

## Reviewing the literature

This issue of *Research Bites* looks at reviewing the literature, an important part of any research project.

### Why do a literature review?

- Determines to what extent the issue or research question has been previously researched
- Identifies past relevant studies as well as the methods used
- Assists in refining your research question
- Puts the project and methodology into a relevant context
- Adds valuable background to the study or formal report
- Suggests areas requiring further investigation
- Required for funding applications

The two main components are conducting the search and critically appraising the results of your search, the published papers.

### Conducting a search

To conduct a search, it is important to plan the search in terms of breadth, depth and period including key search terms. There are a number of courses on how to do literature searches. These are available through Area Health Services (e.g. through the Clinical Information Access Program - CIAP) and university libraries.

Free databases are available at PubMed, Cochrane Library and PEDro.

### Critical appraisal skills

Critical appraisal skills are essential for helping to decide if published research is of sufficiently high quality. Critical appraisal checklists have been produced by many authors (CASP, 2000; NPHP, 2001; Peat, 2001).

### Useful resources

- <http://www.phru.org.uk/~casp> Critical Appraisal Skills Programme (CASP)
- <http://www.nphp.gov.au/ppi/evidence/index.htm> National Public Health Partnership (NPHP)
- <http://ptwww.cchs.usyd.edu.au/pedro/scaleitems.htm> Physiotherapy Evidence Database (PEDro)
- <http://www.ncbi.nlm.nih.gov/80/entrez/query.fcgi?db=PubMed> PubMed
- <http://www.update-software.com/cochrane> Cochrane Library
- Peat, J., 2001, *Health Science Research: a handbook of quantitative methods*, Allen & Unwin, Sydney.
- Crombie IK & Davies HTO, 1996, *Research in Health Care: design, conduct and interpretation of health services research* Wiley & Sons, Brisbane.

CASP (2000) identified three broad issues that need to be considered when appraising research. They are:

- Are the results of the study valid?
- What are the results?
- Will the results help locally?

CASP have developed a detailed list of questions to help us think of these issues systematically. An example of one of these checklists (for RCTs) is shown below. Checklists also exist for systematic reviews and qualitative studies.

### 12 questions to help you make sense of a RCT (CASP, 2000)

#### Are the results of the study valid?

1. Did the trial address a clearly focused issue?
2. Is a RCT an appropriate method to answer this issue?
3. How were patients assigned to treatment groups?
4. Were participants, staff and study personnel "blind" to treatment?
5. Were all of the participants who entered the trial properly accounted for at its conclusion?
6. Aside from the experimental intervention were the groups treated in the same way?
7. Did the study have enough participants to minimise the play of chance?

#### What are the results?

8. How are the results presented? What is the main result?
9. How precise are these results?

#### Will the results help locally?

10. Can the results be applied to the local population?
11. Were all important outcomes considered?
12. Should policy or practice change as a result of the evidence contained in this trial?

For further information about PHReNet South contact:  
Anita Fletcher, ph: 4226-7052, email: [afletcher@idgp.org.au](mailto:afletcher@idgp.org.au)

**Next issue: What is qualitative research?**