

Integrating 5As for the Management of Overweight and Obese Adults in Malaysian Primary Care

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5As obesity management in primary care

ABSTRACT

Malaysia has been reported to have the highest prevalence of obesity among Southeast Asian countries. The recent Malaysian National Health and Morbidity Survey also found that the prevalence of overweight and obesity has markedly increased as compared to fifteen years ago. It can be attributed to changes in dietary and physical activity patterns that are a consequence of modern environmental and societal changes. Primary care has been well known to be successful in providing care for chronic diseases. However, interventions for obesity in primary care have seldom been documented in Malaysia. In both government and private primary care clinics, initiation of discussion and counselling for patients with obesity are infrequent. This article will discuss the 5As intervention, which is based on behaviour change theory, as a feasible initiative to manage obesity and overweight patients in Malaysian primary care.

Keywords: Obesity; Primary care; 5As; Counselling

OBESITY AND MALAYSIA'S PRIMARY CARE

Obesity poses a significant public health concern worldwide, with its prevalence tripling since 1975 to over 1.9 billion individuals now classified as overweight and 650 million obese.¹ Once considered a problem of the high income countries, obesity and overweight now plague low to middle income countries as well. In addition to their previous challenges pertaining to infectious illnesses and malnutrition, they also face a drastic growth of obesity and overweight. This double burden of diseases has grave economic perils and strain the overburdened health system in these countries. For instance, in Asia-pacific, the monetary burden due to overweight and its complications such as coronary artery diseases ranges from 1.5% to 9.9% of the total health-care expenses.² This rapid transition in trends of obesity and overweight can be attributed to changes in dietary and physical activity patterns that are a consequence of modern environmental and societal changes.¹

The World Health Organization defines an overweight individual as having a body mass index (BMI) $\geq 25\text{kg/m}^2$ and obesity as a BMI $\geq 30\text{kg/m}^2$.¹ The indices for diagnosing obesity among Asians are lower than their European counterparts because Asians have more visceral adipose tissue than Europeans.³ In Asian context, the BMI cut-off levels have been modified such that $\geq 23\text{kg/m}^2$ indicates a mild increase in risk, while a BMI $\geq 27\text{kg/m}^2$ marks high risk for cardiovascular diseases and diabetes⁴. Using these diagnostic criteria in Malaysia, at least five large scale surveys have documented prevalence of obesity including a series of National Health and Morbidity Surveys (NHMS).⁵ Malaysians report one of the highest rates of obesity among the Southeast Asian countries. The most recent estimates reported in the NHMS (2015) place the prevalence of overweight individuals at 30.0% and obesity at 17.0%, a four-time increase in prevalence rates of obesity since 2004⁵.

The rapid rise in the prevalence of individuals with obesity is a major public health concern in Malaysia, with several stakeholders prompting action at the national level. These efforts spanned across prevalence surveys, documentation of nutritional behaviours and introduction of public health interventions combating obesity. The Technical Working Group on Nutrition Research gave birth to the Nutrition Research Priorities in Malaysia (NRPM 2016 to 2025), whereby fourteen research priority areas have been set to aid in our understanding of obesity in Malaysia, the effectiveness of existing interventions and design new modalities.⁶ Despite these major efforts, so far in Malaysia, only five studies have reported the development and evaluation of interventions for obesity⁶.

The successful role of both government and private primary care clinics (PCCs) in providing preventative and treatment interventions for chronic diseases has already been documented.⁷ However, PCC focused interventions for obesity have seldom been documented in Malaysia where a majority of the population visits PCCs for management of non-communicable diseases. In these PCCs, counselling for patients with obesity is seldom done owing to a lack of competency in obesity management among providers; and lack of time and financial incentivization^{8,9}. To overcome these challenges, Behaviour Change Theory (BCT) based interventions for obesity specifically designed for a PCC setting may be a cost-effective initiative¹⁰. One of the BCT derived interventions is 5As (Table 1), which is applicable across all health settings. However, the 5As acronym has always been synonymous with smoking cessation intervention and unheard of to manage weight problems in Malaysia. Thus, the discussion about 5As in this article may serve as an initial step to better manage obesity in the country.

Table 1: The 5As of obesity management^{9,10,11}

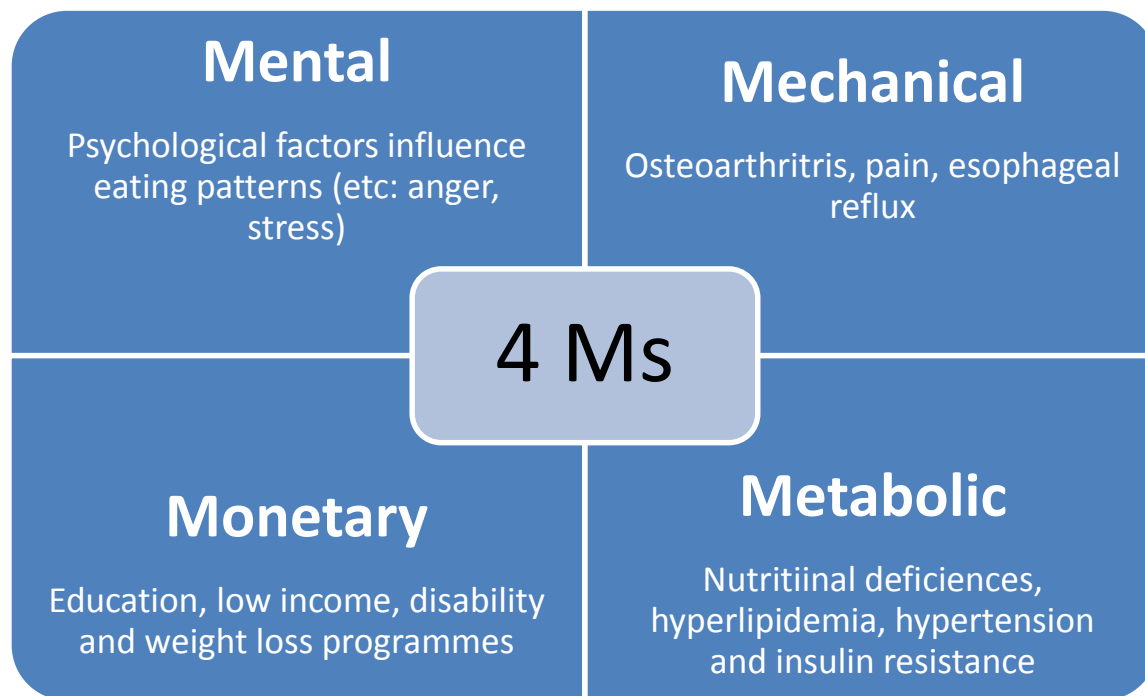
5As	Definition
Ask	Ask for consent to discuss weight, eating habits, physical activity, and preparedness for change
Assess	Assess the category of obesity, underlying causes, complications/ comorbidities and potential barriers for management
Advice	Advice on treatment options and health benefits
Agree	Agree on lifestyle modifications and/or other interventions (medical or surgical) with a mutually agreed goal
Assist	Assist in recognizing any obstacle, providing proper information, resources and schedule regular follow-up

ELEMENTS OF THE 5As

Ask: Discussion about weight problems is considered a sensitive topic across multiple cultures. In an effective interviewing style, rapport is built gradually, and the permission of the patient is sought after to discuss about weight. Ideally, initial questions to talk about weight should be, “Does it make you feel comfortable if we talk about your

weight?”. Such type of questions is significant to initiate a conversation about weight in a non-judgmental manner and without embarrassing the patient. It is then followed by questions about the patient’s lifestyle, dietary habits, and readiness to reduce weight^{10,11}. If patients are not ready for a discussion or intervention, their wish should be respected and inform them help is always available when they are ready.

Assess: The assessment consists of detecting underlying causes of weight gain and obesity-related comorbidities/ complications, and classifying the stage of obesity. This can be obtained by detail history taking; obtaining BMI and waist circumference; and occasionally laboratory investigations. Additionally, patients’ motivator to reduce weight and possible barriers should also be assessed to facilitates counselling in later stage. The complete assessment is best described by 4Ms framework (Figure 1) which includes mental, metabolic, mechanical and monetary factors^{9,11}.

Fig. 1: The 4Ms rule for assessment of root causes of obesity^{9,11}

Advice: Patients should be advised about health risks of obesity and benefits they can obtain from reducing weight. If there are any queries, physicians should accept them without prejudice and provide a positive discussion.^{10,11} Obesity management consists of lifestyle modifications, behavioural intervention, medications and surgery. All options with their pros and cons, relating to individual’s medical and personal history, should be discussed with patients to ensure an informed decision can be made. The management plan opted by patients should be one that is achievable and sustainable by them for long term. This is

because weight regain will occur if adherence to treatment plan is lax.

Agree: Managing obesity and its related comorbidities is complicated, and it takes a lot of courage on an individual part to agree on welcoming a new life. After suggesting individuals about their treatment, they must agree on it before proceeding with treatment. This agreement includes a diet plan, workout routine and target weight loss. Sometimes patients set up weight targets for themselves which may have negative psychological effects if weight goals are not reached. It is important to counsel the patient

that feeling healthier than before may be more important than failing to achieve target weight over time^{10,11}.

Assist: During the patients' weight loss journey, they may encounter multiple roadblocks. The physicians' role is to assist patients in identifying their socio-emotional, physical or monetary barriers and discuss strategies to overcome them. Occasionally, referral to other specialist providers (dietitian, exercise physiologist, endocrinologist) may be required. Regular follow up in PCC is also important to monitor progress and review suitability of existing management^{10,11}. Patients with success in adhering treatment plan and achieving the agreed goal should be given positive reinforcement by words of encouragement to sustain their motivation.

The 5As approach was originally developed for smoking cessation by the US Public Health Service, has been adapted and found successful for treatment among Canadian patients with obesity.^{8,9} This framework has potential beyond the reduction of weight among its recipients by identifying cause of obesity and then focusing on behaviour change among the patients. The behaviours to be targeted may include dietary habits, physical activities, and socioemotional causes such as mental stress, social stressors and comorbid diseases. This patient-centred approach was implemented among Canadian general practitioners¹¹, who reported a two-fold increase in initiation of obesity management, and moderate to strong effect sizes for improvement in the assessment of obesity, assistance and coordination and follow up efforts¹⁰. In conclusion, obesity is plaguing Malaysian at an accelerated rate, and implementation of 5As for weight management in PCC is timely and evidence-based to improve healthcare providers' and patients' success rate in tackling obesity.

REFERENCES

1. World Health Organization. Obesity and overweight [Internet]. Geneva: World Health Organization; 2018 [cited 2019 July 16]. Available from: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>.
2. Asia Pacific Cohort Studies Collaboration. The burden of overweight and obesity in the Asia-Pacific region. *Obes Rev* 2007; 8: 191–196.
3. Lear SA, Chockalingam A, Kohli S, Richardson CG, Humphries KH. Elevation in cardiovascular disease risk in South Asians is mediated by differences in visceral adipose tissue. *Obesity* 2012; 20: 1293–1300.
4. Misra A. Revisions of cutoffs of body mass index to define overweight and obesity are needed for the Asian-ethnic groups. *Int Journal Obes* 2003 Nov; 27(11): 1294.
5. Ghee LK. A review of adult obesity research in Malaysia. *Med J Malaysia* 2016 Jun 1; 71(1): 7.
6. Nor NS, Ambak R, Zaki NM, Aziz NS, Cheong SM, Razak MA et al. An update on obesity research pattern among adults in Malaysia: a scoping review. *BMC women's health* 2018 Jul; 18(1): 114.
7. Whitlock EP, Orleans CT, Pender N, Allan J. Evaluating primary care behavioral counseling interventions: an evidence-based approach. *Am J Prev Med* 2002 May; 22(4): 267-84.
8. Alexander SC, Ostbye T, Pollak KI, Gradison M, Bastian LA, Brouwer RJ. Physicians' beliefs about discussing obesity: results from focus groups. *Am J Health Promot* 2007 Jul-Aug; 21(6): 498-500.
9. Rueda-Clausen CF, Benterud E, Bond T, Olszowka R, Vallis MT, Sharma AM. Effect of implementing the 5 A s of Obesity Management framework on provider-patient interactions in primary care. *Clin Obes* 2014 Feb; 4(1): 39-44.
10. Campbell-Scherer DL, Asselin J, Osunlana AM, Ogunleye AA, Fielding S, Anderson R et al. Changing provider behaviour to increase nurse visits for obesity in family practice: the 5As Team randomized controlled trial. *CMAJ Open* 2019 May 30; 7(2): E371-E378. doi: 10.9778/cmajo.20180165.
11. Ogunleye AA, Osunlana A, Asselin J, Cave A, Sharma AM, Campbell-Scherer DL. The 5As team intervention: bridging the knowledge gap in obesity management among primary care practitioners. *BMC Res N* 2015 Dec; 8(1): 810.