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Current attitudes and practices of obesity counselling by health care providers

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Summary
Introduction: Relatively few patients receive obesity counselling consistent with the USPSTF guidelines, and many health care professionals (HCPs) are biased in their attitudes towards obesity management.
Methods: A national sample of family physicians, internists, OB/GYN physicians, and nurse practitioners (NPs) completed a web-based survey of beliefs, practice, and knowledge regarding obesity management.
Results: A majority of HCPs believe that it is both the patient's and the provider's responsibility to ensure that the patient is counselled about obesity. Obesity (77%), obesity-related diseases (79%), or obesity-related risk factors (71%) prompt HCPs to offer obesity counselling; 59% of HCPs wait for the patient to broach the subject of their weight. Increased blood pressure (89%) and heart disease risks (90%) are the most common themes in counselling. Across all HCPs except NPs ''exercise'' is discussed more frequently than ''physical activity'' (85% vs 81%), ''diet'' more frequently than ''eating habits'' (77% vs 75%), and ''obesity'' more frequently than ''unhealthy weight'' (60% vs 45%). NPs are more likely to discuss physical activity, eating habits, and unhealthy weight instead. To improve counselling for obesity, HCPs reported needing more time (70%), training in obesity management (53%), improved reimbursement (53%), and better tools to help patients recognise obesity risks (50%). Obesity-related diseases, risk factors, or obesity alone predict obesity counselling amongst HCPs.

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Conclusion: Better training in weight management and tools to help patients recognise risks appear to be key elements in helping patients compare the risks of what they may consider invasive therapy against the risks of continued obesity.

Introduction

The United States Preventive Services Task Force (USPSTF) guidelines recommend intensive, multicomponent behavioural interventions for patients with BMI over 30 kg/m^2 [1]. This recommendation is based on a 2011 systematic review that found such counselling leads to an average 6% body weight loss and improved comorbidities and cardiovascular disease risk factors, compared with little or no weight loss in the control groups [2]. Other evidence suggests that weight-related advice from health care providers (HCP) substantially affects a variety of health outcomes in addition to weight loss [3]. Following discussions on weight management with a HCP, patients are not only more likely to perceive themselves as overweight, but are also more likely to report wanting to lose weight, and more likely to attempt weight loss [4—6]. Perhaps most importantly, patients who are counselled show an increased odds of clinically significant weight loss (at least 5%) [7].

Previous literature has assessed HCP perceptions about obesity and obesity counselling; despite the significant benefits of such counselling, relatively few patients receive obesity counselling consistent with the USPSTF guidelines [8—10]. Physicians instead report using low intensity and infrequent counselling and focusing the conversation exclusively on diet and physical activity, omitting other potential factors that predispose to obesity such as genetic, environmental, psychological, neurochemical influences [11—14]. The literature also suggests that HCPs are biased in their attitudes towards obesity management; many believe obesity simply results from a lack of patient self-control and it is the patient's responsibility alone to manage obesity [15,16]. These views contrast with provider beliefs about other behaviour-related health conditions, such as diabetes or cardiovascular disease, in which physicians perceive that challenges in treatment stem from characteristics of the disease itself and the complexity of its management [17]. Additionally, HCPs report low confidence in their ability to treat obesity, instead identifying nutritionists and dieticians as the most qualified providers to counsel patients with obesity [14,18].

Most of these studies have focused only on primary care physicians and have not considered other types of HCPs. However, with so much focus nationally by healthcare systems and the media on obesity, and several recent policies expanding the scope of HCP-recommended obesity practice, such as the USPSTF indications for intensive behavioural counselling in primary care, these beliefs may be changing. This paper adds to the literature by assessing the current attitudes and practices of HCPs, and evaluating differential attitudes and practices between primary care physicians, OB-GYNs, and nurse practitioners regarding obesity counselling. We have included these provider types because as primary care NPs deliver similar services and spend their time in nearly identical ways to primary care physicians, and the association of obesity with complications in pregnancy and infertility treatment point to the role of OB-GYNs in addressing the obesity epidemic [19,20]. Given that these provider types provide primary care to their patients, many of whom may be living with obesity, each of these providers play a primary role in obesity management.

Methods

Porter Novelli collected data in June 2015 using the web-based survey, DocStyles 2015. Survey questions were designed by the research team in concert with Porter Novelli. Survey participants were randomly sampled using SERMO's Global Medical Panel, which includes over 330,000 medical professionals in the United States. Panelists are verified using a double opt-in sign up process with telephone confirmation at place of work. SERMO took a random sample of eligible healthcare professionals from their main database to load into their invitation database. All invitations included a link to the Web-based survey. The sample included 465 family practitioners, 535 internists, 250 OBGYNs, and 251 nurse practitioners. Respondents were paid an honorarium of $35—$80 for completing the survey. The amount was dependent upon the length of the survey, which differed by provider type. Participants were screened to include only those who practice

Table 1 Characteristics of survey respondents.

	Total	PCPs	OB-GYNs	NPs
n	1501	1000	250	251
Age (mean)	46.5	45.9	49.3	46.2
Gender				
Male	62%	74%	59%	13%
Female	38%	22%	41%	87%
Race				
White	66%	59%	73%	88%
Black or African American	3%	2%	3%	5%
Asian	23%	30%	16%	4%
Two or more races	3%	3%	4%	3%
Other race	5%	6%	3%	1%
Work setting				
Group outpatient practice	66%	66%	70%	56%
Individual outpatient practice	20%	20%	24%	19%
Inpatient practice	15%	14%	6%	25%
Years of practice	15.91	15.42	18.59	14.52

in the United States, actively see patients, work in an individual, group, or hospital practice, and have been practicing for at least three years.

The survey contained 131 questions, five of which were submitted by our research team for this study. Answers to those questions are analysed here. Participants were asked about demographic characteristics (gender, race, age, height, weight), medical practice (income of patient population, setting, years in practice, type of practice), attitudes about obesity, and practices concerning obesity counselling and treatment. Reported height and weight were used to calculate Body Mass Index (BMI, kg/m^2) (Appendix A).

Statistical analysis was done using the Stata software (StataCorp. 2015. *Stata Statistical Software: Release 14*. College Station, TX: StataCorp LP). Chi square tests and analysis of variance (ANOVA) tests assessed differences in provider characteristics by specialty.

Results

The survey had a 77% response rate with a total of 1501 providers participating. The response rate was greatest from internists and family medicine providers (89%) and lowest from NPs (52%). Demographic information is provided in Table 1. The average age of participants was 46.6 years ($M = 46.4$, SD-10.30) with OB-GYNS slightly older, and the average length of practice was 16 years ($M = 15.9$, $SD = 8.75$). The majority of respondents were White (66%), and while percentages varied, this was true across provider type with NPs having the largest percentage of White respondents (88%). Most providers worked in a group outpatient practice (66%). Men made up 62% of the sample and were likely to be family practitioners or internists. Women were the minority in each provider category, except the NP group in which they made up 87%. The prevalence of obesity in each group was 10%, 8%, and 14% amongst PCPs, OB-GYNs, and NPs respectively.

Table 2 describes participants' responses concerning attitudes towards obesity counselling. Sixty-five percent believe it is the responsibility of both the provider and the patient to ensure that obesity counselling takes place. Only 2% of total respondents indicated the responsibility fell entirely on the patient, although over a third felt the responsibility was theirs alone. No providers thought obesity was not a medical issue. There were no statistically significant differences between provider type concerning counselling responsibility.

Sixty-seven percent of respondents indicated that having more time with patients would improve their ability to counsel on obesity. Across specialties, this percentage was highest amongst PCPs (71%) ($p < 0.01$). A larger percentage of NPs (64%) valued training in obesity management compared to other specialties ($p < 0.01$), and a larger percentage of OB-GYNs (60%) valued more training in obesity management ($p < 0.01$). A smaller percentage of OB-GYNs (16%) valued advice about ethnic group differences compared to other specialties

Table 2 Differences in attitudes towards counselling between provider type.

	Total	PCPs	OB-GYNs	NPs
Whose responsibility is it to ensure that a patient is counselled about obesity?				
Both patient and provider	65%	66%	61%	66%
My responsibility	32%	31%	36%	33%
Patient's responsibility	2%	2%	1%	0%
Other provider or referral	1%	1%	2%	1%
It is not a medical issue	0%	0%	0%	0%
What could improve your ability to counsel a person with obesity?				
More time with the patient*	67%	71%	61%	61%
Training in obesity management*	56%	53%	60%	64%
Improved reimbursement process	53%	55%	56%	48%
Tool to help patients recognise obesity risks*	53%	53%	56%	61%
Advice on how to avoid offending patients	29%	28%	30%	32%
Advice about ethnic group differences**	24%	24%	16%	31%
None of these	3%	3%	3%	4%

* p Value < 0.01 in difference in response between providers.
** p Value < 0.001 in difference in response between providers.

($p < 0.001$). Only half of providers indicated a need for an ''improved reimbursement process,'' and there was no statistically significant difference in this response across provider type.

Table 3 describes providers' responses concerning practices in obesity counselling. When asked what prompted them to initiate obesity counselling, over 70% of providers reported obesity-related diseases. A large percentage of respondents also selected obesity-related risk factors (68%) and the patient bringing it up (57%). Similar trends were seen across other specialties, although OB-GYN percentages for most answers were lower than PCPs or NPs ($p < 0.001$). Sixty-six percent of those who viewed obesity counselling as their responsibility also responded that having more time with patients would improve their counselling, compared to 44% of those who placed the responsibility on the patient.

The most common terms used when discussing obesity with patients were ''exercise'' (84%), ''physical activity'' (81%), ''diet'' (75%), and ''eating habits'' (76%). Similar trends were seen across provider types, although NPs had higher percentages of selecting less stigmatising language like ''healthy weight'' (69%) ($p < 0.001$), ''eating habits'' (88%) ($p < 0.001$), and ''physical activity'' (87%) ($p < 0.01$) compared to other groups. NPs were also less likely to use more stigmatising language like ''obesity'' (47%) ($p < 0.001$), ''diet'' (68%) ($p < 0.05$) and ''heavy'' (16%) ($p < 0.05$). Compared to women, men were more likely to use the terms ''obesity'' (60% vs 50%), and ''diet'' (77% vs 72%). Compared to men, women were more likely to use the terms ''healthy weight'' (60% vs 50%), and ''eating habits'' (80% vs 75%).

The most common themes discussed when providers counsel about obesity are risk of heart disease (89%) and blood pressure (87%). Complications of diabetes (79%), abnormal lipids (73%), and activities of daily living (71%) were also frequent selections. Poor glycemic control was the least selected answer (66%). A higher percentage of NPs reported discussing risk of heart disease (91%) ($p < 0.01$), increased blood pressure (92%) ($p < 0.001$), and activities of daily living (80%) compared to other specialties ($p < 0.001$). OB-GYNs were less likely to report discussing complications of diabetes (72%) ($p = 0.01$), abnormal lipids (54%) ($p < 0.001$), and poor glycemic control (47%) ($p < 0.001$).

Table 4 describes the impact of perceived responsibility on perceptions of counselling improvement. Sixty-six percent of those who believe they are responsible for bringing up obesity also believe more time with the patient would improve their ability to counsel, compared to 44% of those who view conversations about obesity as the patient's responsibility ($p < 0.05$). Fifty-three percent of those who said they were responsible for bringing up obesity also indicated that they wanted more training in obesity management, compared to 36% of those said obesity was the patient's responsibility ($p < 0.05$). Those who believe conversations around obesity to be their responsibility are also more likely to indicate wanting tools to help patients recognise obesity risks ($p < 0.01$) and advice on how to avoid offending patients ($p < 0.01$).

Table 3 Differences in practices in obesity counselling between provider type.

	Total	PCPs	OB-GYNs	NPs
In your practice, which of the following prompts obesity counselling?				
Obesity alone	76%	77%	78%	71%
Obesity-related disease***	76%	79%	63%	76%
Obesity-related risk factors***	68%	71%	51%	75%
The patient brings it up	57%	59%	51%	57%
Other***	4%	3%	2%	10%
None of the above	1%	0%	2%	1%
When discussing excess body weight with your patients, what term(s) do you use?				
Exercise	84%	85%	82%	82%
Physical activity**	81%	81%	76%	87%
Diet*	75%	77%	76%	68%
Eating habits***	76%	75%	70%	88%
Overweight	67%	68%	69%	61%
Obesity***	56%	30%	52%	47%
Increased BMI	60%	60%	56%	59%
Healthy weight***	54%	61%	52%	69%
Unhealthy weight	47%	51%	45%	54%
Normal weight	30%	45%	32%	26%
Heavy*	20%	20%	25%	16%
Something else not listed**	6%	4%	6%	10%
I do not discuss obesity/excess body weight	0%	0%	0%	1%
When you discuss obesity with patients, which of the following are you likely to discuss?				
Risk of heart disease**	89%	90%	84%	91%
Increased blood pressure***	87%	89%	78%	92%
Complications of diabetes (e.g. blindness)*	79%	80%	72%	81%
Abnormal lipids***	73%	78%	54%	71%
Activities of daily living***	71%	68%	74%	80%
Poor glycemic control***	66%	70%	47%	68%
None of these**	1%	1%	3%	1%

* p Value < 0.05 in difference in response between providers.
** p Value < 0.01 in difference in response between providers.
*** p Value < 0.001 in difference in response between providers.

Discussion

This article adds to the literature about HCP attitudes and practices regarding obesity by examining current HCP attitudes towards obesity counselling. In addition to assessing HCP attitudes overall, we evaluated differences between PCPs, OB-GYNs, and NPs. Although there were several areas where survey responses differed by provider type, in many instances agreement existed across specialties. For example, the majority of PCPs, OB-GYNs, and NPs all believed that obesity counselling is a shared responsibility between themselves and the patient, with no significant differences between provider types. Half as many believe that it is solely their responsibility compared to a shared responsibility. Just 1% responded that it is the responsibility of another provider.

Previous research has produced mixed results. For example, of 500 PCPs polled in 2012, 48% felt dieticians were more qualified to help patients with obesity, while 41% believed physicians were the most qualified [14]. A survey amongst medical and graduate nursing students found that nearly 90% of both groups believed it was a part of their role to counsel on obesity issues [21]. The results of this trainee survey are much more in line with the data presented here—97% of total respondents indicated some level of responsibility to counsel about obesity. However, in contrast to the trainees, the respondents of the current survey had practiced an average of 16 years. Given the shared sense of responsibility between both young and established practitioners, shifts in attitudes may not be the result of a cohort effect, but rather actual changes in perception as obesity becomes more culturally relevant outside of clinical medicine.

Unlike previous research, which has presented responsibility as a binary condition (i.e. are you or are you not responsible?), the survey used in

Table 4 Impact of perceived responsibility on perceptions of counselling improvement.

	It is the patient's responsibility	It is my responsibility
What could improve your ability to counsel a person with obesity?		
More time with the patient*		
Selected	44%	66%
Unselected	56%	34%
Training in obesity management*		
Selected	36%	53%
Unselected	64%	47%
Improved reimbursement process		
Selected	56%	49%
Unselected	44%	51%
Tool to help patients recognize obesity risks**		
Selected	44%	48%
Unselected	56%	52%
Advice on how to avoid offending patients**		
Selected	20%	23%
Unselected	80%	77%
Advice about ethnic group differences		
Selected	20%	22%
Unselected	80%	78%

Difference in response between provider types:
* p Value < 0.05.
** p Value < 0.01.

this study asked providers to quantify the level and extent of responsibility they felt for addressing obesity. This, along with the broader range of provider types and the increased relevance of obesity in primary care, may explain differences from previous research. Most respondents indicated that obesity alone would prompt them to counsel the patient. This is consistent with previous research, which suggested that a diagnosis of obesity was associated with a 2.4 greater odds of having an obesity management plan in place [22].

When they counsel, OB-GYNs are less likely than other providers to discuss themes related to comorbidities and risk factors. Given their answers to the ''what prompts you to counsel'' question, these risk factor issues do not appear to be as great a concern for OB-GYNs as they are for other provider types. PCPs and NPs responded to most themes with similar frequency, although NPs were more likely to discuss Activities of Daily Living when they counselled. The sensitivity of NPs to a patient's quality of life suggests a regard for non-clinical considerations that the other providers may not share.

This sensitivity was also seen in NPs responses to the vocabulary question. Neutral terms, such as ''eating habits,'' ''physical activity,'' and ''health/unhealthy weight,'' are preferred, and potentially less stigmatising, than ''diet,'' ''exercise,'' and ''obese,'' respectively [27]. NPs were significantly more likely than other providers to use preferred language. Notably, women were more likely to use preferred language, and 87% of NPs in this survey were female. There is limited research on gender differences in obesity attitudes and practices, and none has looked at vocabulary choice in counselling. Therefore it is difficult to assess whether the differences between the practices of NPs vs PCPs and OB-GYNs were the result of inherent differences in training, or practice setting, or were confounded by gender.

Regardless of gender or provider type, large percentages of respondents are using language less acceptable to patients when discussing obesity with. Research has shown that stigma in conversations involving weight affects psychological wellness, and can also impair health outcomes [23—29]. Biased language is so offensive that 19% of patients have said they would avoid future medical visits if such language were used consistently, and 21% have reported they would seek a new doctor in this situation [30]. To help resolve the effects of weight bias, a focus in both education and training on the use of appropriate weight terminology is crucial.

Providers overwhelmingly felt that ''more time with the patient'' could improve their ability to counsel, especially those who viewed obesity counselling as their responsibility. These results are consistent with previous research in which providers often report time as a key barrier to obesity counselling [31—34]. Those who reported additional training would improve their ability to counsel were less likely to believe that ensuring counselling was the patient's responsibility.

Interestingly, those who wanted more advice on how to avoid weight bias were more likely to indicate shared responsibility or to refer responsibility to another provider, rather than viewing responsibility as either the patient's or their own responsibility to ensure counselling takes place. NPs were more likely than their colleagues to report a need for ''additional training,'' ''more tools,'' and ''advice about ethnic group differences.'' The need for advice aligns well with the sensitivity demonstrated by NPs throughout the survey.

Overall, there was limited interest amongst respondents in ''advice on how to avoid offending patients'' and ''advice about ethnic group differences,'' despite extensive literature on the harmful effects of weight bias in healthcare. These data indicate that professionals may lack awareness of

the role that race/ethnicity plays in weight, weight control, and weight loss. For example, African American (AA) women with obesity tend not to perceive themselves as such, and are frequently more satisfied with their body shape than white Americans [35]. They also tend to have higher perceived body satisfaction, and view a larger body as being more attractive [36,37]. Therefore, they are less likely to lose weight, as doing so can be seen as unnecessary [36,37]. In some research, losing weight was identified as being correlated with white culture [36]. This reveals that AA women (a) may not perceive the health risks, (b) may not understand that obesity is a health related medical issue and not an aesthetic issue, and therefore (c) may not be motivated to lose as much weight as others [38]. Clinicians need to understand these issues as they related to the social determinants of health and adapt their communication to accommodate cultural differences.

Limitations

Although DocStyles has a large, national sample size, the data collected may not accurately reflect the views of HCPs in the United States. Participation in the survey is voluntary and awarded with an honorarium, likely creating some self-selection bias. Because all data are self-reported, the results may be skewed towards more desirable answers, rather than actual attitudes or practice in obesity counselling. Quotas for specialty, race/ethnicity, and age may have excluded the perspectives of other HCPs. Finally, DocStyles has not been tested for reliability or validity.

Conclusion

Obesity continues to have significant and devastating effects on the health of adults in the United States. HCPs are now presented with the challenge of addressing this disease with their patients. This research provides a clearer picture of the current attitudes and practices of a range of providers, including PCPs, OB-GYNs, and NPs. There are areas of agreement and consistency across specialty, but these data suggest there are instances where certain providers might be counselling more effectively than others. Better education and role modelling on the part of mentors, particularly in the area of appropriate language, is needed. This research adds useful breakdown detail for comparison across health professional viewpoints, which may help to guide curriculum development for all levels of training across a variety of specialties. Further research can help determine how HCPs can best utilise their own specialty to engage in obesity counselling and better address obesity overall.

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Appendix A.

Attitudes towards obesity counselling were assessed with two questions. First participants were asked ''*Whose responsibility is it to ensure that a patient is counselled about obesity?*'' and they could select one options (''It is the patient's responsibility,'' ''It is my responsibility,'' ''Both patient and provider responsibility,'' ''Responsibility of other provider or referral,'' or ''It is not a medical issue''). Next participants were asked ''*What could improve your ability to counsel? Select all that apply*'' and were given six options (''Training in obesity management,'' ''More time with the patient,'' ''Improved reimbursement process,'' ''Tool to help patients recognise obesity risks,'' ''Advice on how to avoid offending patients,'' ''Advice about ethnic group differences,'' and ''None of these'').

Practices around obesity counselling were assessed with three questions. First participants were asked ''*In your practice, which of the following prompts obesity counselling? Select all that apply.*'' and given six options (''Obesity alone,'' ''Obesity-related disease,'' ''Obesity-related risk factors,'' ''The patient brings it up,'' ''Other,'' and ''None of the above''). Next participants were asked ''*When discussing excess body weight with your patients, what term(s) do you use?*'' and given thirteen options (''Obesity,'' ''Overweight,'' ''Increased BMI,'' ''Heavy,'' ''Unhealthy weight,'' ''Health weight,'' ''Normal weight,'' ''Diet,'' ''Eating habits,'' ''Exercise,'' ''Physical activity,'' ''Something else,'' ''I do not discuss obesity''). Lastly participants were asked ''*When you discuss obesity with patients, which of the following are you likely to discuss? Select all that apply*'' and given seven options. (''Poor glycemic control,'' ''Abnormal lipids,'' ''Increased blood pressure,'' ''Complications from diabetes,'' ''Risk of heart disease,'' ''Activities of daily living,'' and ''None of these'').

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