

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:-

B.Sc. (Intercal)

CHIME 6: Maternal and Child Health in Developing Countries

COURSE CODE : **CHME0006**

UNIT VALUE : **0.50**

DATE : **30-MAY-03**

TIME : **14.30**

TIME ALLOWED : **3 Hours**

SECTION C. 40% OF TOTAL MARK

Read the following scenario and answer ALL the questions. The number in brackets gives the percentage of the total mark awarded for each question.

You have been appointed as the special advisor in Maternal and Child health to Ministry of Health in Zongolanda, a developing country. In Zongolanda, the maternal mortality ratio is 1000, the under-5 mortality rate is 198. The low birth weight rate is 30% and 40% of children are stunted. The female literacy rate is 25%.

Write definitions (specifying numerator and denominator clearly) for:

- QC1. maternal mortality ratio (2%)
QC2. under-5 mortality (2%)
QC3. low birth weight rate (2%)
QC4. proportion of children who are stunted (2%)

Your first priority is to understand why mortality is so high. You commission a group from the Institute of Child Health, London, to train your survey team and then carry out cluster-randomised community-based surveys using standardised verbal autopsy tools

- QC5. List the most probable main causes of maternal deaths (4%)
QC6. List the most probable main causes of under-5 deaths (4%)
QC7. What are the most likely underlying causes of both maternal and child deaths (6%)

The survey reveals that 80% of mothers deliver at home and the majority of child deaths occur at home. The Minister has allocated US\$50,000 per district per year for three years to improve maternal and child survival in six poor districts with the highest mortality, each with a population of about 250,000. Each district has a hospital, two smaller health centres providing in-patient midwifery, and five community-based public health nurses employed to provide domiciliary support and training for the estimated 60 traditional birth attendants.

QC8. The Minister asks you to outline the TWO most important areas in which to invest the money in the health system. List your priorities in order of merit, giving your reasons for each priority (6%)

QC9. The minister is confused with regard to policy changes regarding attendants at delivery. Briefly list the advantages and disadvantages of Traditional Birth Attendants (TBAs) (6%)

The Gates Foundation has given a large grant to an international NGO to promote community demand for health care services, both preventive and curative. This NGO approaches you for advice regarding how to implement such a programme in the six target districts.

QC10. What approaches could you use to alter behaviour? What key health messages would you prioritise to improve maternal and child survival? (6%)

END OF PAPER

This exam paper is divided into three sections. Answer **ONE** question in section A, **FOUR** questions in section B and all of section C. You are advised to spend approximately one hour and ten minutes on section A, forty minutes on section B and one hour and ten minutes on section C.

SECTION A. 40% OF TOTAL MARK

Write an essay on ONE of the following.

1. Outline the Millennium Development Goal relating to child survival. What are the key strategies to reduce childhood deaths? Comment on whether such goals are useful and whether this goal will be met.
2. Describe the Delays model for understanding the underlying causes of maternal deaths. What interventions may be applied to address each of the delays? When discussing skilled attendance at delivery, provide a definition of the term.
3. How does malnutrition affect the health and development of children and what public health measures can prevent it?
4. Define the term 'disease eradication'. What are the requirements for a successful eradication campaign? Discuss the challenges, benefits and costs of such campaigns to society, giving examples from previous and current disease eradication campaigns.

SECTION B. (20% OF TOTAL MARK)

Write SHORT NOTES on FOUR of the following. Each short note is worth 5% of the total mark.

1. Mechanisms of Mother to Child Transmission of HIV
2. Integrated Management of Childhood Illness (IMCI)
3. The life cycle approach to maternal and child health
4. Essential newborn care
5. The effects of vitamin A deficiency and how it may be prevented
6. Health challenges for street children
7. Nutritional and anti-infective properties of breastmilk
8. Prevention of malaria

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