



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

Course Title PUBH7115 Mortality Analysis

Course Co-ordinator: Dr Tim Adair

Mode: Internal, Semester 2

Course Introduction:

This course builds on PUBH7600 (Introduction to Epidemiology) and equips students to conduct detailed analyses of mortality and causes of death, which are increasingly relevant in international public health practice. The curriculum focuses on the collection, evaluation and analysis of data from censuses, surveys, and vital registration systems. These analyses are critical to developing the evidence base for health policy particularly, but not only in, developing countries. The methods and measures cover the intersection between demography and epidemiology, and equip students with the knowledge for research and practice in descriptive epidemiology. In particular, the course builds capacity among students in appraising data and methods to measure and monitor progress towards mortality related United Nations Millennium Development Goals (MDG 4: reduce child mortality, MDG 5: improve maternal health, MDG 6: combat HIV/AIDS, malaria and other diseases).

COURSE AIMS:

The principal objectives of this course are: To provide an overview and details of various demographic and epidemiological methods to assess the quality of data on mortality in developing countries; To learn how to apply various indirect techniques to estimate mortality levels and patterns in populations with inadequate vital registration data; To introduce students to the concepts and application of the International Classification of Diseases to generate data on causes of death and to learn how to correct routinely collected data for mis-certification and coding error; Apply the above concepts and methods to the measurement and monitoring of the United Nations Millennium Development Goals.

COURSE CONTENT

The course is structured in two parts; methods for estimating age-specific mortality rates, particularly in populations with limited data; and principles and problems of cause of death data. Specifically, the course deals with the following topics:- Basic measures of mortality; Correcting deficient vital registration data; Constructing a life table; Principles and application of model life tables; Indirect methods (children ever born; sibling survival) for estimating child and adult mortality from censuses and surveys; Principles and history of cause of death data collection; Rules for certification and coding of causes of death; Principles of evaluation and validation of cause of death data; Principles and application of verbal autopsy methods; Methods for detecting and correcting misdiagnoses and incorrect coding; Principles of mortality data tabulation and analysis

METHOD OF ASSESSMENT

- In class mid term examination at the end of week 6 40%
- Final take home assessment at the end of week 12 50%
- In class participation and attendance at tutorial sessions 10%

REQUIRED RESOURCES AND TEXTS:

Rowland D. *Demographic methods and concepts*. New York; Oxford University Press; 2003

Further details are provided in the Course Profile.

http://www.uq.edu.au/study/course.html?course_code=PUBH7115