

**UNIVERSITY OF WALES COLLEGE OF MEDICINE  
MASTER OF PUBLIC HEALTH  
WEDNESDAY, 12TH MAY 1999**

**Paper 1A**

**PUBLIC HEALTH POLICY**

You should answer **FOUR** questions: equal marks are given to each question.

**ONE from Section A: Determinants of Health**

**ONE from Section B: Health Economics**

**TWO from Section C: Health Policy and Management**

Credit will be given for evidence of critical thinking and for answers which are illustrated by reference to the literature and, where relevant, to your own experience.

**PLEASE USE A SEPARATE ANSWER BOOK FOR EACH  
QUESTION**

## **Section A: Determinants of Health**

### **Answer One Question**

1. Discuss the view that how we define the problem defines the solution with respect to **either** deaths from lung cancer **or** morbidity from pesticide use.
2. Discuss the role of NGOs/charitable organisations in reducing the health risks caused by social inequality.

## **Section B: Health Economics**

### **Answer One Question**

3. Why is it important that health services operate efficiently? How can economic evaluation be used to improve the efficiency of health services?
4. From a health economics perspective, discuss the view that men with erectile dysfunction 'need' treatment with Viagra?

## **Section C: Health Policy and Management**

### **Answer Two Questions**

5. Inequalities in health have increased over the past ten years in the UK. How can such inequalities be measured? Discuss the causes of increased inequalities.
6. Strong primary health care keeps down costs in a health service. Discuss whether you believe this statement to be true, using examples from two countries.
7. 'Government health policy has a greater impact on health than all of the work of doctors and nurses'. Discuss the truth or falseness of this statement for a country of your choice in relation to cigarette smoking.
8. What do we mean by 'quality' in health care, and what steps would you give priority to in improving quality?

**UNIVERSITY OF WALES COLLEGE OF MEDICINE  
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WEDNESDAY, 19TH MAY 1999**

**Paper 1C**

**EPIDEMIOLOGY**

**(including demography and social research methods)**

You should answer **FOUR** questions: equal marks are given to each question.

**TWO** from Section A

**ONE** from Section B

**ONE** from Section C

Credit will be given for evidence of critical thinking and for answers which are illustrated by reference to the literature and, where relevant, to your own experience.

**PLEASE USE A SEPARATE ANSWER BOOK FOR  
EACH QUESTION**

## SECTION A (Epidemiology)

### Answer TWO questions

1. Describe some leading sources of bias in case control studies and outline how these may be reduced.
2. The table below shows the results of a prospective study of the relationship between anthropometric status and mortality in the three months following measurement (N = 1350; WFH and WFA were calculated for each child).

	Survived	Died
WFH > 80%	1092	129
WFH < 80%	108	21
WFA > 60%	1166	131
WFA < 60%	34	19

WFA = Weight for Height

WFA = Weight for Age

Explain what is meant by relative risk, and use the results in the table to calculate the relative risk of low anthropometric status. How could this information be used to identify children at risk of dying?

3. Write short notes on:
  - rate
  - ratio
  - crude death rate (CDR)
  - SMR
  - randomised controlled trial with parallel groups
  - randomised cross over trial
4. Describe briefly a sequence of studies that might be undertaken to investigate a possible new disease cluster, e.g. leukaemia in the vicinity of overhead power lines.

## Section B Social Research Methods

### Answer ONE question

5. Discuss the ethical issues associated with undertaking placebo controlled trials in developing countries.

6. The local Council is planning to install CCTV (closed circuit television) cameras in the shopping centre to deter crime including physical assaults. Design a base-line study that would enable you to evaluate the success of this intervention after two years so as to inform policy as to further extension of those cameras elsewhere in the city. Include an explanation for selecting your indicators, and show how you would measure them.
7. Discuss the issues of reliability and validity associated with qualitative and quantitative studies.

**Section C Demography**  
**Answer ONE question**

8. In “Somewhere” in 1998 there were 68,892 live births and 63,299 deaths in an estimated population of 5,153,300. The number of women aged 15-44 was estimated as 1,080,600.

Calculate a) the crude birth rate  
b) the crude death rate  
c) the general fertility rate for “Somewhere” in 1998

Discuss the limitations of these measures.

9. Discuss how you would measure the impact of improved antenatal and obstetric care on maternal health in a country of your choice.
10. Account for the differences observed in the population structure between a third world and an industrialised country.