

Evidence-Based Practice (EBP): The meaning of Evidence

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Introduction

This article aims to inform the family practitioner about the difference between information and evidence, and to distinguish between research-based practice and evidence-based practice. (*SA Fam Pract* 2003;45(8):60-61)

THE MEANING OF EVIDENCE

The general meaning of evidence relates to information that helps establish facts from a range of sources or information to draw and support conclusions. This information has attributes of “clarity, obviousness and conspicuousness”.¹ There is a clear distinction between *information* and *evidence*. Information is defined as “news”, while evidence is “something that tends to prove or provide grounds for holding a certain belief”. A higher standard therefore exists for something to be called *evidence* rather than simple *information*.² Whilst *information* is the basis for finding evidence and based on what was learnt during undergraduate or postgraduate training, workshops, or in clinical practice, this “information” becomes “evidence” when it has been subjected to particular set of criteria (op cit). Having differentiated between “information” and “evidence” a distinction between research-based practice and evidence-based practice is necessary.

WHAT IS RESEARCH-BASED PRACTICE?

The term “research” has been defined

as “a systematic process of collecting and analysing information (data) in order to increase our understanding of the phenomenon with which we are concerned or interested”.³ Whilst the term “information” is included in the definition, it refers explicitly to data. Research is not information gathering or a transportation of facts from one location to another. In other words, research is not merely rewriting the works of others. When considering research-based practice, the formulation of a research problem is the first step needed to systematically conduct scientific research. A research problem differs from a research issue as the latter may involve one concept. A research problem, deals with the “whats, hows and whys of social activities”.⁴ A research issue is usually reduced to a series of research statements, hypotheses or questions. Together these form the core of a research problem. The next consideration is the critical selection of the study most appropriate for use in investigating the problem. The factors determining the type of study selection should include the nature of the problem; the availability of resources such as finance; the known data pertaining to the subject matter; the presentation of the data and the validity and reliability of the study.⁴

WHAT IS EVIDENCE-BASED PRACTICE?

Evidence-based practice relies on scientific research. However it goes a step further aiming to close the gap between research and practice. This is achieved by critically evaluating research done by others, drawing personal experience, taking cognisance of patient’s needs and implementation of the findings into practice. In order to practice evidence-based research, a sound knowledge of the various types of basic research principles is beneficial but not essential. For example if one is in an environment where guidance is available from co-workers or a mentor, it is not essential. The only challenge is that at times these facilities are not available. In this instance the two skills may be developed simultaneously.¹

Evidence-based research differs from research-based practice. Firstly, the main thrust of evidence-based practice methodology is explicitness. Literature is classified according to diagnosis, therapy, reviews and guidelines. Set criteria are used for objective critical assessment.⁵ Secondly, the aim of evidence-based research is to provide practitioners with rules and tools against which they can evaluate their own practice. They are able to develop

solutions for individual patients and populations, develop and re-appraise protocols or guidelines in their departments. This methodology differs from the processes traditionally employed where protocols and guidelines were based on the opinion of "experts". The main disadvantage of this practice is that the protocols and guidelines are rapidly outdated. (op cit.).

The following chronological steps for evidence-based research have been recommended by a number of authors:

- Formulate the need for information into a specific question.
- Research evidence is then located by means of a systematic search.
- Evidence is then critically appraised for its validity, impact and applicability to own practice.
- Results are integrated with other information such as values, patient preferences and circumstances in which the decision is made.⁶□

References:

1. Cusick A. OZ OT EBP21C: Australian Occupational Therapy, Evidence-Based Practice and the 21st Century. *Australian Occupational Therapy Journal*. 2001; 48: 102-117.
2. Wolfe FM. In: Geyman JP, Deyo RA, Ramsey SD, editors. Summarizing Evidence for Clinical Use. In: Evidence-Based Clinical Practice. Concepts and Approaches. Oxford, United Kingdom: Butterwoth-Heinemann; 2000.
3. Leedy P D. Practical Research. Planning and Design 6th Edition. New York: Merrill; 1997.
4. Munro L. An overview of four types of research. *The S A Radiographer*. 1999 October; 10-11.
5. Stolberg HO. Evidence-based radiology in clinical practice, education and research. *CAR Forum* 1998 April; 42(2):1-2. Available at: <http://www.cma.ca/Forum/vol-42/issue - 2/2-1-e.htm>. Accessed 27 August 2001.
6. Reynolds S. In: Trinder L and Reynolds S, editors. The Anatomy of Evidence-Based Practice: Principles and Methods. In: Evidence Based Practice. A Critical Appraisal. Edinburgh, United Kingdom: Blackwell Science. 2000: 17-34.

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