Clinical challenge

SINGLE COMPLETION ITEMS

DIRECTIONS Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the most appropriate statement as your answer.

Case 1 – Mick Potter
Mick Potter, aged 45 years, is your first patient on your first day working in Cashlow Medical Centre, located in the most economically disadvantaged area of Sydney. You see from the notes that Mick is unemployed, recently separated and lives alone. He has been prescribed sertraline 50 mg daily for depression.

Question 1
Dr Downer, who has been working at Cashlow for the past 10 years, told you some disturbing facts about the patient population. Compared to the population in the most economically advantaged areas of Sydney, the patients you will be treating in Cashlow

A. are 2.5 times more likely to have diabetes
B. have 5 times the cardiovascular mortality
C. are 3 times more likely to smoke
D. are more likely to exercise
E. men are more likely to be overweight.

Question 2
Mick tells you he has had pains in his chest over the weekend and although they have now settled, he thought he had better come to see you because his father died of a heart attack aged 53 years. His pain was a burning sensation, typical of gastro-oesophageal reflux. Mick is normotensive and his ECG is normal. Mick

A. needs a full assessment of risks for cardio-vascular disease (CVD)
B. is unlikely to be interested in modifying his risk factors
C. is unlikely to change his risk factors because of his social circumstances
D. is unlikely to be motivated to change if he is depressed
E. doesn't require CVD assessment as his symptoms are not cardiac.

Question 3
Mick's BMI is 29 and his waist circumference is 96 cm. He tells you he smokes 25 cigarettes a day and drinks 4–5 cans of full strength beer on most nights. He has a fasting glucose of 4.9, cholesterol of 6.9 and HDL of 0.9. As well as a positive family history, Mick's cardiovascular risk factors include:

A. hyperlipidaemia
B. overweight and increased girth
C. depression
D. A and B plus smoking
E. all of the above.

Question 4
You discuss how to address preventive health strategies in patients such as Mick with Dr Downer over coffee. Strategies that may be helpful include:

A. an additional appointment with a practice nurse
B. booking a double appointment for preventive care
C. clinical audit of preventive care recording SES
D. a team approach in the practice to preventive care
E. all of the above.

Case 2 – Nathan Long
Nathan Long, aged 31 years, is an Aboriginal man who presents with tightness in his chest that came on at football training. He has no significant past history but smokes 25 cigarettes per day. An ECG reveals ischaemic changes in the inferior leads.

Question 1
Cardiovascular event risk calculators based on Framingham data

A. are valid for Aboriginal patients
B. overestimate first CHD events in Indigenous Australians
C. underestimate CHD events for Aboriginal men but not Aboriginal women
D. underestimate CHD events for Indigenous Australians at all ages and in both sexes
E. underestimate CHD only in Aboriginal men under 35 years of age.

Question 2
The difference in rates of CHD between male Indigenous Australians under 35 years of age and nonindigenous men under 35

A. is attributable to higher cholesterol level
B. is attributable to low physical activity levels
C. is attributable to higher blood pressure levels
D. all of the above
E. none of the above.

Question 3
Indigenous Australians die of CVD more often and younger than non-Indigenous Australians, and

A. have 7–12 times the age adjusted death rate for CVD at all ages
B. the greatest mortality differentials occur in the over 55 years age group
C. traditional risk factors are no more common in Indigenous Australians

D. social, economic and psychological factors contribute to this

E. all of the above.

Question 4

Nathan's son Andrew was born in 1998. The life expectancy for an indigenous male born in that year is:

A. 56 years

B. 76 years

C. 63 years

D. 15 years less than for a nonindigenous male

E. 10 years less than for a nonindigenous male.

Case 3 – Adina Belay

Adina Belay, aged 8 years, is an Ethiopian refugee. She lives with her parents and her older brother. They have been in Australia for 6 months and have temporary protection visas (TPV). She presents with a letter from the emergency department (ED) where she was seen last night with an episode of acute asthma. She has attended ED 3 times in the past 2 months with similar presentations.

Question 1

Adina has been attending school in Australia and speaks English quite well but her mother, Kidan, speaks very little English. Adina has no respiratory distress but she has a red throat, nasal congestion and mild wheeze. The best course of action is to:

A. prescribe preventer and reliever medications

B. explain asthma and its management to Adina

C. use sign language and diagrams to explain asthma to Kidan

D. all of the above

E. use a telephone interpreter to translate as you explain about asthma and its management.

Question 2

Adina's frequent attendances at the ED suggest inadequate preventive treatment. Choose the most correct response.

A. cost of treatment is not an issue as patients on TPV have access to Medicare and PBS medications

B. as Adina speaks English, language difficul-

ties are unlikely to be contributing

C. family stress and psychological distress may affect adherence to treatment

D. A and B are correct

E. A and C are correct.

Question 3

Adina and her mother return for review a few days later. You consider other health issues relevant to Adina. In patients from sub-Saharan Africa such as Adina

A. unlike adult refugees, psychological distress in children resolves quickly after resettlement

B. catch up immunisations are given on arrival in Australia

C. there are low rates of tropical infections

D. intestinal parasitic infections such as schistosomiasis are very common

E. screening for all infections is undertaken during the immigration process.

Question 4

You discuss the health problems of refugees and trauma survivors, and how to manage them with your colleagues. All the following are correct except:

A. refugees should be encouraged to talk about their trauma to reduce psychological distress

B. refugees often have complex physical and mental health problems

C. preventive health care is often overlooked in the care of refugees

D. dental problems are particularly common

E. infectious and nutritional diseases are common.

Case 4 – Stan Pearce

Stan Pearce, aged 42 years, is an Aboriginal man with a past history of hypertension and an acute myocardial infarction at 35 years of age. He attends because of difficulty sleeping. He smokes 20 cigarettes per day and has not attended for repeat prescriptions of his medications or blood tests for the preceding 12 months.

Question 1

You suspect Stan is depressed. Choose the correct statement.

A. screening tools for depression have been specifically validated for use in Indigenous Australian adults

B. psychosocial stress is a CHD risk factor but much less so than smoking

C. the elevated CHD risk from psychosocial stress remains, despite controlling for major behavioural risk factors

D. the elevated CHD risk from psychosocial stress is due totally to increased behavioural risk factors

E. B and C are correct.

Question 2

The most important initial strategy to improve Stan's health is to:

A. commence SSRI medication

B. re-prescribe an ACE inhibitor, aspirin, a statin, and a beta blocker

C. prescribe nicotine replacement therapy

D. impress on Stan the risks he is running and the importance of complying with therapy

E. understand how Stan views his illness and engage support from family members, Aboriginal health workers and other community supports.

Question 3

For doctors and practices managing patients such as Stan, strategies that are likely to improve health outcomes include all except:

A. training in cultural awareness for practice staff

B. continuity of care and effective follow up systems

C. adopting an egocentric view of illness

D. involving indigenous health workers in patient care and practice organisation

E. improving accessibility and cultural appropriateness of medical services.

Question 4

Men attend doctors less often and when they do, they have shorter consultations and engage less in preventive health. Additional barriers to health care access for indigenous males includes all except:

A. concerns about privacy when attending clinics

B. predominance of male staff in the health centre setting

C. destruction of men's usual roles in the community and family

D. strong influence of women's health issues in health priorities

E. lack of cultural awareness of nonindigenous staff.

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ANSWERS TO SEPTEMBER CLINICAL CHALLENGE

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Case 1 – Huong Mei-Li

1. Answer C

For the SFH measurement the woman should have an empty bladder and should lie supine with legs extended. The fundal height is found by palpating down from the xiphisternum. A nonelastic tape should be placed face down along the uterine axis measuring from fundus down to the top of the pubic symphysis.

2. Answer B

In accurately dated pregnancies such as Mei-Li's, 80–85% of pregnancies identified as SGA are constitutionally small but healthy.

3. Answer A

An AC <10th centile on a customised chart has a high sensitivity for IUGR and an AC >10th centile makes IUGR much less likely. EFW <10th centile and decreased amniotic fluid volume also indicate IUGR, but the most sensitive measure is reduced growth velocity.

4. Answer B

Although the Doppler assessment is a positive sign, and Mei Li's fetus may simply be constitutionally small, ongoing close monitoring is warranted and a reassessment of the AC, EFW and umbilical artery Doppler in 2 weeks is appropriate. The time and mode of delivery depends on degree of fetal compromise, gestation and cervical status.

Case 2 – Billy Briggs

1. Answer B

In children, a BMI over the 85th centile suggests overweight and over the 95th suggests obesity. Although genetic influences are likely to be contributing to Billy and Lisa's weight problem, family members are likely to share environmental factors as well, such as sedentary behaviour and dietary patterns.

2. Answer A

Overweight and obese children have lower quality of life, and the higher the BMI, the poorer the quality of life. They are also at risk of adult obesity a range of psychosocial and physical problems such as lower self esteem, bullying, type 2 diabetes, hypertension and dyslipidaemia.

3. Answer B

Many parents of obese children do not perceive them to be overweight and may be unaware of the negative health consequences for their children. Approaching the problem with respect and establishing common ground is an important first step.

4. Answer B

'Lifestyle' physical activity and involving the entire family are important strategies. Everone can benefit from increased physical activity regardless of weight. Encourage using after school time to get outdoors and be active, without being prescriptive about what needs to be done. Checking food labels is important, as food labelled low fat may be high in sugar and kilojoules.

Case 3 – Billy Briggs continued

1. Answer C

Resilience is the ability to 'bounce back' from life's difficulties and maintain a healthy and fulfilling life despite adversity. Key coping skills associated with resilience are self efficacy (a confidence in one's ability to solve problems in different situations), optimistic thinking, being able to identify and engage strengths and to regulate emotions.

2. Answer E

Billy could be encouraged to develop a more optimistic style by trying to remember 'difficult times happen to everyone, not just me', 'this is temporary' and 'not everything is ruined'.

3. Answer E

'Positive tracking' can be a helpful technique for children to promote resilience. It involves trying to find any positive aspects in a situation, however small.

4. Answer C

The BOUNCE BACK acronym uses cognitive behaviour therapy concepts to teach young people coping skills (see Table 2 page 750 September 2005). Encouraging Billy to develop mastery, to persist with tasks despite frustration and to meet a challenge increases his sense of self worth and promotes resilience.

Case 4 – Madison Noble

1. Answer A

A pathological cause should be considered particularly if the child is less than the 1st centile and the growth velocity <25th centile. When weight loss precedes slowed growth, this suggests a chronic illness as a possible cause.

2. Answer D

Children aged less than 2 years should be measured supine, but from 2 onward should be measured standing without shoes or socks. In all children the arm span is approximately equal to height. The ratio of upper to lower segments reduces from 1.7 as a neonate to approximately 1.0 by 10–12 years.

3. Answer A

Children with constitutional delay have transient slowing of growth at about 3 years and about 11–12 years. Bone age is delayed and the height age (the age at which their current height would be the 50th centile) correlates with the bone age.

4. Answer B

Turner syndrome affects girls and is caused by complete or partial absence of one X chromosome. Clinical features include height <1st centile, webbed neck, widely spaced nipples and may involve cardiac or renal anomalies. It is diagnosed by karyotype testing.

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