

Research Skills for Medical Students

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chapter 3

Critical Appraisal

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Achieving your medical degree

This chapter will help you to begin to meet the following requirements of **Tomorrow's Doctors** (General Medical Council, 2009).

Outcomes 1 – The doctor as a scholar and a scientist

12. Apply scientific method and approaches to medical research.
 - a) Critically appraise the results of relevant diagnostic, prognostic and treatment trials and other qualitative and quantitative studies as reported in the medical and scientific literature.
 - b) Formulate simple relevant research questions in biomedical science, psychosocial science or population science, and design appropriate studies or experiments to address the questions.
 - c) Apply findings from the literature to answer questions raised by specific clinical problems.

Outcomes 2 – The doctor as a practitioner

19. Use information effectively in a medical context.
 - b) Make effective use of computers and other information systems, including storing and retrieving information.

The chapter will also enable you to meet the UK Foundation Curriculum (Academy of Medical Royal Colleges, 2012) requirements for engaging in and understanding research, audit and evaluation.

Chapter overview

After reading this chapter you will be able to:

- explain what is meant by critical appraisal;
- critically appraise literature related to research using different study designs;
- use your knowledge of the practical issues associated with data collection to critically appraise the credibility of research;
- apply these skills to your own research in interpreting your results and writing up your study.

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