ADMINSTRATIVE MEDICINE

Part I Examination

Monday 9 June 2014

13:30 – 16:00 (2½ hours)

Paper IA

Candidates must answer all parts of this questions

Style, clear grammatical English and legibility will be taken into consideration by the Examiners. Answers should be written in a form appropriate to the audience specified in the question.
Weighting of marks for each part of the question is shown in parenthesis.

DO NOT OPEN PAPER UNTIL THE INVIGILATOR INSTRUCTS YOU TO BEGIN

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1. Suppose you are planning for a screening programme for lung cancer for a community. The prevalence of lung cancer in those aged 40 or above is 2%. The screening test has the sensitivity of 95% and specificity of 90%. Please answer the following questions based on the above information.

    i.   How many people would turn out to be test positive in 1,000,000 adults aged 40 or above tested?   (1.5 marks)

    ii. How many would truly have lung cancer in those test positives?

                                                                                (1.5 marks)

    iii. What percentage of the test positives would have to go through unnecessary confirmatory examinations so as to rule out the disease?   (1.5 marks)

QUESTION CONTINUES

iv. What percentage of true cancer patients would the test miss?

(1.5 marks)

v. Name four methods that can be taken to reduce the unnecessary costs of the screening programme. (4 marks)

2. The **Table** below shows the mortality rates of Single Males versus Married Males in the United States in one year.

Age	Single Males			Married Males		
	Population (thousands)	Number of Deaths	Death rate per 1,000	Population (thousands)	Number of Deaths	Death rate per 1,000
15-24	17,724	39,745	2.24	3,427	7,327	2.14
25-64	6,600	63,497	9.62	41,171	346,872	8.43
65+	563	98,065	174.18	7,831	550,953	70.36
Total	24,887	201,307		52,429	905,152	

i. Calculate the crude death rates per 1,000 population for both Single and Married males respectively. How do the risks of dying compared in these two populations? (3 marks)

ii. Calculate the direct age-standardized death rates for both Single and Married males respectively by using the total of Single and Married males as the standard population. How do the risks of dying compared in these two populations now? Explain why the risks are the same or different from part (i).

(5 marks)

iii. Calculate the Standardized Mortality Ratio (SMR) for Married males by assuming the same mortality experience as Single males. Explain your results. (2 marks)

3. i. Describe, with examples, the issues faced in the provision and access to Hong Kong health care, by ethnic minority and culturally diverse groups. (6 marks)

ii. Discuss how these issues can be addressed. (4 marks)

QUESTION CONTINUES

4. You are a senior manager responsible for decision making on introduction of new drugs in a public sector organization. The leader of a group of Physicians would like to introduce Dabigatran as an option to prevent stroke and systemic embolism for patients with non-valvular atrial fibrillation into the drug formulary to be provided free of charge to indicated patients. A 2-page summary on the drug by the NHS National Institute for Health and Clinical Excellence was presented to you.

   i. What are the factors to be considered when deciding on the inclusion of a new medicine into the formulary funded by public money? (5 Marks)

   ii. With reference to the factors mentioned in (i), describe your steps for decision making in response to this request of introducing Dabigatran. (5 marks)

5. Write short notes on the following aspects of complaint management in a public hospital in Hong Kong:

   i. Structure of a complaint management system (4 marks)

   ii. Indicators of good complaint management (4 marks)

   iii. How does complaint management link with risk management? (2 marks)

6. Regarding the following two items mentioned in the Chief Executive's Policy Address 2014, describe the political background and concerns which may influence the execution of the policies by the Government:

   i. Government sponsored population screening for colorectal cancers among residents aged 65 or above (5 marks)

   ii. Establishment of Chinese Medicine Hospital with inpatient services (5 marks)

END OF PAPER