

Current Practices of Primary Care Doctors in Managing Adults with Obesity: A Narrative Review

EZZAH KHAN, SOO HUAT TEOH*

Lifestyle Science Cluster, Advanced Medical & Dental Institute, Universiti Sains Malaysia, 13200 Kepala Batas, Penang, Malaysia.

Correspondence to Soo Huat Teoh, Email: soohuat@usm.my, Tel: +6045622085

ABSTRACT

Obesity is currently on the rise and has been classified as a non-communicable disease by the World Health Organization (WHO). There are two ways to determine obesity which is through the calculation of their Body Mass Index (BMI) and waist-hip ratio measurement. Most common factors of obesity are imbalance of food intake with low engagement of physical activities which increases the probability of gaining weight. It has been a constant battle for both Primary Care Doctors (PCDs) and the patients to overcome obesity. The challenges faced by PCDs often involved with lacking proper training and not having adequate equipment while patients are struggling to maintain their motivation and adapting to a lifestyle change to achieve healthy weight. To combat obesity, effort should be made by both PCDs and patients with the help of larger organisations such as the government and other health organisations. Preventive measures such as raising awareness and promoting better lifestyle to avoid obesity should be made to reach all households. More research on obesity is encouraged to find out more on its causes and the treatment options.

Keywords: Obesity; adults with obesity; Primary Care Doctors

INTRODUCTION

Currently classified as a preventable non-communicable disease, the number of adults with obesity has risen to nearly tripled since 1975. In addition, it was also reported that over 650 million of adult population were living with obesity in 2016; and those are among living in countries where overweight and obesity killed more people than those that are underweight⁽¹⁾. Moreover, obesity has recently been classified as a disease by the American Medical Association and also by the Canadian Medical Association in 2015^(2, 3).

Obesity is defined of having a Body Mass Index (BMI) greater than or equal to 30. BMI is commonly used as a guide without overlooking other factors such as the fatness level which vary among individuals, genetics, and other factors^(1, 2). In general, we thought that an individual who are living with obesity are usually a person that has a higher percentage of body fat. However, the current practices of calculating a person's BMI to determine whether they are having obesity or not; contradicts with the fact that it does not take into account of the people who has high muscle mass or has low fat percentage that resulted in high BMI. Hence, it is best to use waist-hip ratio measurement to ratify the results⁽⁴⁾, but the review by Plourde & Prud'homme (2012) pointed out that waist circumference measurements is actually the best method to identify abdominal obesity which makes it easier to classify⁽⁵⁾.

It is said that an imbalance of food intake and physical activity is the main factor of obesity that emerges from urbanization, environmental and societal changes leading to the increased number of people living with obesity⁽¹⁾. Similar to other diseases, obesity is the outcome of various components such as behavioural, environmental, geographical, genetics, socioeconomic and other comorbidities⁽⁶⁾. Due to all these aspects, it makes Wiklund (2016) wonder of the causes and specifically in what way

people consume more energy than they expend as the solution to prevent obesity would be mainly balancing physical activities and food intake⁽⁷⁾. Identifying the causes enable us to prevent further health risks such as diabetes, hypertension, cancer, respiratory diseases, and poor mental health⁽⁸⁾. Apart from that, factors such as behavioural, genetics, food consumption, fitness level, educational level, and food and beverage marketing undeniably influences the rate of obesity⁽⁹⁾.

Challenges in Encountering Obesity: Primary care doctors (PCDs) feel restricted to provide better care when they are lacking in weight management training, preventive measures knowledge, treatment strategies and with the limited numbers of weight-related clinic. On this basis, then it is undeniable that Steeves and colleagues (2015) reported the primary care practitioners lack confidence, lack in counselling skills and lacking strategies in addressing weight related issues⁽¹⁰⁾. It is also agreed by Croghan et al. (2019), as they mentioned that due to the educational barriers, limited tool, resources, and consultation time, PCDs and nurses often gave poor advices on managing obesity⁽¹¹⁾.

Aside from using BMI as the indicator of obesity, body fat distribution would be the best and most precise indicator of obesity. Primary care practitioners find it a bit difficult to recognize patients with metabolically healthy obesity according to their weight and height calculation. Therefore, with these kinds of cases, primary care practitioners would require proper and extensive training and equipment to evaluate and suggest appropriate treatment suitable for the patient⁽¹²⁾. Providing the best treatment and management can also be challenging to the practitioner as they need to make sure of the cost factor, its effectivity and sustainability to the patient⁽¹³⁾.

Some situation defies the PCDs especially when they are put into a socio-dilemma spot because weight is a very sensitive topic and most of the patient does not prefer to discuss about it even with the availability of many effective

treatments^(14, 15). Unintentionally, factors like not having an appropriate equipment, adequate privacy and using proper terms or language discourages patients from opening up and it will disrupt the doctor's management plan⁽¹⁶⁾. Guidelines that are more accurate and time saving should be implemented and trained to increase PCDs motivation in consulting patients with obesity. Besides, environmental and cultural factors play an important role in keeping their motivation to lose weight⁽¹⁴⁾.

In addition, maintaining the doctor-patients trust and relationship is a vital factor in ensuring the effectiveness of the treatment⁽¹⁴⁾. Unsuccessful weight loss treatment often impacted both the physician and the patient. When patients lose determination, PCDs often felt discouraged and it shows that sustaining motivation and behavioural change to be in a constant battle⁽¹⁷⁾. Perhaps for all these obvious reasons, primary care practitioners repeatedly fail to recognize patients with obesity⁽¹⁸⁾.

Importance of Primary Care In Obesity Management: In a study conducted by Pratt et al. (2019), 203 patients with obesity were asked to complete an assessment to determine the difference in weight status and relationship dynamics weight status of parent—child restrictive feeding practices. The result showed that by applying the family-based programming, a balance weight status with good relationship dynamics of parent-child could prevent obesity to the group that are at higher risk of getting obesity⁽¹⁹⁾. Adding to that from a study done in June 2013 to December 2014 by Aveyard and colleagues (2016) which involves 1882 individuals, it showed that giving advices to lose weight to improve health made a distinct impact compared to those who received both advices and support from their practitioners⁽²⁰⁾.

On another note, some patients felt that their doctor is responsible to confer with them about their weight issues and some felt that the suggestions and treatment approaches were futile⁽²¹⁾. By nature, PCDs care about their patients and will look after them but in this case, some thought the responsibility falls onto the patient to manage their own weight⁽¹⁴⁾. In a qualitative literature review by Henderson (2015) on understanding people's beliefs and practices, he found out that 144 practitioners believe that patients are responsible for obesity and that primary care settings are poorly equipped to help these patients. From the same review, Henderson (2015) discovered that 105 patients blamed themselves for being in an unhealthy weight condition but recognized the need of getting help from the health practitioners⁽²²⁾. A review by Swinburn & Arroll (2016) of the same study concluded that if primary care systems could employ and adapt to this method, it would contribute to reducing the prevalence of adult with obesity and prevent obesity in general^(23, 24).

With appropriate training and equipment in place, better quality healthcare could be delivered and achieved especially when we have patients that fully engage with the treatment with positive motivation and high intention to manage their weight⁽²⁵⁾. As patients have their own needs and preferences to be met, providing adequate information will aid them in making wise decisions for their treatment⁽²⁶⁾. Therefore, personalized treatment plan with realistic goals and time proves to be more effective as some would have lost weight with just small changes to the

lifestyle while some needed surgical intervention⁽²⁷⁾. Surgical intervention is not often recommended to patients, however Nudel & Sanchez (2019) felt that weight loss surgical interventions should be paired with existing and emerging drugs in future as it would improve morbidity and mortality⁽²⁸⁾. El Ghoch & Fakhoury (2019) also agreed that neither treatment nor surgical intervention should be perceived as a miracle as it will still require effort from the patients in addition to the medication and surgery⁽²⁹⁾. In a search on 344 articles on anti-obesity therapies and the results showed that although pharmacotherapies do assist in reducing obesity but it works better with exercises and it is hoped that more medication with safer and less side effects will be produced in future⁽³⁰⁾.

Improving the Management of Obesity in Future: One of the important things is improving on addressing the issue of obesity and its treatment when both practitioners and patients should be taking advantages in applying new technologies such as telehealth for interventions. Out of all patients that have been practicing obesity interventions through telehealth, at least 31% of the patients has lost at least 5% of weight which reveals that weight loss can be a long-term success if patients could maintain it for at least 2 to 5 years⁽³¹⁾.

It is encouraged for the practitioners dealing with patients with obesity to use the approach of patient-centred language as patients find terminology such as "unhealthy weight" to be more positive compared to the use of 'obese' term. Usage of positive terminologies could ease their fears and build rapport when discussing weight issues⁽³²⁾. The motivational interviewing technique which incorporates elements such as being optimistic for change with proper support in a non-confrontational setting may help individuals to maintain behavioural changes and help them to have control and able to set an achievable goals in their weight loss journey. In addition, strengthening relationships, building trust and continued support from healthcare staff to patients with obesity can contribute a better success of weight loss⁽³³⁾.

Heymsfield et al. (2017) hoped that with adequate physician training in obesity and nutrition; practitioners equipped with knowledge of recent treatment, medication and management intervention; as well as promoting healthy living will benefit the patients, along with the public in combatting obesity in the long run⁽³⁴⁾. By increasing knowledge in weight management, physicians will have lower negative attitudes toward obesity and will be more encouraging and optimistic towards the output. With more knowledge, physicians will be able to provide better emotional support and weight management solution for example advising suitable diet, exercises, drugs or surgery intervention for the patient to achieve optimal results⁽¹⁷⁾.

Although primary care practitioners should play the biggest role in preventing obesity and disease that arises from it, the effort such as a mass promotion should be assisted by the government through the national education campaign to raise awareness for self-prevention as it will be more effective and has a higher impact in reaching the households⁽³⁵⁾. Since obesity has become a public health concern, it is highly recommended to include the treatment of obesity in medical training. Keeping up with the latest guideline and the recent advancements on treating obesity

will benefit the patients and indirectly allow medical practitioners to be able to provide better consultations and advices to patients⁽³⁶⁾.

Acknowledgement: We would like to thank the Malaysian Primary Care Research Group from the Academy of Family Physicians Malaysia and Universiti Sains Malaysia's short term grant (304/CIPPT/6315326) for awarding us the research grant to prepare this review article.

REFERENCES

1. WHO WHO. Obesity and overweight <https://www.who.int/2020> [Available from: <https://www.who.int/en/news-room/fact-sheets/detail/obesity-and-overweight>.
2. Butt F, Farooq Butt A, Alam F, Aslam N, Abdul Moeed H, Butt FA. Perception and Management of Obesity Among Pakistani Doctors. *Cureus*. 2019;11(2):e4156.
3. CMA CMA. Obesity as a chronic medical disease <https://www.cma.ca/>: Canadian Medical Association; 2019 [updated 3rd March 2019. Available from: <https://policybase.cma.ca/en/permalink/policy11700>.
4. NHS NHS. Obesity www.nhs.uk: NHS; 2019 [updated 16 May 2019. Available from: <https://www.nhs.uk/conditions/obesity/>.
5. Plourde G, Prud'homme D. Managing obesity in adults in primary care. *Canadian Medical Association Journal*. 2012;184(9):1039.
6. Campbell-Scherer D, Sharma A. Improving Obesity Prevention and Management in Primary Care in Canada. *Current Obesity Reports*. 2016;5.
7. Wiklund P. The role of physical activity and exercise in obesity and weight management: Time for critical appraisal. *Journal of Sport and Health Science*. 2016;5(2):151-4.
8. Laidlaw A, Napier C, Neville F, Collinson A, Cecil J. Talking about weight talk: primary care practitioner knowledge, attitudes and practice. *Journal of Communication in Healthcare*. 2019;1-9.
9. CDC CfDcAP. Adult Overweight and Obesity <https://www.cdc.gov/>: U.S. Department of Health & Human Services; 2020 [updated June 30, 2020. Available from: <https://www.cdc.gov/obesity/adult/index.html>.
10. Steeves JA, Liu B, Willis G, Lee R, Smith AW. Physicians' personal beliefs about weight-related care and their associations with care delivery: The U.S. National Survey of Energy Balance Related Care among Primary Care Physicians. *Obesity Research & Clinical Practice*. 2015;9(3):243-55.
11. Croghan IT, Ebbert JO, Njeru JW, Rajjo TI, Lynch BA, DeJesus RS, et al. Identifying Opportunities for Advancing Weight Management in Primary Care. *Journal of primary care & community health*. 2019;10:2150132719870879.
12. Bray GA, Frühbeck G, Ryan DH, Wilding JPH. Management of obesity. *The Lancet*. 2016;387(10031):1947-56.
13. Wang Y, Xue H, Huang Y, Huang L, Zhang D. A Systematic Review of Application and Effectiveness of mHealth Interventions for Obesity and Diabetes Treatment and Self-Management. *Advances in Nutrition*. 2017;8(3):449-62.
14. Dewhurst A, Peters S, Devereux-Fitzgerald A, Hart J. Physicians' views and experiences of discussing weight management within routine clinical consultations: A thematic synthesis. *Patient education and counseling*. 2017;100(5):897-908.
15. Gray L, Stubbe M, Macdonald L, Tester R, Hilder J, Dowell AC. A taboo topic? How General Practitioners talk about overweight and obesity in New Zealand. *Journal of primary health care*. 2018;10(2):150-8.
16. Hauff C, Fruh S, Graves R, Sims B, Williams S, Minchew L, et al. NP student encounters with obesity bias in clinical practice. *Nurse Practitioner*. 2019;44:41-6.
17. Ferrante JM, Piasecki AK, Ohman-Strickland PA, Crabtree BF. Family physicians' practices and attitudes regarding care of extremely obese patients. *Obesity (Silver Spring, Md)*. 2009;17(9):1710-6.
18. Hansen AR, Rustin C, Opoku ST, Shevatekar G, Jones J, Zhang J. Trends in US adults with overweight and obesity reporting being notified by doctors about body weight status, 1999–2016. *Nutrition, Metabolism and Cardiovascular Diseases*. 2020;30(4):608-15.
19. Pratt KJ, Ferriby M, Brown CL, Noria S, Needleman B, Skelton JA. Adult weight management patients' perceptions of family dynamics and weight status. *Clinical Obesity*. 2019;9(5):e12326.
20. Aveyard P, Lewis A, Tearne S, Hood K, Christian-Brown A, Adab P, et al. Screening and brief intervention for obesity in primary care: a parallel, two-arm, randomised trial. *The Lancet*. 2016;388(10059):2492-500.
21. Torti J, Luig T, Borowitz M, Johnson JA, Sharma AM, Campbell-Scherer DL. The 5As team patient study: patient perspectives on the role of primary care in obesity management. *BMC family practice*. 2017;18(1):19.
22. Henderson E. Obesity in primary care: a qualitative synthesis of patient and practitioner perspectives on roles and responsibilities. *British Journal of General Practice*. 2015;65(633):e240.
23. Swinburn B, Arroll B. Rethinking primary care systems for obesity. *The Lancet*. 2016;388(10059):2452-4.
24. Wadden TA, Volger S, Tsai AG, Sarwer DB, Berkowitz RI, Diewald LK, et al. Managing obesity in primary care practice: an overview with perspective from the POWER-UP study. *Int J Obes (Lond)*. 2013;37 Suppl 1(0 1):S3-S11.
25. Jay M, Gillespie C, Schlair S, Sherman S, Kalet A. Physicians' use of the 5As in counseling obese patients: is the quality of counseling associated with patients' motivation and intention to lose weight? *BMC Health Serv Res*. 2010;10:159-.
26. Epstein R, Alper B, Quill T, Epstein RM, Alper BS, Quill TE. Communicating evidence for participatory decision making. *JAMA* 2004;291:2359-66. *JAMA : the journal of the American Medical Association*. 2004;291:2359-66.

27. Burguera B, Tur J. 3 Medical Management of Obesity. In: Brethauer SA, Schauer PR, Schirmer BD, editors. *Minimally Invasive Bariatric Surgery*. New York, NY: Springer New York; 2015. p. 15-38.
28. Nudel J, Sanchez VM. Surgical management of obesity. *Metabolism*. 2019;92:206-16.
29. El Ghoch M, Fakhoury R. CHALLENGES AND NEW DIRECTIONS IN OBESITY MANAGEMENT: LIFESTYLE MODIFICATION PROGRAMMES, PHARMACOTHERAPY AND BARIATRIC SURGERY. *Journal of population therapeutics and clinical pharmacology = Journal de la therapeutique des populations et de la pharmacologie clinique*. 2019;26(2):e1-e4.
30. Haslam D. Weight management in obesity – past and present. *International Journal of Clinical Practice*. 2016;70(3):206-17.
31. Dietz WH, Baur LA, Hall K, Puhl RM, Taveras EM, Uauy R, et al. Management of obesity: improvement of health-care training and systems for prevention and care. *The Lancet*. 2015;385(9986):2521-33.
32. Kahan S, Wilson DK, Sweeney AM. The Role of Behavioral Medicine in the Treatment of Obesity in Primary Care. *Medical Clinics*. 2018;102(1):125-33.
33. Fruh SM. Obesity: Risk factors, complications, and strategies for sustainable long-term weight management. *Journal of the American Association of Nurse Practitioners*. 2017;29(S1):S3-S14.
34. Heymsfield SB, Wadden TA. Mechanisms, Pathophysiology, and Management of Obesity. *The New England journal of medicine*. 2017;376(3):254-66.
35. Neeland Ian J, Poirier P, Després J-P. Cardiovascular and Metabolic Heterogeneity of Obesity. *Circulation*. 2018;137(13):1391-406.
36. Antognoli EL, Seeholzer EL, Gullett H, Jackson B, Smith S, Flocke SA. Primary Care Resident Training for Obesity, Nutrition, and Physical Activity Counseling: A Mixed-Methods Study. *Health Promotion Practice*. 2016;18(5):672-80.