



AUSTRALIAN COLLEGE OF VETERINARY SCIENTISTS SCIENCE WEEK - EPIDEMIOLOGY CHAPTER

PRE-CONFERENCE WORKSHOP

Making sense of science: Critical appraisal and evidence synthesis for clinicians and epidemiologists

Professor Mark Elwood, British Columbia Cancer Agency

28 - 30 June 2010

Gallery Room, Gold Coast International Hotel, Surfers Paradise

The ability to read, understand and critically appraise research and literature is an essential skill for veterinary and medical practitioners and epidemiologists. With the amount of information available to us increasing, it is important to spend our limited time reading documents that will be useful and relevant for our area of work.

This course offers a set of tools and an easy-to-use approach for 'making sense of science' with a focus on epidemiology- the process of reading a scientific article, identifying its main findings, assessing its methodological quality, and understanding how the results can be put to practical use.

Led by Professor Mark Elwood of the British Columbia Cancer Agency, this 3 day course will take you from zero to hero. Topics covered will include:

- Why we need to evaluate literature.
- Working out what the results mean.
- Types of research and levels of evidence.
- Reasons why published science may be unreliable, and how to detect unreliability.
- Using appraisal tools/checklists.

The aim is to highlight the fundamental principles of critical appraisal using a clear, concise and simplified approach. No prior knowledge will be assumed, and you'll be guided from basic ideas to advanced concepts using diagrams, case scenarios and hands-on workshop sessions. The course is based on the very successful course held at Massey University Epicentre, New Zealand, in 2008.

Who will benefit?

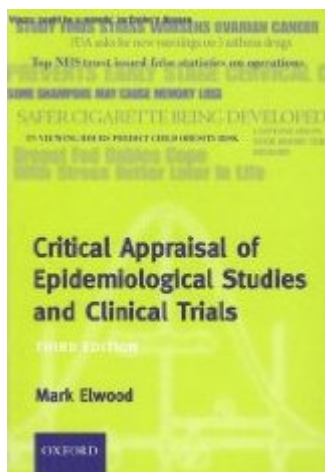
Anyone who needs to assess the quality and validity of biomedical information: veterinary and medical clinicians, epidemiologists, those involved in research, the pharmaceutical industry, and government.

This course will also be of great benefit for those sitting their Australian College of Veterinary Science membership examinations as the ability to assess veterinary literature is regularly examined.

Mark Elwood

Mark Elwood is an epidemiologist and public health medicine specialist (MD, DSc, FRCPC, MBA), and currently Vice-President of Family and Community Oncology at the British Columbia Cancer Agency, which provides cancer care services, including screening, for the 4.4 million people in that province. He holds Professorial positions at the University of British Columbia and at Monash University, Melbourne.

Previously he has been Professor of Cancer Epidemiology at the University of Otago in Dunedin, Director of the National Cancer Control Initiative in Australia, and head of the department of Epidemiology and Community Medicine at the University of Nottingham, in England. He has been extensively involved in research and program development in cancer prevention and screening. He has strong interests in evidence-based health care and the use of scientific knowledge in policy development. He has produced over 250 scientific papers and several books, including the text for this course (see below).



Here's what they said about the 2nd edition ...

'I recommend a close look at this book by those who teach critical appraisal and by anyone who seeks a deeper understanding of the underlying methods.' RCPSC Annals (Sept 1998).

'... a useful resource for health care providers and managers who wish to learn a basic approach to critical appraisal of medical literature. ... a very good resource for health practitioners, managers, and policy makers who wish to enhance their ability to make sound judgements regarding the use of published information. -- Overall rating - Very good' Chronic Diseases in Canada (Nov 1998).

'This book, designed for those without research experience, provides encouragement to the development of the analytical skills necessary to complement other professional skills ... The book will have value and appeal for anyone who wishes to think more critically about health issues and the way information about them is presented.' Journal of the Institute of Health Education.

Program

Monday 28 June 2010

Time	Instructor	Format	Details
0830 - 0900			Registration.
0900 - 0930	MS	Lecture	Introduction and objectives.
0930 - 1030	ME	Seminar	Causes, coincidence and reading newspapers.
1030 - 1100			Morning tea
1100 - 1230	ME	Seminar	Causality and critical appraisal: what does it mean?
1230 - 1330			Lunch
1330 - 1430	ME	Seminar	Methods to show causes --- study design.
1430 - 1530	MS ME	Discussion	Case study 1.
1530 - 1600			Afternoon tea
1600 - 1700	ME	Seminar	The third factor --- confounding.

Tuesday 29 June 2010

Time	Instructor	Format	Details
0900 - 1000	ME	Seminar	Dealing with confounding.
1000 - 1030	MS	Lecture	Are the data any good?
1030 - 1100			Morning tea
1100 - 1130	ME	Seminar	Do I believe these results - critical appraisal.
1130 - 1230	MS	Seminar	Statistics for a simple table.
1230 - 1330			Lunch
1330 - 1530	MS ME	Discussion	Case study 2.
1530 - 1600			Afternoon tea
1600 - 1700	ME	Seminar	The positive features of causation.

Wednesday 30 June 2010

Time	Instructor	Format	Details
0900 - 1000	ME	Seminar	Putting it together --- assessing causation.
1000 - 1030	MS ME	Discussion	Planning a study.
1030 - 1100			Morning tea
1100 - 1230	ME	Seminar	Hierarchies of evidence; Assessing several studies --- meta-analysis.
1230 - 1330			Lunch
1330 - 1430	Guest lecture	Lecture	Evidence synthesis and decision making.
1430 - 1500	MS ME	Discussion	Review, questions and answers.
1500 - 1530			Afternoon tea
1530 - 1630	ME	Seminar	A system for critical appraisal.
1630 - 1700			Course summary and close.

ME: Mark Elwood; MS Mark Stevenson;

Registration and price details

The cost of the course is AU\$ 695 for ACVSc members, prospective members preparing to sit chapter examinations or veterinary and medical students and AU\$ 995 for non-members. The course fee includes notes, CD-ROM of teaching materials, morning and afternoon teas and lunches. Participants can pre-order for collection at the workshop the third edition of Professor Elwood's book 'Critical Appraisal of Epidemiological Studies and Clinical Trials' for the reduced price of AU\$105.

A registration form is attached on the final page.

For more information about this course, please contact
Chris Morley at chris.morley@maf.govt.nz