

## Purpose and procedure

The general purpose of *Evidence-Based Nursing* is to select from the health-related literature those articles reporting studies and reviews that warrant immediate attention by nurses attempting to keep pace with important advances in their profession. These articles are summarised in “value added” abstracts and commented on by nurses. The specific purposes of *Evidence-Based Nursing* are

- ▶ to identify, using predefined criteria, the best quantitative and qualitative original and review articles on the meaning, cause, course, assessment, prevention, treatment, or economics of health problems managed by nurses and on quality improvement
- ▶ to summarise this literature in the form of “structured abstracts” that describe the question, methods, results, and evidence-based conclusions of studies in a reproducible and accurate fashion
- ▶ to provide brief, highly expert comment on the context of each article, its methods, and the clinical applications that its findings warrant
- ▶ to disseminate the summaries in a timely fashion to nurses

The RCN Publishing Company Limited and the BMJ Publishing Group publish *Evidence-Based Nursing* under the editorship of Dr Donna Ciliska at McMaster University in Canada, Dr Andrew Jull at the University of Auckland in New Zealand, and Dr Carl Thompson at the University of York in the UK. The Health Information Research Unit (HIRU) of the Department of Clinical Epidemiology and Biostatistics at McMaster University hosts the editorial office for the production of the abstracts and commissioning of commentaries. Dr Brian Haynes acts as coordinating editor to ensure that methods and procedures are consistent with other evidence-based journals prepared by HIRU.

### CRITERIA FOR SELECTION AND REVIEW OF ARTICLES FOR ABSTRACTING

All articles in a journal issue are considered for abstracting if they meet the following basic and category-specific criteria:

#### Basic criteria

- ▶ original or review articles
- ▶ in English
- ▶ quantitative and qualitative studies
- ▶ about topics that are important to the clinical practice of nurses in any setting
- ▶ analysis of data consistent with the study question

#### Category-specific criteria (quantitative studies)

Studies of prevention or treatment must also include:

- ▶ random allocation of participants to comparison groups
- ▶ follow-up (end-point assessment) of  $\geq 80\%$  of those entering the investigation
- ▶ outcome measures of known or probable clinical importance

Studies of assessment (screening or diagnosis) must also include:

- ▶ a spectrum of participants, some (but not all) of whom have the condition of interest
- ▶ an objective diagnostic (gold) standard (eg, central venous pressure) or current clinical standard for diagnosis (eg, sphygmomanometer reading for hypertension), preferably

with documentation of reproducible criteria for subjectively interpreted diagnostic standard (ie, report of statistically significant measure of agreement beyond chance among observers)

- ▶ interpretation of the diagnostic standard without knowledge of test result
- ▶ interpretation of the test without knowledge of diagnostic standard result

Studies of prognosis must also include:

- ▶ an inception cohort (first onset or assembled at a uniform point in the development of a condition or disease) of individuals, all initially free of the outcome of interest
- ▶ follow-up of  $\geq 80\%$  of participants until a major study endpoint occurs or the study ends

Studies of causation must also include:

- ▶ observations of the relation between modifiable exposures and putative clinical outcomes
- ▶ prospective data collection with clearly identified comparison group(s) for those at risk of, or having, the outcome of interest (ie, randomised controlled trials, quasi-randomised controlled trials, non-randomised controlled trials, cohort studies with case by case matching or statistical adjustment to create comparable groups, or nested case-control studies)
- ▶ blinding (masking) of observers of outcome to exposure; criterion assumed to be met if outcome is objective (eg, all-cause mortality)

Studies of quality improvement or continuing education must also include:

- ▶ random allocation of participants or units to comparison groups
- ▶ follow-up of  $\geq 80\%$  of participants
- ▶ outcome measures of known or probable clinical importance

Studies of the economics of healthcare interventions must include:

- ▶ an economic question comparing alternative courses of action
- ▶ comparison of alternative diagnostic or therapeutic services or quality improvement activities on the basis of both the outcomes produced (effectiveness) and resources consumed (costs)
- ▶ evidence of effectiveness from a study (or studies) of real (not hypothetical) patients, which meet(s) the criteria for treatment, assessment, quality improvement, or a systematic review article
- ▶ results presented in terms of the incremental or additional costs and outcomes of one intervention over another
- ▶ a sensitivity analysis if there is uncertainty in the estimates or imprecision in the measurement

Clinical prediction guides must also include:

- ▶ generation of the guide in  $\geq 1$  set of patients (training or derivation set)
- ▶ validation of the guide in an independent set of patients (test or validation set)

**Systematic review articles must also include:**

- ▶ a clear statement of the clinical topic being reviewed
- ▶ a clear description of the sources and methods for identifying articles
- ▶ specification of the inclusion and exclusion criteria for selecting articles for detailed review
- ▶ ≥1 article in the review that meets the above noted criteria for treatment, assessment, prognosis, causation, quality improvement, economics, or clinical prediction guides

**Qualitative studies**

- ▶ content reflects the phenomenon of interest from the perspective of people experiencing it
- ▶ data collection methods are appropriate for qualitative data
- ▶ analyses are appropriate for qualitative data

These criteria are subject to modification if, for example, it becomes feasible to apply higher standards that increase the validity and applicability of studies for clinical practice. The objective of *Evidence-Based Nursing* is to abstract only the very best literature, consistent with a reasonable number of articles “making it through the filter.”

Articles meeting the criteria set out above are abstracted according to the procedure for more informative abstracts,<sup>1</sup> with the following modifications: abstracts are approximately 400 words in length; and each abstract is reviewed by an expert in the content area covered by the article. This expert writes a commentary in which she or he compares the study findings to previous research findings, identifies any important methodological problems that affect interpretation of the study results, and offers recommendations for clinical application. The author of the original article is given an opportunity to review the abstract and commentary before publication.

On a quarterly basis, we will publish to the *Evidence-Based Nursing* website ([www.evidencebasednursing.com](http://www.evidencebasednursing.com)) a selected list of articles that passed all criteria but were not abstracted because, in the judgment of the editors, their findings were less applicable to general nursing practice, the topic was of interest to only a select group of nurse specialists, or the topic was recently addressed in another abstract.

1. **Haynes RB**, Mulrow CD, Huth EJ, et al. More informative abstracts revisited. *Ann Intern Med* 1990;**113**:69–76.

**Journals currently reviewed\***

Acad Emerg Med	Aust J Physiother	Heart Lung	J Trauma
Acta Obstet Gynecol Scand	Birth	Int J Clin Pract	J Vasc Surg
Acta Orthop	BJOG	Int J Nurs Stud	JAMA
Age Ageing	BMJ	Int J Obes	Kidney Int
Aliment Pharmacol Ther	Br J Gen Pract	J Adv Nurs	Lancet
Am J Cardiol	Br J Psychiatry	J Allerg Clin Immunol	Lancet Neurol
Am J Clin Nutr	Br J Surg	J Am Acad Child Adolesc Psychiatry	Lancet Oncology
Am J Epidemiol	Can J Gastroenterol	J Am Acad Dermatol	Mayo Clin Proc
Am J Gastroenterol	Can J Nurs Res	J Am Coll Cardiol	Med Care
Am J Kidney Dis	Canadian Agency for Drugs and Technologies in Health (CADTH)	J Am Coll Surg	Med J Aust
Am J Med	Cancer Nurs	J Am Diet Assoc	Midwifery
Am J Obstet Gynecol	Cephalalgia	J Am Geriatr Soc	N Engl J Med
Am J Occup Ther	Chest	J Am Soc Nephrol	Neurology
Am J Psychiatry	Circulation	J Arthroplasty	Nurs Res
Am J Public Health	Clin Chem	J Bone Joint Surg Am	Nutr J
Am J Respir Crit Care Med	Clin J Am Soc Nephrol	J Bone Joint Surg Br	Obesity
Am J Sports Med	Clin Orthop Rel Res	J Child Psychol Psychiatry	Obesity Surgery
Ann Allerg Asthma Immunol	Clin Rehab	J Clin Epidemiol	Obstet Gynecol
Ann Emerg Med	CMAJ	J Clin Nurs	Oncol Nurs Forum
Ann Fam Med	Cochrane Database Syst Rev	J Clin Oncol	Pain
Ann Intern Med	Crit Care Med	J Clin Psychopharmacol	Patient Educ Couns
Ann Neurol	Diabet Med	J Consult Clin Psychol	Pediatrics
Ann Rheum Dis	Diabetes Care	J Fam Pract	Pharmacotherapy
Ann Surg	Diabetes Obes Metab	J Gen Intern Med	Phys Ther
ANS Adv Nurs Sci	Eur Heart J	J Hand Surg [Am]	Prev Med
Appl Nurs Res	Evid Rep Technol Assess (Summ)	J Hand Surg [Br]	Psychosom Med
Arch Dermatol	Fam Pract	J Infect Dis	Qual Health Res
Arch Dis Child	Foot Ankle	J Manipulative Physiol Ther	Radiology
Arch Dis Child Fetal Neonatal Ed	Gastroenterol	J Neurol Neurosurg Psychiatry	Res Nurs Health
Arch Gen Psychiatry	Gut	J Neurosurg	Rheumatology
Arch Intern Med	Headache	J Nurs Scholarsh	Soc Sci Med
Arch Neurol	Health Educ Behav	J Orthop Trauma	Spine
Arch Pediatr Adolesc Med	Health Psychol	J Pediatr	Spine J
Arch Phys Med Rehabil	Health Technol Assess	J Pediatr Oncol Nurs	Stroke
Arch Surg	Heart	J Pediatric Orthop	Thorax
Arthritis Rheum		J Rheumatol	West J Nurs Res
Arthritis Rhem: Arthritis Care Res		J Shoulder Elbow Surg	
Arthroscopy			

\*This list is subject to modification based on the relative performance of each journal according to the set criteria.