

ASSESSMENT OF 30 MCQS

FPSC NO : 93

MCQS ON BASIC OBESITY MANAGEMENT ACCREDITATION 2021

Submission DEADLINE: 15 June 2021, 12 NOON

INSTRUCTIONS

- To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal (www.cfps2online.org)
- Attempt ALL the following multiple choice questions.
- There is only ONE correct answer for each question.
- The answers should be submitted to the College of Family Physicians Singapore via the College Online Portal before the submission deadline stated above.
- There will be NO further extension of the submission deadline

1. Regarding obesity as a disease, which of the following statements is TRUE?

- Obesity is not a chronic disease as it is the result of a person's choice of lifestyle.
- Obesity is a disease as there is a distinct disruption to physiology, resulting from distinct multiple causes.
- Socio-economic factors and food insecurity decrease one's likelihood of consuming highly processed, energy-dense foods.
- If a mother loses a lot of weight during her early pregnancy, her child is less predisposed to childhood obesity and insulin resistance.
- Weight discrimination and stigma result in people living with obesity receiving more treatment in general.

2. Mdm Aisha, who is 45-years old and has a body mass index of 27kg/m², has been trying to lose weight for the last five years. She would lose at most 1-2 kg each attempt but would regain to a weight higher than before each attempt. She usually tries water fasting 3-4 times a week without any exercise. She seeks your opinion on her situation and your advice to lose weight as her knee pain is impeding her activity. Please select the FALSE statement.

- During and after weight loss, as a physiologic response, the body produces counter-regulatory hormones which may lead to increased hunger, reduced satiation and increased food intake.
- Assessing for other lifestyle factors like sleeping patterns, stress levels, psychosocial support, food security in her life may help to elicit contributory factors to lack of adequate weight loss and weight maintenance.
- Our weight is tightly defended by the body which can make losing and maintaining weight challenging.
- During and after weight loss, there is an adaptive increase in energy expenditure which leads her to want to eat more, and which can persist for many years on.
- Weight-loss attempts should be planned with weight maintenance in mind. Long-term follow-up and monitoring should be expected.

3. With regards to the management of obesity and its complications, what is the main goal of therapy today?

- BMI-centric approach.
- A 20 percent weight loss to improve NAFLD or OSA.
- Eat less and exercise more.
- Moderate weight loss (5-10 percent weight loss).
- Treat or prevent obesity complications.

4. With regards to reducing the burden of disease associated with obesity, which of the following is the key goal?

- Obesity prevention.
- Patients pledging they will take action.
- Reduction of the number of severely obese by bariatric surgery.
- Health literacy on obesity self-help.
- Intermittent fasting target of at least 50 percent of the obese population.

5. Mdm Siti, a 42-year-old Malay lady, whom you are seeing for the first time, acknowledges that her excessive weight is causing her problems and gives you permission to discuss about her weight after you asked. What would you do NEXT?

- Agree with her decision and proceed to make SMART goals with her.
- Assist her by referring her to the dietician and exercise therapist.
- Assess her by first taking a comprehensive history.
- Advise her on the need for a long-term weight management strategy.
- Assist her by referring her to internet resources on weight loss.

6. Mr Koh, a 55-year-old Chinese man, became defensive (about his diet) when you suggest that his diet can be improved. According to Motivational Interviewing core principles, what should you do?

- A. Confront him on his defensiveness.
- B. Assure him that he is being heard and understood.
- C. Make a strong case on why you think his diet is a problem.
- D. Tell him to return only when he is ready.
- E. Point out to him that his reasons are just excuses.

7. Ms Tan, a 23-year-old Chinese female, comes to you with progressive weight gain, oligomenorrhoea, muscle weakness and easy bruising. She recently did a pre-employment check-up and was diagnosed with hypertension and prediabetes. At your clinic visit, her BMI is 30.5 kg/m², waist circumference 90cm, BP 138/87 mmHg. She appears to have facial plethora, thick purple striae and proximal weakness. She is concerned about the weight gain and requests medications for weight loss, what should you do?

- A. Prescribe to her a diet and exercise plan and review her in three months.
- B. Discuss with her about medications for weight management.
- C. Start her on medications for hypertension and prediabetes.
- D. Diagnose her with polycystic ovarian syndrome (PCOS).
- E. Refer to Endocrinologist for workup of suspected Cushing's syndrome.

8. Mr Lim, a 50-year-old Chinese man, has a history of type 2 diabetes mellitus, hypertension, non-alcoholic fatty liver disease, and hypertriglyceridemia. He was recently diagnosed with depression by another doctor one year ago. He noticed progressive weight gain over the last six months. Which of the following medications, that Mr Lim is taking, may contribute to weight gain?

- A. Mirtazapine.
- B. Metformin.
- C. Fenofibrate.
- D. Losartan.
- E. Sitagliptin.

9. Mr Raj is a 30-year-old Indian man who has a past medical history of type 2 diabetes mellitus and obstructive sleep apnoea (OSA). His BMI is 35.4 kg/m². For his diabetes mellitus, his HbA1c continues to be elevated at 8.5 percent despite three oral

anti-diabetic agents. For his OSA, he was unable to tolerate the continuous positive airway pressure (CPAP) despite trying various mask fits. He previously tried to lose weight using weight loss supplements bought online, but this had limited effect. Which of the following factors from the clinical history would most strongly suggest that early and aggressive intervention for his weight is required?

- A. His Indian ethnicity.
- B. His young age of 30 years old.
- C. His BMI of 35.4 kg/m², indicating Class II obesity.
- D. The presence of difficult to control obesity-related comorbidities.
- E. History of weight loss attempts.

10. Daily calorie deficit required to achieve 0.5 - 1.0kg weight loss per week is: _____. Choose the correct option.

- A. 300cal.
- B. Unknown.
- C. At least 500cal.
- D. >1000cal.
- E. >1500cal.

11. Which is true about Very Low Calorie Diets:

- A. They provide < 800 calories per day.
- B. They rely on the use of meal replacements.
- C. They should only be used for the short-term.
- D. They should be under medical supervision.
- E. All of above.

12. All statements about the "Keto diets" are true EXCEPT?

- A. "Keto diets" are low in carbohydrate and high in fat.
- B. The studies have shown that ketogenic diets are safe in the long-term.
- C. Ketogenic diets help to control hunger.
- D. Keto diets are low in dietary fibre and micronutrients.
- E. "Keto flu" is a frequent side effect of this diet.

13. The management of overweight and obesity should include ALL of the following EXCEPT:

- A. Sustainable dietary changes.
- B. Physical activity.
- C. Behaviour modification.
- D. Family involvement.
- E. Crash diets.

14. Which is true of pre-participation screening in physical activity?

- A. A normal exercise stress test ensures that the

individual is safe to undergo all forms of exercise for the next two years.

- B. An individual who has been brisk walking five days a week should stop his activity and seek medical clearance first if he has been newly diagnosed with hypertension.
- C. An individual who has been jogging five days a week and develops fatigue during exercise should reduce his jogging to three days a week instead as the fatigue is due to overtraining.
- D. An individual with peripheral artery disease who is previously inactive should seek medical clearance first if he is keen to start a jogging regime.
- E. Persons with metabolic syndrome should undergo an exercise stress test prior to beginning any exercise to assess for occult cardiovascular disease.

15. Which is true of physical activity in obese and overweight persons?

- A. Obese or overweight persons should aim to achieve at least 30 minutes of physical activity per session as that is the minimum duration of physical activity required for weight loss.
- B. Obese or overweight persons should jog to lose weight as it is the most effective form of exercise.
- C. Obese or overweight persons should start with light- to moderate-intensity physical activity if they are currently not physically active.
- D. Obese or overweight persons should undergo exercise stress testing prior to beginning exercise to assess for occult cardiovascular disease.
- E. Physical activity needs to result in weight loss of 5 to 10 percent to create health benefits for obese and overweight persons.

16. About physical activity, which of the following is TRUE?

- A. Aerobic physical activity has to be of at least ten minutes duration to confer health benefits.
- B. Exercise is defined as any bodily movement produced by skeletal muscles that result in energy expenditure.
- C. Obese or overweight persons require a minimum of 300 minutes of moderate-intensity aerobic physical activity per week for health benefits.
- D. Physical inactivity is defined as the inability to achieve physical activity guideline targets.
- E. Sedentary behaviour is defined as any behaviour characterised by an energy expenditure of 1.5 METs or less, such as sleeping, watching TV or using the computer.

17. About physical activity with comorbidities, which of the following is FALSE?

- A. Individuals on beta-blockers may have blunted heart rate response and should monitor exercise intensity using rate of perceived exertion instead.
- B. Individuals on insulin should avoid exercising during peak onset of their medication to prevent hypoglycaemic episodes.

- C. Individuals with diabetic foot ulcers should avoid jogging.
- D. Individuals with knee pain should stop all weight-bearing exercises.
- E. Proper footwear should be advised for individuals planning to embark on weight-bearing physical activity.

18. Before starting an anti-obesity medication (AOM) in a patient, the following should be considered:

- A. The BMI of the patient is the sole criteria for starting an AOM.
- B. The presence of obesity-related comorbidities regardless of BMI should be used to decide when AOM is to be started.
- C. The presence of other medical conditions which may serve as contraindications or which the AOM may worsen should aid in the choice of AOM.
- D. The efficacy of the AOM should be the main determinant on the choice of medications.
- E. Side-effects of the AOM should not influence the choice of medication.

19. Mr Rohit is a 30-year-old Indian man who has a past medical history of dyslipidaemia, type 2 diabetes mellitus (DM) diagnosed three years ago, and obstructive sleep apnoea (OSA). His BMI is 27.4 kg/m² and his blood pressure is 135/78mmHg, heart rate is 80bpm regular. His HbA1c continues to be elevated at 8.5 percent despite being on metformin and empagliflozin for the last three months. He is not keen to start on continuous positive airway pressure (CPAP) treatment now as he wants to lose some weight first. He has lost about three percent of his weight in the last three months by reducing overall caloric intake and walking 40 minutes four times a week, improving his HbA1c to 7.8 percent. He is keen to lose more weight with pharmacotherapy. Which of the following considerations is the most reasonable in Mr Rohit?

- A. AOM should not be considered yet as he has managed to lose three percent of his weight with improvement in his DM.
- B. For OSA improvement, he will need at least 7-10 percent weight loss. Hence AOM should be considered.
- C. He should be considered for bariatric surgery instead of the use of AOM since his DM is poorly controlled on two glucose-lowering medications.
- D. Once an AOM is started, he does not have to be as strict with his dietary intake and exercise since these measures are not as effective as an AOM.
- E. Combination of orlistat, phentermine and liraglutide should be considered in him since this will result in the greatest amount of weight loss.

20. After determining that Mr Rohit is an eligible candidate for AOM and discussing options with him, Mr Rohit was started on liraglutide. The following are considerations in the use of glucagon-like peptide I (GLP-I) receptor agonists in patients with obesity:

- Gastrointestinal side-effects can occur in up to 65 percent of people using liraglutide for weight loss but these are usually mild and self-limiting.
- Increasing liraglutide from 1.8mg/day to 3.0mg/day in a person with diabetes will significantly reduce his HbA1c further.
- Adding Liraglutide to more intensive use of behavioural therapy and lifestyle intervention can help him lose up to nearly 12 percent of his weight in one year.
- Liraglutide should be stopped if he fails to lose four percent of his initial weight on Liraglutide 2.4mg/day in 12 weeks.
- Liraglutide should be increased to 3.0mg/day as tolerated and monitored for at least 12 weeks on this dose before deciding if treatment should be continued on or not.

21. Ms Renu, a 38-yr-old Indian lady, has a history of obesity, hypertension and hypertriglyceridemia. She has a history of constipation but no history of insomnia or palpitations. During her visit, her parameters are: BMI 28kg/m², BP 130/78mmHg, HR 75bpm reg. Acanthosis of her neck with no Cushingoid features. She is keen to try phentermine as her friend had lost 10kg after taking it for one month. You counsel her on the use of phentermine. Which of the following statement regarding phentermine is false?

- Phentermine can only be used for up to a maximum of about six months in Singapore since most studies involving phentermine are up to six months.
- Phentermine can raise blood pressure and heart rate with unknown long-term cardiovascular effects.
- Weight loss of about 4kg above placebo (or best lifestyle effort) can be expected with 30mg/day over 3-6 months.
- Being a schedule IV drug, phentermine has a high potential for abuse.
- Gastrointestinal side effects with phentermine are common.

22. Ms Tan, a 28-year-old Chinese female administrative assistant who comes to you with oligomenorrhoea and hirsutism. She is currently on treatment via her psychiatrist for anxiety disorder and is being investigated for a thyroid nodule. You diagnose her with polycystic ovarian syndrome after a workup, during which she was found to have an elevated fasting plasma glucose of 6.4mmol/dL (confirmed on repeat sample on a

separate day, with an HbA1c of six percent). Her BMI is 28.5 kg/m², waist circumference 92 cm, BP 130/77 mmHg. You counsel her that weight loss is part of the treatment of her current medical conditions. She has been obese since late childhood and has started swimming three times a week since six months ago, but that has only kept her weight stable. She is open to start weight loss treatments. Which of the following on the use of anti-obesity medications in her is false?

- Treatment with orlistat and liraglutide in the long-term can reduce her risk of developing diabetes mellitus.
- Orlistat can help her lose about 3-4 percent of her weight in addition to her lifestyle.
- Phentermine is a good option for her as it will not worsen her anxiety.
- Liraglutide should not be started until the thyroid nodule is fully investigated.
- Regardless of medication choice, she has to use contraception and discontinue the medication immediately should she get pregnant.

23. Bariatric surgery introduced since the 1960s has a place in the management of obesity. Which of the following statements BEST describes the aim of bariatric surgery?

- To prevent people from eating.
- To increase resting metabolic rate.
- To reduce body fat levels.
- To achieve weight loss.
- To reduce the absorption of nutrients.

24. With regards to bariatric surgery, what is the goal of this surgical procedure?

- Induce early satiety.
- Feel satisfied with smaller meal portions.
- Reduce hunger.
- Alter taste preferences.
- Increase the secretion of GLP-I.

25. With regards to bariatric surgery, what are the fears that patients express most related to?

- Type 2 Diabetes Mellitus.
- The surgery itself.
- Adverse event rates.
- Prolonged hospital stay.
- Post-surgery vomiting and diarrhoea.

26. With regards to bariatric surgery, which of the following is NOT a bariatric procedure?

- Adjustable gastric banding.
- Vertical sleeve gastrectomy.

- C. Nissen fundoplication.
- D. Biliopancreatic diversion.
- E. Mini-gastric bypass.

27. It is established that physical activity is an important component of weight management programs. Which of the following is not a component of our overall physical activity?

- A. Non-exercise activity thermogenesis.
- B. Exercise activity thermogenesis.
- C. Sedentary activity.
- D. Basal metabolic rate.
- E. Thermic effect of food.

28. What is the correct order of the five stages of behaviour change that the Transtheoretical Model describes?

- A. Pre-contemplation, contemplation, preparation, action, maintenance.
- B. Preparation, pre-contemplation, contemplation, action, maintenance.
- C. Pre-contemplation, preparation, contemplation, action, maintenance.
- D. Preparation, action, maintenance, pre-contemplation, contemplation.
- E. Contemplation, pre-contemplation, preparation, action, maintenance.

29. Sustained physical activity can induce weight loss. What is the recommended amount of weekly physical activity required to induce a 5 to 7.5 kg weight loss?

- A. >150 minutes of vigorous-intensity physical activity.
- B. >150 minutes of moderate-intensity physical activity.
- C. 225 to 420 minutes of moderate-intensity physical activity.
- D. 225 to 420 minutes of vigorous-intensity physical activity.
- E. 200 to 300 minutes of moderate-intensity physical activity.

30. Behavioural strategies can be deployed to increase physical activity. Which of the following is NOT a behavioural strategy for increasing physical activity?

- A. Provision of rewards.
- B. Health education.
- C. Self-monitoring.
- D. Goal setting.
- E. Enhancing self-efficacy.

CORRECTION

1. In the Vol 47 No. 3 - Osteoporosis: A Growing Primary Care Concern, Unit 1 article titled "Postmenopausal Osteoporosis: Screening & Diagnosis based on FRAX® and BMD" there was an error in the first paragraph of Osteoporosis Self-Assessment Tool for Asians. The sixteen sentence of the first paragraph should have read "which will help place the patient into the appropriate risk group - a) score < 0 - low-risk, b) score 0-20 - moderate-risk and c) score > 20 - high-risk group."
2. In the Vol 47 No. 3 - Osteoporosis: A Growing Primary Care Concern, MCQs section, there was an error in the Question 1. The question should have read "Which of these patients should not be screened for osteoporosis?."

The article and MCQs have been corrected.