

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For the following qualifications :-

B.Sc. (Intercal)

Health Sciences C110: The Population Perspective in Primary Care

COURSE CODE : **HESCC110**

UNIT VALUE : **0.50**

DATE : **25-APR-02**

TIME : **09.30**

TIME ALLOWED : **3 hours**

02-C0697-3-30

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TURN OVER

Paper title: The population perspective in primary care

You must answer 2 (two) of the following 4 questions.

All questions carry equal marks.

Please answer each separate question in a new answer book.

This is a 3 hour paper.

1. Examine the following age-specific death rates for population A and population B. Write a short answer on each of the following questions.

Age	A			B		
	Population	deaths	rate per 100,000	population	deaths	rate per 100,000
0-4	51449	105	205	56397	708	1256
5-14	104028	23	22	102868	128	124
15-44	363262	427	118	208371	532	256
45-59	133938	711	531	45604	398	872
60+	145113	5855	4035	31055	1243	4002
All	797790	7121		444295	3009	

- a. Are these incidence rates or prevalence rates? Explain the difference. **[10%]**
- b. Calculate the crude mortality rate for each population. If you have not brought a calculator show your working and approximate the answer. **[10%]**
- c. Comment on the age distribution of each population. **[10%]**
- d. Comment on the differences between the age-specific death rates in each population at each age. Comparing the crude mortality rates for each population explain why do they not fit with this pattern. **[20%]**
- e. One of these populations is from a developed region of the world and the other from a developing region. Which population is likely to be representative of each region? Explain your answer. **[10%]**
- f. Assuming the developed region is similar to the UK population what would you expect to be the important causes of death at each age? What routine sources of information may be available to you that would help you understand the causes of death? **[40%]**

(question [a], [b], [c], and [e] each carry 10% , [d] carries 20% and [f] carries 40% of the marks for this question)

2. A recent article and editorial in the *Journal of the American Medical Association* (Hirsch AT, et al 2001; 286: 1317-1324) suggests the Doppler brachial-ankle index (i.e. using a blood pressure cuff and simple Doppler ultrasound to measure the difference between the pressure required to occlude the pulse at the arm and the ankle) as a useful method of screening for (a) peripheral vascular disease and (b) those at high risk of cardiovascular disease in primary care. What are the issues that would need to be considered before recommending this (or any other screening test) for adoption in primary care?
3. Describe how you would evaluate a chronic disease management programme in primary care (illustrate your answer with an example).
4. Your practice serves a mixed urban area. Your practice nurse tells you that there has been a marked fall in uptake of MMR vaccine. She remarks that it is the middle class mothers/parents who appear to be refusing MMR.
 - a) How would you confirm this finding?
 - b) Describe how you would develop and implement a strategy to improve the uptake of MMR vaccine. **(each sub section of this question carries equal marks)**

END OF PAPER