5. Write short notes on the following:

   (a) The basic elements to prove for an action in medical negligence.

   (5 marks)

   (b) Pros and Cons of "no fault compensation".

   (5 marks)

6. Comment on the following initiatives by government to improve population health:

   (a) Taxation as a means of tobacco control.

   (4 marks)

   (b) Providing monetary incentives to health care providers as driver for quality improvement.

   (3 marks)

   (c) Government health care vouchers.

   (3 marks)

END OF PAPER

香港社會醫學學院

HONG KONG COLLEGE OF COMMUNITY MEDICINE

founder College of the Hong Kong Academy of Medicine

Incorporated with limited liability

ADMINSTRATIVE MEDICINE

Part I Examination

Monday 8 June 2009

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

1. In a children's hospital, 30 patients under 15 years old were treated for cancer during the last 5 years. It was suspected that exposure to X-rays during pregnancy was related to the incidence of cancer in children. The history of X-ray exposure of the mothers was extracted from the hospital records for all 30 cancer patients and 60 non-cancer patients. Among them, the mothers of 5 children with cancer had been exposed to X-rays during their pregnancy, while 7 of the mothers of non-cancer new-cancer patients had been exposed.

   (a) Compile the data into a 2x2 table. (2 marks)

   (b) Referring to the 2x2 table,
   (i) Name the study design. (1 mark)
   (ii) Calculate the measure of association between mother's X-ray exposure and children's risk of cancer. (2 marks)
   (iii) The 95% CI of the association is 0.44 – 5.24. Comment on this result and that obtained in (ii). (2 marks)

   (c) Describe the major possible biases of this study. (3 marks)

2. A paediatrician sets out to evaluate the efficacy of an experimental drug A in paediatric patients with urinary tract infections (UTI) in a double-blind, randomized study. Fifty such patients will be randomized to receive either the experimental drug A or a standard drug B for one week. After conducting the study, the paediatrician reports at a research conference that "the results are not statistically significant (*p-value* >0.05), thus drug A and drug B are equally effective".

QUESTION CONTINUES

   (a) What is the primary outcome for this trial? State the null and alternative hypothesis of the study. (3 marks)

   (b) What is meant by a double-blind and randomized study? What are the advantages of this type of study design? (4 marks)

   (c) Do you agree with the paediatrician's conclusion that "drug A and drug B are equally effective" based on a test result of *p-value* >0.05? Explain. (3 marks)

3. (a) Using local and international examples, explain how social factors influence health and illness. (5 marks)

   (b) In the case of illness, discuss how these factors can be mitigated for improved health outcomes. (5 marks)

4. As Hospital Chief Executive of a teaching hospital, you received a request from the Ophthalmology Professor to introduce a new expensive drug, Ranibizumab, as standard treatment for the wet type of Age Related Macular Degeneration. Discuss your approach in handling this request. (10 marks)

QUESTION CONTINUES