PROCEEDINGS OF SINGAPORE HEALTHCARE

Original Article

Proceedings of Singapore Healthcare
2017, Vol. 26(3) 144–149

DOI: 10.1177/2010105816688030
journals.sagepub.com/home/psh
SAGE

Do primary care physicians use the 5As in counselling obese patients? A qualitative study

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Abstract

Background: Obesity is a global public health problem. A systematic review showed that intensive behavioural counselling is effective in weight management amongst patients with obesity, but little is known if primary care physicians (PCPs) are involved in delivering such counselling. Studies revealed that patients had weight reduction if they were counselled by PCPs who used the 5As (Ask, Assess, Advise, Agree and Assist) method, but PCPs varied in their use of this tool. We aimed to explore the local PCP modalities of obesity counselling and if their approaches and methods corresponded to the 5As tool.

Methods: Qualitative data were obtained from interviews with 50 PCPs from public and private primary care practices during six focus group discussions and seven in-depth interviews. The interviews were audio-recorded, transcribed, audited and analysed iteratively based on the grounded theory. Emergent themes were first externally validated, and then finalized after rounds of deliberations amongst the investigators.

Results: PCPs varied in their approach in obesity counselling, focusing predominantly on "Ask", "Assess" and "Advise" in the 5As tool. "Asking" was indirect and "Assessment" rarely covered the effects of obesity on psychosocial functioning. Dietary and lifestyle modifications were the main foci in "Advise". "Agree" was least performed. Polyclinic doctors tended to "Assist" patients with referral to other healthcare workers for further weight management, but few deliberately "Arrange" to review progress in weight management, citing barriers.

Conclusion: PCPs varied in their method of obesity counselling, pending on context and setting of their practices. In contrast to "Ask', "Assess" and "Advise", the use of "Agree" and "Arrange" was uncommon.

Keywords

Obesity, primary care physicians, qualitative research, counselling, 5As

Background

Obesity has been described as a global pandemic with rising prevalence rates worldwide.[1] It ranged between 27.5% for adults and 47.1% for children during the period from 1980 to 2013.[2] In 2010, overweight and obesity were already estimated to have caused 3.4 million deaths, 3.9% of years of life lost and 3.8% of disability adjusted life years globally.[3] It is thus critical to review the current modalities of management which have been shown to be effective in achieving sustained weight loss amongst patients with obesity. In their systematic review, Wadden et al. showed that intensive behavioural

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Box 1. Questions used to guide in-depth interviews and focus group discussions.

1. What is your approach towards managing an overweight or obese patient in your practice?
2. Which aspect of management will you consider the most effective in dealing with obesity?
   a. What exactly do you cover when you provide dietary advice?
   b. What information is included when you counsel patients on exercise?
3. Guidelines have been developed in obesity management. What are your views on these guidelines?
4. What are the challenges that you face in managing these overweight/obese patients?
5. What are your views and considerations in referring patients for bariatric surgery?
6. Studies have shown that the following are associated with obesity. What are your views?
   a. Sleep
   b. Stress
   c. Psychological health
7. Do you think your present weight or BMI affects the way you counsel obese patients?

BMI: body mass index.

counselling of individuals could lead to their significant weight loss.[4] Such counselling covered calories reduction in food intake, increase in physical activities and other weight management measures. However, the authors also highlighted the paucity of evidence that doctors carried out such counselling in their respective practices.[4] Healthcare workers, including physicians, should consider using validated tools to counsel their patients to change behaviour in their weight management. Vallis et al. developed the "Ask, Assess, Advise, Agree and Assist" or 5As method from smoking cessation counselling.[5] Jay et al. adapted this 5As method for obesity counselling.[6] They surveyed patients after their consultation with their primary care physicians (PCPs) to assess if the latter used the 5As method to engage and counsel them on weight management. They found that patients who reported receiving the 5As method were associated with motivation to reduce weight and intentions to change behaviour.

Subsequently, Alexander et al. audio-recorded primary care consultations between PCPs and patients with obesity in their study in 2011.[7] They determined PCPs' use of the 5As via coding of the recorded consultation content. Patients' motivation and confidence were assessed before and immediately after the encounter. Three months later, they assessed patient change in dietary fat intake, exercise and weight. They found that PCPs routinely "Ask" and "Advise" patients to lose weight, but rarely "Assess", "Assist" or "Arrange". "Assist" and "Arrange" were related to diet improvement, whereas "Advise" was associated with increase in motivation and confidence to change dietary fat intake and confidence to lose weight. Overall, PCPs frequently used at least one of the 5As (83%).

However, in Singapore, despite rising obesity prevalence, there has been little research that details the approaches and methods in obesity counselling being carried out by the local PCPs. There is a need for situational analysis to explore the status of engagement and behavioural counselling amongst these PCPs. From the studies by Jay and Alexander, the 5As method seems effective in engaging patients and motivating them to change behaviour to reduce weight. Nonetheless, the extent and level of adaption of this 5As method by local PCPs remain unknown. A qualitative research methodology is preferable to gain an in-depth understanding of PCPs' context in engaging and counselling their patients with obesity.

Thus, this qualitative study aimed to explore the current methods and approaches used by PCPs in obesity counselling and whether their method would be similar or dissimilar to the 5As method. In the former scenario, the 5As method has the potential to be scaled up in primary care. It is a systematic, easy-to-remember tool which can be incorporated into training curriculum and programmes for PCPs, so as to equip them with the related skills and techniques to apply it to their patients.

Methods

Study design and participants

The study is based on a qualitative research design; this is the preferred method to gather in-depth information on the clinical practice of PCPs. Focus group discussions (FGDs) and in-depth interviews (IDIs) with PCPs in Singapore were carried out to collect qualitative data. Purposive sampling was deployed to capture views of PCPs of different demographic profiles, academic qualifications and experience in terms of years of general practice. PCPs from both the public and private primary care clinics were included as the model of care delivery was expected to influence their practice. Only PCPs who declared that they were actively practising in primary care at the time of recruitment and who had counselled at least one patient with obesity in the past three months were invited to the study. PCPs that were retired, no longer practicing or were working part-time were excluded from this study. Invitation for participation was conducted through email and telephone contact.

FGDs, IDIs and data collection

Potential PCPs who satisfied the inclusion and exclusion criteria were provided with a participant information sheet detailing the study and its execution. Those who agreed verbally were then invited to participate at scheduled FGDs or one-to-one interviews during IDIs. The principal investigator (JJL) conducted the FGDs and IDIs, supported by the co-investigators. An interview guide (Box 1) was developed after the literature review and discussions with the research team. It consisted of open-ended questions with a view to explore the approaches, gaps, challenges and barriers faced

by PCPs in managing obese patients in their respective primary care practice. This guide was piloted during a mock FGD and further refined iteratively after each FGD or IDI.[8]

The FGDs and IDIs were conducted in meeting rooms – in the institution for the FGD or at the respective practice for the IDI. Written informed consent was obtained from all participating PCPs, who were anonymized to ensure data confidentiality.

Each interview or discussion, lasting between 60 and 90 minutes, was audio-recorded, transcribed and audited by an independent investigator in the team for accuracy.

Analysis

JJL and the co-investigator TNC analysed the data to identify emergent themes using the Grounded Theory.[9] Both read the transcripts after the first two FGDs and one IDI, and developed an initial coding framework with the aid of the NVivo (version 7) software. The codes were modified or expanded after each interview as the study progressed. No new code was identified after the fifth FGD, suggesting idea saturation, which was confirmed by the last (the sixth) FGD. The coded data were then grouped and organized in themes iteratively with reference to the hypothesis and the study's objectives.

The original intent was to leverage on the Grounded Theory methodology to build models of obesity counselling from the qualitative data. In the iterations between the interviews and with reference to the publications by Jay and Alexander, in which the 5As method was found to result in favourable patient outcomes, JJL and TNC decided to depict the findings in comparison to the 5As method of behavioural counselling.

Hence, the themes were summarized and framed against the 5As method before they were emailed to all participating PCPs to gather their feedback and agreement. The majority of them (84%) reverted with their agreement to the key themes. Two of the themes of lower agreement amongst them were then omitted from the results.

Results

Participants

Six FGDs and seven IDIs were conducted between March 2015 and February 2016. A total of 50 PCPs of different ethnicities, work experience and qualifications, aged between 26 and 61 years, participated in this study. The participants' characteristics are presented in Table 1.

The emergent themes were grouped into each component of the 5As method for ease of reference and understanding of the state of its implementation by PCPs.

Ask. "Ask" refers to asking permission to discuss weight management or to explore readiness to change.

Few PCP directly ask patients for permission to discuss their weight issues. Instead, most broached the perceived sensitive topic of weight management with their patients by first raising awareness through biometric measurements and calculation of body mass index (BMI), and presenting this data upfront to patients. These measurements may be done as part of the routine pre-consultation process performed by clinic assistants or during the physician consultation itself, usually when the physician suspects a weight issue, after the "eyeballing" of a patient's body habitus.

Table 1. Participant demographic, practice and qualification characteristics.

	Characteristics	*N* (50)
Demographic		
Sex		
	Female	21
	Male	29
Age (years)		
	25–40	23
	>41–56	27
Ethnic Group		
	Chinese	38
	Indian	9
	Malay	3
Practice		
Years working in primary care		
	1–10	25
	11–20	18
	21+	7
Type of practice		
	Private general practitioner	30
	Polyclinic Dr	20
Qualifications		
	Basic degree (MBBS/MD/MBChB)	6
	Post-graduate (diploma)	20
	Master degree/Fellowship in Family Medicine	24

> I see mainly patients with chronic illnesses … we check their weight regularly in this clinic. I will normally pull out this weight chart, show the patient the chart and compare the weight over the past few visits with the current one, so that I can create awareness that the patient has a weight problem, whether the weight is going up or going down. (Senior polyclinic Dr 5, IDI 5)

> I work in a private clinic. I see mainly professionals, shift workers and white collared workers. Busy individuals, very irregular working hours, and so when they do come to me, it's really with the intent of sorting whatever they are quickly. It's very opportunistic to ask, "Hey may I take your weight?" it's surprising for them to measure their weight after not having stepped on a weighing machine for many years … that's what I've been noticing … getting them aware of their weight and their BMI. (General practitioner (GP) 18, FGD 4)

Facilitating the targeted patients to reflect on their weight condition and exploring their readiness to change were the preferred approaches instead of direct questioning. PCPs usually explored the patient's readiness for change through verbal and non-verbal cues.

> I don't tell the patient that, "Hey you need to lose weight" or "You're overweight" … we get the patient to talk about how

> they feel about their weight, what do you think about it … are you happy with your current weight and we tend to go from there. (Head of a polyclinic, Dr 1, IDI 6)

> When you practice in a private setting it's very difficult to broach the subject of weight management … It's a very sensitive subject you can't tell the patients "Oh by the way I think you're obese" because you'll end up offending them, they'll never come to your clinic again [laughs]. (GP 10, FGD 3, runs a chain of private GP clinics)

Assess. Beyond confirmation of obesity, "Assess" covers the evaluation of health status and root causes of weight gain: "… (in exploring) whether the patient is motivated. The body language, the way the patient looks, the way he expresses, acknowledges … gives you an indication about the degree of receptiveness" (GP 30, Fellow, IDI 2).

> First we have to uncover the different layer, the meaning, the hidden agenda behind eating, overeating. Secondly, the under exercising, and thirdly, whether there's a medical condition that we've missed out. A lot of patients actually don't eat for satiety. They actually eat for comfort. (GP 48, Fellow, FGD 3)

The need for exclusion of secondary (including iatrogenic) causes of weight gain and the evaluation of individual patient specific root causes appeared to be well recognized by PCPs, even though not consistently carried out during consultations. Exploring the impact of weight on psychosocial functioning was rarely carried out by PCPs.

> … as doctors we also need to look at their medications, if the patient is on a high, whopping dose of insulin or glipizide … making the patient feel hungry and eating more. I always want to look at the medication first, on what patient is on. (Senior polyclinic Dr 4, Master degree, FGD 1)

> There are people that are depressed and they eat … a lot of women undergoing menopause who don't sleep well, eat supper. So usually you need to treat the root cause. (Head of a polyclinic Dr 2, Post-graduate diploma, IDI 1)

> … now people are hooked onto computer, they surf the web, and they are more sedentary. They sleep late, they snack a lot and they eat a lot. Drinking among the young is also increasing. They have beer, alcohol and all that when they go to pubs. The alcohol calories are quite high and it's becoming that kind of lifestyle. (Head of a polyclinic Dr 6, IDI 4)

Advise. "Advise" includes informing at risk individuals of the risks of obesity and treatment options. "Advise" seemed to be a predominant activity during obesity counselling by PCPs, who perceived this to be of value to patients.

> I would explain to them that the nature of their obesity increases their risk of diabetes, hypertension and hyperlipidaemia. I encourage them to shed some kilos … but in a non-threatening manner … explain to them that the best way is through exercise and diet modification … and if they are really, really obese like BMI 45 and above, I would encourage them to go for bariatric surgery because by then majority have Obstructive Sleep Apnoea (OSA), impaired glucose tolerance and diabetes … the ill effects of severe obesity. (GP 41, IDI 3)

PCPs focused on dietary advice during weight counselling, as they perceived that dieting is easier for patients to understand and execute: "First of all I think one of the easier ways is to talk to them about caloric intake because it's something that they can understand easily … After all, the patient wants something simple to bring back home" (GP 32, FGD 3).

> In my opinion, I go for food … food is king, you get them into the right mind set for food, exercise will follow because whatever you say, no matter how much you're going to exercise, if you do not know the way in juggling your caloric intake, everything else fails. (GP 9, FGD 2)

PCPs provided tips and used stories (personal or patients'), including using themselves as role models to counsel patients.

> If I have something positive to share or lessons from my own personal journey to share, I will share… the patient will feel that this doctor cares because he or she shares with me the lessons and the personal struggle in his or her own life. Then it makes the doctor less like a robot. It becomes more personable. (Senior polyclinic Dr 21, IDI 5)

Agree. "Agree" pertains to respectful negotiation, including goal setting and behaviour modification, to achieve best outcomes. The systematic goal setting component of "Agree" seemed to be the least performed. PCPs identified patient's intrinsic motivators, such as the desire to decrease chronic medications, to negotiate, build partnerships and obtain their commitment to reduce weight tactfully.

> When a patient comes to you for a chronic condition, it's very hard to shift their attention to the weight, so I find it helpful to link it. Most patients are very concerned about taking more medicines, having to administer injections, about long-term side effects of medication. You tell them that if they exercise and manage to bring the weight down by one to two kilograms, it will improve the diabetes or blood pressure without having to increase medication, this could become an incentive to them. (GP 44, FGD 3)

> … the idea is 10% of weight loss. "If you're 65 kg it's about six kg divide by six, it's one kg a month, and then in three months hopefully you lose three kg. Don't be depressed if you don't, we'll see how far you can go." In this way, I find that I get some successes. (GP 11, FGD 1)

Assist. "Assist" refers to the enhancement of facilitators, reduction of barriers in weight management and arrangement of reviews to keep the conversation going. PCPs generally indicated the need to support their patients emotionally through praise, words of encouragement and involvement of family members. However, most PCPs do not routinely arrange follow-up with patients to specifically review their progress unless in the setting of other chronic disease review. PCPs also assisted their patients by offering referrals to external weight management programmes in hospitals, to dieticians or chronic disease nurse counsellors.

> Not everybody goes for bariatric surgery straight away and that's where the team management comes in. They (external weight

> management team) will try other measures first. That's why we need to refer to a weight management team of which bariatric surgery is one component and they will try the other things first. (GP 9, FGD 3)

> We can't know everything … unless we have a degree in clinical nutrition, we probably won't know how to give the details. Sometimes when we reach a point whereby things are just not moving, the patient is wondering what else they can do. That's when I ask, "Do you want to see a dietician?" There may be certain blind spots they (dietician) can spot. (GP 26, FGD 3)

PCPs faced challenges in continuing the assistance to their patients due to inadequate infrastructure, coordination and communication between healthcare providers. There is also lack of standard care paths in the managing of patients with weight issues in the primary care setting: "Frankly we don't know [discussing the progress of patients with obesity referred to weight management centres]. We really don't know; they won't come back to us or we don't see them again …" (Polyclinic Dr 46, FGD 6). "We had a talk a year back; the bariatric surgeon himself came from the hospital to give it. After that we referred one patient and then 'out of sight, out of mind'. We've forgotten about it…" (Polyclinic Dr 41, FGD 5).

Discussion

This study alluded to the way PCPs counselled their patients with obesity in their practices. Out of the 5As, PCPs focused predominantly on the components of "Ask", "Assess" and "Advise".

However, PCPs tended to be indirect in "Asking" patients about their weight, often using weight measurements as a prompt to trigger the discussion. This was often followed by an evaluation of readiness for change through observation of verbal and non-verbal cues, and, finally, facilitation of discussions with those who were perceived to be ready. PCPs felt more comfortable using this indirect approach than asking for permission directly from patients, as they regarded discussion on weight issues as a sensitive topic from the patient's perspectives. A study by Brown et al. had also shown that patients with obesity not only feel personally responsible for their condition, but also harboured a sense of stigma due to perceived negative stereotypes.[10]

In "Advising" patients, PCPs focused on the need for patients to modify their diet and adopt healthier lifestyle measures such as increased physical activities. Most PCPs explored patients' intrinsic motivators and negotiated small steps in lifestyle modification as part of goal setting. Such good practices should be shared in a Family Medicine forum and included as practical tips for PCPs in obesity-related training programmes.

Beyond biometric "Assessment", the PCPs rarely explored the effects of patients' weight on the latter's psychosocial functioning. Without assessment, PCPs have little insight and understanding of patient's willingness to change their behaviour to attain weight loss. Consequently, PCPs were in a less favourable position to help patients design their respective action plan for weight management.

PCPs did not have specific "Assist" measures to carry out regularly for their patients. Apart from the referral to a dietician and other weight management programmes, they rarely arranged for follow-up. However, Alexander et al. had shown that patients, whose PCP had "Assisted" or "Arranged", showed improvement in dietary fat intake and actual weight loss. They attributed the frequency of contact to be a vital factor in influencing behavioural change, as patients felt accountable to their PCP. However, this is the element in the 5As method in which most of the local PCPs seemed to be least consistent in applying during their patient counselling.

Strengths and limitations

This study provides an invaluable insight into the variable approaches adopted currently by PCPs in obesity counselling, and identifies the extent and context in which they apply the 5As method in their behavioural counselling.

However, the study design did not allow for the objective assessment of the actual clinical practices, competency and confidence of the PCPs in using the 5As method. Such a gap can be filled by triangulation with other research methods such as practice audits and interviews of patients to substantiate the results of this study.

Comparison with existing literature

There are currently several adaptations of the 5As framework used in obesity counselling research, incorporating "Ask", "Assess", "Advise", "Agree", "Assist" and "Arrange" in different permutations. In this study, the modified 5As framework, as described by Vallis et al. in 2013,[5] was used as a framework to evaluate the clinical practices of the PCPs. The definition and the list of actions included in each step differed slightly in these studies, making direct comparisons based on the steps alone challenging. For example, Jay et al. covered the activity of asking the patient about weight, under the step "Assess".[6]

The results of this study are similar to the findings by Alexander and Jay, where PCPs routinely "Asked" and "Advised" patients on their weight management.[6,7] Whether omitting the other components of the 5As method would compromise the effectiveness of the counselling requires further evaluation.

Implications for clinical practice and future research

The variable approach may be deliberate, circumstantial or even inevitable as PCPs modify the method to fit the dynamic interaction during the counselling. The 5As method could be truncated in the context of patient-centric care. Nonetheless, the lack of agreement and abridged assistance in the 5As method could hamper continuity of discussion of the topic between PCP and patient. Further studies are needed to evaluate if a systematic application of the 5As method could be more effective in achieving behaviour change amongst patients with obesity. The potential to scale up the 5As approach in local primary care practices will be evaluated if

the 5As method is assimilated into the core PCP training curriculum on weight management.

Acknowledgements

The authors thank the primary care physicians for their invaluable contributions to this study.

Declaration of conflicting interests

None declared.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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