#### ASSESSMENT OF 30 MCQs

# FPSC NO: 44 MCQs on NEW HORIZONS IN HYPERTENSION Submission DEADLINE: 25 November 2011

#### **INSTRUCTIONS**

- To submit answers to the following multiple choice questions, you are required to log on to the College On-line 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 On-line Portal before the submission deadline stated above.

## I. Which of the following is a CORRECT list of established risk factors for hypertension?

- A. Increasing age, female sex, and diabetes.
- B. Increasing age, female sex, and menopause.
- C. Increasing age, male sex, and andropause
- D. Low socioeconomic status, male sex, and obesity.
- E. Female sex, malnutrition, and diabetes

### 2. About hypertension in Singapore, which of the following statement is CORRECT?

- A. Hypertension is the most common condition noted in hospital admissions.
- B. Hypertension is more prevalent in Singapore compared to North America or European countries
- C. Hypertension prevalence reaches a peak and plateaus off as the population gets older.
- D. Hypertension is present in about a quarter of the population aged 18 to 69 years old.
- E. ALL of the above are correct.

## 3. In population surveys conducted in Singapore in the last 15 years which of the following statement about hypertension is CORRECT?

- A. About 38% of hypertensives were previously undiagnosed in the 2004 National Survey.
- B. Undiagnosed hypertension was more common in females.
- C. Amongst the men, hypertension was most prevalent among the Malays.
- D. Amongst the women, hypertension is most common among the Indians.
- E. ALL of the above are correct.

## 4. With regards to blood pressure control in Singapore, which of the following statement is CORRECT?

- A. The 2004 National Survey showed good BP control. (<140/90mmHq) in about 37.7% of the population.
- B. The 2006 polyclinic survey showed only 25% of hypertensives had good BP control.
- C. The Chinese had better BP control than Malays and Indians.
- D. In the elderly, 90 % of them had good BP control.
- E. Elevated blood pressure is normal in the elderly and no treatment is needed.
- 5. In diabetics with hypertension, there is a high prevalence of microalbuminuria so there is a value in screening for this. One local study, found that X% of hypertensive diabetics had microalbuminria. What is X?
  - A. 43.5.
  - B. 48.5.
  - C. 53.5.
  - D. 58.5.
  - E. 63.5.

## 6. With regards to blood pressure (BP) variability, which of the following statement is CORRECT?

- A. Night time BP is 10-20% higher than daytime BP. undiagnosed in the 2004 National Survey.
- B. There is a steeper increase of BP in the early night hours
- C. There is no increase of BP throughout the waking hours in normotensive subjects.
- D. Hypertensive patients who exhibit BP variability have increased risk of end organ damage.
- E. Late night surge in BP is associated with higher risk of acute myocardial infarction, sudden death and stroke.

# 7. With regards to blood pressure variability in the UK-TIA & ASCOT-BPLA trials, which of the following statement best describes the results from the studies?

- A. Late evening surge in BP is associated with a higher risk of stroke.
- B. So long as the average BP is below target, the risk of stroke is reduced.
- C. Treatment to reduce BP variability has marginal effect in reducing cardiovascular risk.
- D. Patients with normal BP in the clinic is at less risk to have pressures that spike to dangerous levels in other situations.
- Excessive variability in systolic BP was associated with increased risk of cardiovascular events.

### 8. About Home BP monitoring (HBPM), which of the following statement is CORRECT?

- A. HMBP does not eliminate the problem of white coat hypertension.
- B. HMBP does not require much patient participation.
- C. HMBP is not able to detect diurnal BP variation, surges and troughs.
- D. HBPM has been shown to provide better prediction of end organ damage and cardiovascular risk compared to clinic BP.
- E. HMBP is of limited use in monitoring the BP of elderly patients as BP variability decreases with age.

#### 9. About Ambulatory BP monitoring, (ABPM) what is its advantage over Home BP monitoring (HBPM)? about hypertension is CORRECT?

- A. ABPM provides a complete picture of BP diurnal variation.
- B. ABPM provides day-time BP profile which is superior to night-time ambulatory BP as a cardiovasculr outcome predictor.
- C. ABPM is cheaper to do than HBPM.
- D. ABPM upper limits of normal for day-time readings is 120/70 mmHg.
- E. ABPM is more repeatable than HBPM.

### 10. About the choice of drugs for BP control, which of the following statement is CORRECT?

- A. ARB-CCB is an "average" combination in treating high BP.
- B. ACE-inhibitor-Diuretic is a "preferred" combination in treating high BP.
- C. Beta-blocker/ thiazide combination is more effective than calcium channel blocker / ACE-inhibitor in reducing systolic BP variability.
- D. ACE inhibitor-beta-blocker is a 'preferred' combination in treating high BP.
- E. ACE inhibitor-ARB is a "preferred" combination in treating high BP.

#### II. About risk factors for cerebrovascular diseases, which of the following statement is CORRECT?

- A. About 54% of strokes worldwide are attributable to hypertension.
- B. Increasing age is most important single modifiable risk factor.
- C. Blood pressure level and risk of stroke is not consistent and continuous.
- D. Hypertension increases the risk of haemorrhagic strokes but not ischaemic strokes
- E. Hypertension plays a key role in large artery atherosclerosis but not lacunae strokes.

## 12. In Singapore, with regards to the diagnosis of cerebrovascular accidents which of the following statement is CORRECT?

- A. A patient with an acute onset of neurological symptoms persisting for more than 12 hours has a stroke.
- B. Neurological symptoms from impaired cerebrovascular perfusion that recovers within 1 hour is by definition a stroke.
- C. The Face, Arm, Speech Test (FAST) is a validated tool to screen for diagnosis of stroke or transient ischaemic attack (TIA).
- D. Initial diagnosis of cerebrovascular accident is made by ultrasound scan.
- It is important to exclude hyperglycaemia in all patients presenting with sudden onset of neurological symptoms

## 13. In patients suspected of having a transient ischaemic attack (TIA), which of the following statement on management is CORRECT?

- A. A patient with ABCD2 score of 4 and above should be started on aspirin 100mg daily immediately.
- B. Patients with 2 or more TIA's in a week should be treated as high risk only if the ABCD2 score is above 3.
- C. Patients suspected of TIA but low risk score of 3 or below should be referred within 2 weeks to a specialist.
- D. Patients who present to you with TIA symptoms that occurred more than 1 week ago should be referred to a specialist within 48 hours.
- E. A patient with ABCD2 score of 4 and above should be referred to a specialist within 24 hours of onset of symptoms.

#### 14. With regards to Peripheral vascular Disease (PVD), which of the following statement is CORRECT?

- A. The risk of PVD is independent of blood pressure.
- B. The presence of PVD increases the risk of cardiovascular events.
- C. In PVD, the risk of intermittent claudication is high.
- D. About half of patients with PVD have hypertension.
- E. Ankle brachial index is a highly specific (91%) and sensitive (99%) for PVD.

#### 15. About the management of Peripheral vascular Disease (PVD), which of the following is useful?

- A. Decreasing exercise.
- B. Lowering LDL to less than 4mmol/L.
- C. Avoiding ACE inhibitors.
- D. Prescribing pentoxifylline because it benefits 80% of patients.
- E. Controlling blood pressure

#### 16. With regards to changing unhealthy behaviours which of the following statement is CORRECT?

- A. Unhealthy behaviours cause more than 60% of premature deaths.
- B. Just telling patients that they are at risk of developing diseases is usually sufficient to change behaviour.
- C. Most consultations about changing unhealthy behaviours are heart sink experiences.
- D. The usual consultation taking place at the clinic is the main source of behaviour change.
- E. Patients are changing their behaviour more readily nowadays compared to before.

# 17. In the process of changing unhealthy behaviours, patients usually go through a series of stages. Which of the following statement about these stages is CORRECT?

- A. There are usually six stages that a person navigates or goes through in the transtheoretical model of change.
- B. During the course of change, the person usually moves forward from one stage to the next stage.
- C. In the action stage, relapse is uncommon.
- D. Patients relapse only once or twice before behavior change is complete and stable.
- E. A framework that describes the natural sequence of behaviour change is the Transtheoretical Model (TTM) or Stages of Change model.

### 18. About behaviour change, which of the following statement is CORRECT?

- A. Behaviour must be visible if durable change is to take place.
- B. The patient must listen to the doctor in order to change.
- C. The patient decides when he or she is ready for change.
- D. The doctor should decide for the patient when is best time for change.
- E. The patient who is motivated to change usually jumps over several stages.

## 19. With regards to relapse after a behaviour has succeeded in changing, which of the following statement is CORRECT?

- A. Relapse is uncommon.
- B. Relapse is an indicator for failure to change.
- C. Relapse is reduced by inducing fear of complications.
- D. It is seldom necessary to go through several cycles of changes before relapse is eliminated.
- Relapse is an excellent opportunity to learn about the patient's own life circumstances.

### 20. About motivational Interviewing (MI), which of the following statement is CORRECT?

- A. The patient has generally no motivation for change and needs to be motivated
- B. MI is a doctor-centred and oriented directive method to elicit change.
- C. In MI, the doctor acts as guide, facilitator and collaborator to elicit and strengthen motivation for change.
- D. The doctor usually allows the patient to control and submits to patient's autonomy and wishes.
- E. Openly challenging the patient is a core MI skill.

## 21. About core communication skills that the practitioner needs to employ in MI, which of the following is CORRECT?

- A. Asking, exploring, and challenging.
- B. Asking, directing, and listening.
- C. Challenging, listening, and guiding
- D. Asking, challenging, and directing.
- E. Asking, listening, informing

## 22. According to the Global Burden of Disease 2000 study, X% of all ischaemic heart disease is attributable to high blood pressure. What is X?

- A. 32
- B. 37
- C. 42
- D. 47
- E. 52

# 23. Figures on hypertension causes, deaths, and effect size of treatment are now available. About these figures, which of the following statement is CORRECT?

- A. Reduction of 10 to 20 mm Hg systolic for a few years confers a relative risk reduction 16% for stroke
- B. Reduction of 5 to 6 mm Hg diastolic for a few years confers a relative risk reduction 38%% for coronary heart disease.
- C. Blood pressure control in most countries is now optimal.
- D. Essential or idiopathic hypertension accounts for 75% of all hypertension cases in a population
- E. About half of BP-attributable deaths occur between systolic BP 115mmHg and 140mmHg.

### 24. About single pill combination therapy, which of the following statement is CORRECT?

- A. A combination of 4 or more agents is often needed to achieve target control of BP.
- B. JNC 6 was the first guideline to advocate first line combination therapy.
- Single pill combination therapies are becoming more commonly used in achieving target control of BP.
- D. Combination therapies almost always involve the older generation classes of drugs.
- E. Single pill combinations always give more side effects than the individual drugs used by themselves.

### 25. About the effects of antihypertensives, which of the following is CORRECT?

- A. In patients with high cardiovascular risk, ARB is contraindicated.
- B. In patients with high cardiovascular risk, ARB is better than ACE inhibitors in giving CV protection.
- C. Short acting calcium channel blockers protect against major cardiovascular events.
- D. Diuretics activates renin-release and hence ACEI which is a blocker of the renin-angiotensin system is a good antihypertensive to be combined with it.
- E. The ACE/ARB combination potentiates the antihypertensive effect of one another.
- 26. About prevalence of hypertension treatment in the United States, X% were receiving pharmacologic treatment. What is X?
  - A. 30
  - B. 40
  - C. 50
  - D. 60
  - E. 70

- 27. A 60-year-old patient with hypertension and diabetes mellitus of 15 years duration is now in stage 5 chronic kidney disease. His estimated GFR (eGFR) is expected to be less than Xml/min/1.73m<sup>2</sup>. What is X?
  - A. 5
  - B. 10
  - C. 15
  - D. 20
  - E. 25
- 28. Based on the National Health and Nutrition Examination Survey (NHANES) III, conducted between 2005 and 2008, 17.3% of the population had an albumin-creatinine ratio of more than 30 mg/g if they are hypertensive compared to X% if they not hypertensive. What is X?
  - A. 6.9
  - B. 7.9
  - C. 8.9
  - D. 9.9
  - E. 10.9
- 29. In the management of hypertension in chronic kidney disease, which of the following is a preferred initial antihypertensive?
  - A. Thiazide diuretic.
  - B. Angiotensin converting enzyme inhibitor.
  - C. Beta blocker.
  - D. Calcium channel blocker.
  - E. Loop diuretic.
- 30. With regards to the use of a diuretic as adjunct antihypertensive, you would choose a loop diuretic if the GFR is less than X ml/min. What is X?
  - A. 30
  - B. 35
  - C. 40
  - D. 45
  - E. 50

| FPSC No. 37 "Primary Care Mental Health" Answers to 30 MCQ Assessment |   |       |       |
|---|---|-------|-------|
| Ι.  | В | II. B | 21. B |
| 2.  | E | 12. D | 22. C |
| 3.  | С | I3. B | 23. D |
| 4.  | Α | 14. E | 24. D |
| 5.  | С | 15. C | 25. E |
| 6.  | В | 16. D | 26. A |
| 7.  | E | 17. E | 27. B |
| 8.  | С | 18. C | 28. A |
| 9.  | Е | 19. D | 29. A |
| 10.   | D | 20. B | 30. D |

| "Onli | ne Notifica | FPSC No. 40<br>tions & E-Service<br>to 30 MCQ Assess |       |
|-------|-------------|--|-------|
| 1.    | D           | II. B  | 21. E |
| 2.    | В           | 12. C  | 22. B |
| 3.    | Е           | 13. A  | 23. B |
| 4.    | С           | 14. E  | 24. E |
| 5.    | В           | I5. D  | 25. D |
| 6.    | Е           | 16. C  | 26. D |
| 7.    | С           | 17. D  | 27. A |
| 8.    | В           | 18. A  | 28. E |
| 9.    | D           | 19. E  | 29. B |
| 10.   | . E         | 20. B  | 30. A |

|     |     | FPSC No. 38<br>nent of Famil<br>to 30 MCQ A | y Violence" |
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| ١.  | Α   | II. C                                       | 21. C       |
| 2.  | D   | I 2. B                                      | 22. E       |
| 3.  | D   | 13. E                                       | 23. A       |
| 4.  | E   | I4. D                                       | 24. D       |
| 5.  | С   | 15. D                                       | 25. B       |
| 6.  | В   | 16. E                                       | 26. A       |
| 7.  | E   | 17. E                                       | 27. C       |
| 8.  | В   | 18. A                                       | 28. D       |
| 9.  | Е   | 19. A                                       | 29. B       |
| 10. | . C | 20. B                                       | 30. A       |

| FPSC No. 41 "Management of Functional Decline in Older Adults" Answers to 30 MCQ Assessment |     |         |       |
|---|-----|---------|-------|
| 1.  | С   | II. E   | 21. B |
| 2.  | D   | 12. C   | 22. A |
| 3.  | Е   | 13. E   | 23. B |
| 4.  | С   | 14. D   | 24. E |
| 5.  | В   | I5. B   | 25. D |
| 6.  | Α   | I 6 . B | 26. C |
| 7.  | D   | 17. A   | 27. B |
| 8.  | С   | 18. C   | 28. E |
| 9.  | В   | 19. E   | 29. D |
| 10  | . E | 20. D   | 30. E |

| FPSC No. 39<br>"Oral Health in Primary Care"<br>Answers to 30 MCQ Assessment |     |       |       |
|--|-----|-------|-------|
| 1.   | E   | II. E | 21. D |
| 2.   | D   | 12. D | 22. C |
| 3.   | С   | 13. B | 23. E |
| 4.   | E   | 14. A | 24. D |
| 5.   | D   | 15. D | 25. E |
| 6.   | С   | 16. C | 26. A |
| 7.   | Е   | 17. E | 27. E |
| 8.   | В   | 18. A | 28. A |
| 9.   | С   | 19. B | 29. D |
| 10.  | . E | 20. B | 30. C |