed that the responsibility to manage weight and to initiate conversations about weight loss is the patient's personal responsibility. Most participants reported that chiropractors should be healthy role models for their patients yet many barriers prevented them from discussing weight-management concerns with their patients. These chiropractic professionals suggest the use of soft approaches to conversations about weight management to 'plant the seed' in patients' minds about this topic, and to offer small steps to achieve weight loss goals.

Future survey research with DCs and chiropractic students based upon the results of this focus group study may better inform educational initiatives on this topic. Further research also may explore the expectations that overweight and/or obese patients have of their chiropractors regarding weight-management. Obese patients may have different attitudes and perceptions than their providers and it would be helpful for chiropractors to see and understand how their overweight patients perceive the role of a chiropractor.

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Authors' contributions

ALW conceived of the study, participated in study design and coordination, developed the interview guide, moderated the focus groups, analyzed the data, and drafted the manuscript. SAS conceived of the study, participated in its design and coordination, developed the interview guide, and assisted in data analysis and manuscript writing. DJL made substantial contributions to the study design and revised the manuscript critically for intellectual content. All authors read and approved of the final manuscript.

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