

**UNIVERSITY COLLEGE LONDON**  
University of London  
**Examination for internal students**

For the following qualifications  
B . Sc (intercal)

Health Sciences C110

**Paper title: The population perspective in primary care**

Answer all 3 questions. Answer each question in a different booklet clearly labelled with the question number and your examination number. Each question will be marked out of 100. Marks allocated to each section of a question are indicated in brackets. This is a 3 hour exam.

**1. Data interpretation**

The chart and table (see handout) show prevalence of treated hypertension in males. It is taken from the following publication:

Key Health Statistics from General Practice 1996: Analyses of morbidity and treatment data including time trends, England and Wales Series MB6, No. 1. London; Office for National Statistics: 1998.

This publication used routine electronic practice data from the 288 practices contributing to the General Practice Research Database covering approximately 3.9% of the population of England and Wales.

Please answer the following short-answer questions.

- a. Why is prevalence of treated hypertension measured rather than incidence? (10)
- b. Which type of area has the highest rate of prevalent treated hypertension? (10)
- c. Which type of area has the highest rate of prevalent treated hypertension allowing for age? (10)
- d. Why does the age-standardised rate for Inner London increase compared with the crude rate but the age-standardised rate for 'Resort and retirement' decrease? (10)
- e. After allowing for age Inner London has a low rate of treated hypertension. Based on the data presented here what may account for low measured treatment rates in inner London? (20)
- f. Look at age-specific treatment prevalence. What probably accounts for the high age-standardised rate of treated hypertension in 'Ports

- and industry'? (10) Why may the rate of treated hypertension be high in this type of area? (10)
- g. How would you obtain a measure of prevalence for treated hypertension per 1000 patients for the year 1996 (or a more recent year) in a typical General Practice? (20)

## **2. Screening and diagnostic tests**

Screening for genital chlamydial infection has recently been piloted in two sites in the United Kingdom. Chlamydia is a common sexually transmitted disease in both males and females. It is frequently asymptomatic. It is treatable with a single course of antibiotics. In females it has been estimated to cause up to 40% of cases of pelvic inflammatory disease. Pelvic inflammatory disease is an important cause of infertility. Screening using a nucleic acid amplification test on a urine sample detects 90-95% of cases with a specificity of 99%. The programme that will probably be recommended is opportunistic screening of sexually active women aged less than 25 years of age in General Practice and other health care settings. Based on your understanding of criteria for evaluating screening programmes and your own knowledge of this client group answer the following questions in relation to Chlamydia screening.

- a. What advantages are associated with a highly sensitive screening test? (20)
- b. What advantages are associated with a highly specific screening test? (20)
- c. Why would an age cut-off at 25 years be advocated? (20)
- d. What practical problems may be associated with opportunistic Chlamydia screening in General Practice? (20)
- e. Why would opportunistic screening in a General Practice setting be advocated rather than other alternative methods of programme organisation? (20)

## **3. Evaluation**

Your practice has in the last year established a register of patients with coronary heart disease to assist in the management of patients with coronary heart disease. What are registers and how may they assist in the management of patients with coronary heart disease? (50) How would you evaluate the success of your management of patients with coronary heart disease? (100)